

Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

October 18, 2001

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. George K. Allen
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: Extension of Expiration Date of Modification to Permit No. PSD-FL-168

The applicant, George K. Allen, General Manager, Indiantown Cogeneration, L.P. applied on September 27, 2001 to the Department for an extension of the expiration date of air construction permit number PSD-FL-168 for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The construction permit (modification) had authorized the installation of a Carbon Dioxide (CO₂) Recovery Plant in addition to providing clarifying language on unrelated permit conditions. A PSD Review concluded that the construction of the CO₂ Recovery Plant caused no significant increases of regulated pollutants and represented the best controls for recovering CO₂ (an unregulated pollutant).

For construction permits, an extension shall be granted if the applicant can demonstrate that, upon completion, the extended permit will comply with the standards and conditions required by the applicable regulations. [Rule 62-4.080(3), F.A.C.]

Based on past compliance on the same facility and the project design of the CO₂ plant, the Department has reasonable assurance that the facility can continue to demonstrate future compliance with the standards and conditions required by the permit and applicable regulations with or without the CO₂ plant.

The Department has reviewed the extension request and hereby extends the date to January 1, 2005 in order to allow completion of physical construction and testing of the CO₂ plant, and to submit a revised facility Title V Operation Permit Application covering all related facility modifications. No other construction, testing, periods of non-compliance, etc. is authorized by this extension.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permitting decision is issued pursuant to Chapter 403, Florida Statutes.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an

"More Protection, Less Process"

administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

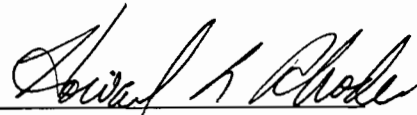
The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

This permitting decision is final and effective on the date filed with the clerk of the Department unless a petition is filed in accordance with the above paragraphs or unless a request for extension of time in which to file a petition is filed within the time specified for filing a petition pursuant to Rule 62-110.106, F.A.C., and the petition conforms to the content requirements of Rules 28-106.201 and 28-106.301, F.A.C. Upon timely filing of a petition or a request for extension of time, this order will not be effective until further order of the Department.

Any party to this permitting decision (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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this order was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 10/18/01 to the person(s) listed:

Mr. George K. Allen, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Oven
Mr. David S. Dee
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.


(Clerk)

10/18/01
(Date)

Indiantown Cogeneration, L.P.

RECEIVED

SEP 27 2001

BUREAU OF AIR REGULATION

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane
Indiantown, FL 34956
Tel: 561.597.6500
Fax: 561.597.6210

September 26th, 2001

Mike Halpin
Dept. of Environmental Regulations
Bureau of Air Regulations
200 Blair Stone Road
Tallahassee, FL 32399-2400

VIA FEDERAL EXPRESS

Re: ICLP Flue Gas Carbon Dioxide Recovery Plant (PSD-FL-168)

Dear Mike:

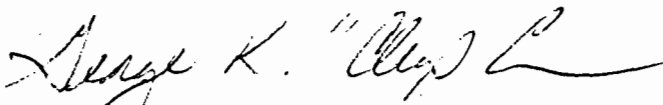
On April 20th, 2001 the Department of Environmental Protection issued a letter modifying ICLP's PSD permit (PSD-FL-168) and authorizing ICLP to construct a carbon dioxide recovery plant adjacent to the ICLP's facility. The PSD permit (specific condition 15) now states that a slipstream from ICLP's pulverized coal boiler exhaust "shall be routed to a carbon dioxide recovery plant."

ICLP has not yet built the carbon dioxide recovery plant therefore, it is not possible to route a slipstream from the Cogeneration facility to the carbon dioxide plant.

Due to fluctuation in the price of carbon dioxide and other market conditions, ICLP is reviewing its plans for the carbon dioxide plant. At this time ICLP does not have a construction date for the carbon dioxide plant. Given these uncertainties, ICLP respectfully request the Department to extend the construction permit (PSD-FL-168) by 24 months.

If you have any questions please contact Nick Laryea at 561-597-6500, extension 19.

Sincerely,



George K. "Chip" Allen
General Manager

cc: N. Laryea
B. DeHart
D. Dee
File

A note from...

Mike
This is the application
that we discussed this

am.
RECEIVED

SEP 12 2000

BUREAU OF AIR REGULATION

Thanks
Leon

Leon

261097-halpin3.doc

August 18, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

**Subject: Indiantown Cogeneration, L.P. Air Permit Modifications
Permit No.: PSD-FL-168, 0850102-001-AV**

Dear Mr. Halpin:

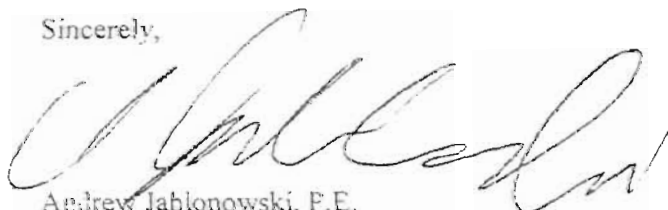
Per your recent discussions with David Burrage of Indiantown Cogeneration, we are submitting the attached revisions to the request to modify the PSD permit for the PC boiler.

This is a revision to the December 1999 PSD permit application for the megawatt increase. The revision includes the revised BACT analysis and proposed emission rates as discussed with Mr. Burrage. It also requests language to allow the use of alternative fuel. We are currently preparing submissions related to air quality modeling and carbon monoxide monitoring, and will be submitting them under separate cover.

Telephone
0-8-371-2000
Facsimile
0-8-371-2468

Thank you for your time and consideration. Please contact me at 978-371-4339 or David Burrage at 561-597-6500 ext. 19 with any questions or comments.

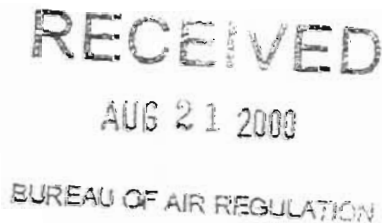
Sincerely,



Andrew Jablonowski, P.E.
Senior Air Quality Engineer

cc: S. Sorrentino, C. Allen, D. Burrage, D. Bullock, Indiantown Cogeneration LP
R. DeHart, PG&E Generating

C. Holladay
SED
B. Jones
EPA
WPS



INDIANTOWN COGENERATION, L.P. PSD PERMIT APPLICATION TO MODIFY PULVERIZED COAL BOILER

tech for the planet.
engineering and technology

Submitted By:

Indiantown Cogeneration, L.P.
19140 SW Warfield Blvd.
Indiantown, FL 34956

Prepared by:

Earth Tech, Inc.
196 Baker Avenue
Concord, MA

December 1999

REVISED August 2000

RECEIVED

AUG 21 2000

BUREAU OF AIR REGULATION

RECEIVED
AUG 24 2000
DEP PROPERTY/RECORDS MANAGEMENT

**INDIANTOWN
COGENERATION, L.P.
PSD PERMIT
APPLICATION TO
MODIFY PULVERIZED
COAL BOILER**

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APPENDICES

APPENDIX I

Permit Application Forms

APPENDIX II

Drawings

APPENDIX III

Supporting Calculations and Emission Data

1.0 INTRODUCTION/PROJECT SUMMARY

The Indiantown Cogeneration L.P. (ICLP) facility is proposing to modify the operations at its site located along Highway 710 approximately three miles northwest of the community of Indiantown and 9 miles east of Lake Okeechobee, Florida. The facility is southwest of and abuts the Caulkins Citrus Processing facility and the Florida Steel Corporation Indiantown steel mill property. The site occupies the central portion of Section 35, Township 39 South, Range 38 East, Martin County, Florida.

ICLP received authorization to construct the 330 megawatt (MW) electric and the 225,000 pound per hour process steam cogeneration facility on March 26, 1992, Permit Number PSD-FL-168. The Power Plant site certification number for the project is PA 90-13. ICLP is proposing to modify the operation of the pulverized-coal-fired boiler to increase the electrical generation output to 390 MW. To achieve this output, ICLP is applying to modify the existing heat input permit limitation from 3,422 million British Thermal Units per hour (MMBtu/hr) to 4,100 MMBtu/hr.

In addition, ICLP is requesting an amendment to the language of PSD permit PSD-FL-168 to allow the combustion of alternative fuels, and to establish a procedure for Florida Department of Environmental Protection (Department) approval of alternative fuels.

The U.S. Environmental Protection Agency (EPA) has promulgated Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) which require a permit review and approval for new or modified existing sources which emit criteria pollutants in amounts greater than the significant emission levels. Although ICLP is

not proposing any increase in the existing pollutant emission limitations for the facility, a comparison of baseline actual emissions to the allowable maximum emissions in the future shows a net increase in annual emissions. Since the net emission increase will exceed the significant levels, the proposed modification at the ICLP plant is subject to PSD review. Based on Florida Administration Code (FAC) Rule 62-212.400, the State of Florida has delegated authority to review and issue PSD construction permits.

The following sections include:

- A detailed description of the facility and proposed modifications (Section 2.0).
- A discussion of the regulatory rationale as it applies to the project (Section 3.0).
- A discussion of the project emissions and Best Available Control Technology (BACT) Evaluation (Section 4.0); and
- Proposed PSD permit condition modifications (Section 5.0)

Air quality impact analyses for this modification are being submitted under separate cover.

2.0 PROJECT DESCRIPTION

This section provides an overview of the project and summarizes the basis for identifying the air quality regulations with which the project must comply.

The proposed modification will be an increase from 330 MW net to 390 MW net for the existing pulverized-coal-fired facility. Presently, the ICLP facility includes one main pulverized-coal-fired boiler and one steam generator, two auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Indiantown Citrus Company, and material handling/conveying equipment. The main primary source of air emissions is the main boiler, firing pulverized coal. Exhaust gas from the main boiler is vented through a series of pollution control devices (PCDs) which include: a selective catalytic reduction (SCR) system for the control of NO_x emissions, spray dryer absorbers for SO₂ removal, and a multi-compartment fabric filter (baghouse) to remove particulates. Secondary air emission sources include the auxiliary boilers firing natural gas or No. 2 fuel oil and the material handling systems for coal, ash and lime. Bin vent filters are provided for material handling equipment to control visible particulate emissions. The exhaust stack is slightly below good engineering practice (GEP) stack height specifications at a height of 495 feet above grade.

Ash is removed by rail or truck for off-site disposal. Cooling at the plant is achieved by means of a mechanical draft-cooling tower.

The primary fuel is eastern bituminous coal having a maximum sulfur content of 2.0 percent. Typical sulfur content is under 1 percent. Natural gas and propane is used for lightoff and startup.

Coal is delivered by rail, unloaded, and stored in an enclosed storage facility on site. An emergency coal pile, sized for 30 days storage at full load, is also provided. Lime used for sulfur capture in the flue gas cleanup system is delivered by train or in enclosed, self-unloading trucks and stored in an enclosed structure. Fugitive emissions from coal storage and material handling are controlled by enclosing most of these operations and venting through fabric filters. No modifications to the material handling equipment are being proposed.

Propane is stored in aboveground tanks, and is delivered by truck.

Presently, the main boiler heat input at full load is 3,422 MMBtu/hr. The heat input of the auxiliary boilers firing #2 fuel oil is 342 MMBtu/hr (358 MMBtu/hr firing natural gas). ICLP is proposing to increase the heat input for the main pulverized-coal-fired boiler to 4,100 MMBtu/hr.

As described in Section 4.2.5 there are currently new fuels (e.g., coal agglomerated with a binder) available which could be fired in ICLP's pulverized-coal-fired boiler. These fuels should behave very similarly to the coal currently being combusted, and should have very similar air emissions. ICLP is requesting this amendment to gain the flexibility to use alternative fuels, subject to the emission limits and other conditions contained in this permit.

3.0 REGULATORY APPLICABILITY EVALUATION

3.1 Chapter 62-210 Stationary Sources -General Requirements

3.1.1 62-210.300 Permits Required

The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant must obtain an appropriate permit from the Department of Environmental Protection (Department) prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. Since the proposed modification to ICLP's facility can not meet the categorical exemptions provided in Rule 62-210.300 (3)(a) or the generic exemptions provided in Rule 62-210.300 (3)(b), ICLP must obtain a preconstruction permit prior to increasing the heat input.

3.2 Chapter 62-212 Stationary Sources - Preconstruction Review

3.2.1 62-212.300 General.

The proposed modification will take place at an existing major source. If a proposed modification at a facility results in a net emissions increase that exceeds the significant emission rate for a regulated pollutant, the project is subject to major new source preconstruction review regulation. As discussed in Section 4.0 of this application, the net emissions increases at ICLP's facility will exceed the significance levels for most regulated pollutants and, therefore, ICLP is applying for a modification to its PSD air construction permit pursuant to Rule 62-212.400.

3.2.2 62-212.400 Prevention of Significant Deterioration (PSD)

The U.S. Environmental Protection Agency (EPA) has promulgated Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) which require a permit review and approval for new or modified existing sources which have the potential to emit criteria pollutants in amounts greater than the significant emission levels. Similarly, the Department has promulgated PSD preconstruction review regulations in Rule 62-212.400.

Pursuant to these requirements, the Facility was issued a Permit to Construct and PSD Permit (PSD Permit/Permit to Construct) dated March 26, 1992, with revisions dated July 16, 1992 (PSD-FL-168). This permit was amended to remove the H₂SO₄ testing requirement in December, 1996. It was further amended in April, 1998 to allow opacity levels for one six minute period per hour of not more than 27 percent opacity, and in May, 2000 to allow construction of a carbon dioxide recovery plant and to clarify auxiliary boiler operating requirements.

“Major stationary sources” and “major modifications” located in areas designated as attainment or unclassifiable for national Ambient Air Quality Standards (NAAQS) are subject to the PSD regulations. Martin County and the surrounding counties are designated as “in attainment or cannot be classified” for all criteria pollutants.

A “major stationary source” is defined as any one of 28 specified sources which has a potential to emit 100 tons per year or more, or any other stationary source which has the potential to emit 250 tons per year or more of any regulated pollutant (40 CFR 52.21). ICLP’s facility is listed as a 100-ton per year source (fossil-fuel-fired steam electric plants of more than 250 million Btu/hr heat input) having the potential to emit more than 100-tons of a criteria pollutant. Since the proposed

modification to ICLP's facility will result in a net emission increase above significance levels ("past actual to future potential"), the modification is subject to PSD review.

Under PSD, each pollutant emitted from a major source in significant quantities, as defined in Table 3-1, and for which the area is designated as "in attainment" for the pollutant, must undergo a PSD analysis. The PSD analysis involves the following:

- BACT analysis
- PSD Increment Consumption Analysis, including other increment-consuming sources in the area (if applicable)
- NAAQS impact analysis, including other significant sources in the area (if applicable)

Impacts on Class 1 PSD Areas. The facility is approximately 142 kilometers north of the Everglades National Park (the nearest Class 1 area). Based on discussions with John Notar of the National Park Service, an analysis of the impacts on this Class I area will be required. The analysis will be submitted under separate cover.

Additional Impacts Analysis. Any source subject to the PSD regulations must also provide an analysis of any adverse air quality-related impacts to:

- Visibility
- Soils
- Vegetation
- Commercial, residential, and industrial growth that the project might cause

TABLE 3-1
TOTAL FACILITY EMISSION

	Baseline (1997-1998) Annual Tons	Allowable* Annual Tons	PSD Significance	PSD Applies?
Nitrogen Oxides	1992	2245	40	Yes
Carbon Monoxide	90	1649	100	Yes
Volatile Organic Compounds	0	54	40	Yes
Particulate Matter	82	270	25	Yes
Sulfur Dioxide	1436	2549	40	Yes
Lead	0.02	0.28	0.6	No
Beryllium	0.0007	0.041	0.0004	Yes
Mercury	0.01	0.17	0.1	Yes
Fluorides	1.1	13.4	3	Yes
Sulfuric Acid Mist	0.6	6.51	7	No
Arsenic	0.01	0.765	0	Yes

*Based on proposed BACT levels in Section 4.

3.2.3 62-212.500 Non-Attainment

The proposed modification will take place at an existing facility located in Martin County which has been designated as "in attainment or cannot be classified" for all criteria pollutants. Therefore, non-attainment new source review is not applicable to the proposed project.

3.3 Chapter 62-204 Air Pollution Control: General

3.3.1 62-204.800 Federal Regulations Adopted by Reference

Emission standards contained in 40 CFR 60, 61, 63, 64, 72, 73, 75, 76, 77, and 78 have been adopted by reference pursuant to Rule 62-204.800

The New Source Performance Standards (NSPS) apply to new, modified, and reconstructed sources of emissions for which the U.S. EPA has promulgated

standards. The EPA promulgated NSPS for fossil-fuel-fired steam generators (40 CFR 60, Subpart D) with a heat input greater than 250 MMBtu per hour in 1971. Since its promulgation, the EPA has proposed revisions and amendments to Subpart D a number of times. One of the amendments, Subpart Da, applies to the ICLP plant. Subpart Da was proposed in 1978 and promulgated in 1979 and specifically applies to electric utility steam generating units.

Electric utility steam generating units are subject to NSPS Subpart Da provided they meet all three of the following criteria. If the plant does not meet any one of the criteria, it may still be subject to NSPS (e.g., the promulgated and proposed emission limits in Subpart Db). Subpart Da is applicable to electric steam generating units that:

- Are capable of combusting more than 73 MW (250 MMBtu/hr) heat input of fossil fuel either alone or in combination with any other fuel
- Supply more than 25 MW electricity to any utility power distribution system for sale
- Supply more than one-third of their potential electric output capacity to any utility power distribution system for sale

Table 3-4 provides a summary of the performance standards that apply to the ICLP facility.

TABLE 3-4
NSPS FOR ELECTRIC UTILITY STEAM GENERATING UNITS

Affected Facility	Pollutant	Emission Level	Requirement
Coal-fired boilers (and coal-derived fuels)	Particulate	0.03 lb/million Btu	Average of three 1-hr test runs
	Opacity	<20% except for one six-minute period/hr <27%	6-minute block average
	SO ₂	0.6 lb/million Btu and 70% reduction	30-day rolling average
	NO _x	0.60 lb/million Btu	30-day rolling average

Source: 40 CFR 60, Subpart Da.

Under 40 CFR 60, Subpart Da, a lower nitrogen oxide requirement applies to facilities where “modification or reconstruction commenced after July 9, 1997.” The lower NO_x emission limit under 40 CFR 60.44a(d)(2) (0.15 lb/MMBtu NO_x, 30-day rolling average), does *not* apply to the ICLP facility because the operational changes being requested do not meet the definition of “modification or reconstruction” in the NSPS. The NSPS defines modification (in 40 CFR 60.2) as follows:

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollution (to which a standard applies) into the atmosphere not previously emitted.

The proposed operational change at ICLP’s facility will not increase the permitted emissions rate for any air pollutant, nor will it result in any new pollutant being emitted. The proposed changes also do not constitute a reconstruction because there

will not be any significant capital expenditures associated with the proposed change in operations.

3.3.2 *Acid Rain - Title IV of CAAA*

Pursuant to Title IV of the CAAA of 1990 and EPA's implementing regulations regarding acid rain requirements (40 CFR Part 72), the Facility does not have any "affected" units. The PC boiler is exempt from Title IV acid rain requirements because the Facility is a qualifying cogeneration facility that had as of 11/15/90 a qualifying power purchase agreement for at least 15% of the total output capacity. This specific exemption is authorized in 40 CFR 72.6(b)(5).

The proposed increase in operations at ICLP's facility does not affect the exemption from the acid rain requirements. The proposed net output is not more than 130% of the original net planned output, so the exemption in 40 CFR 72.6(b)(5) still applies.

3.4 Chapter 62-296 Stationary Sources-Emission Standards

3.4.1 *62-296.405 Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input.*

This DEP regulation limits emissions from the PC boiler. Emission limits listed in this requirement are less stringent than the existing limits in the PSD permit and the Title V operating permit. The facility will continue to comply with the existing limits in the PSD permit and the Title V operating permit.

3.4.2 62-296.711 Materials Handling, Sizing, Screening, Crushing and Grinding Operations

These regulations address solid material handling operations at ICLP. There are no changes to the capacity or operating method of the solid material handling operations at ICLP. ICLP will continue to comply with this regulation through its PSD and Title V operating permits.

4.0 PROJECT EMISSIONS AND CONTROL TECHNOLOGY REVIEW

4.1 Project Emissions

4.1.1 Existing Emissions

As mentioned previously, ICLP is not requesting an increase in the existing emission limits for the facility.

Table 4-1 provides a summary of the existing emission limits for the pulverized-coal-fired boiler.

**TABLE 4-1
PC BOILER EXISTING EMISSION RATES**

<u>Pollutant</u>	<u>(lb/hr)</u>	<u>(ton/yr)</u>
Nitrogen Oxides	582	2549
Carbon Monoxide	376	1647
Hydrocarbons	12.3	54
Particulate Matter	61.6	270
Sulfur Dioxide	582	2549
Lead	0.064	0.28
Beryllium	0.0093	0.041
Mercury	0.039	0.172
Arsenic	0.175	0.765
H ₂ SO ₄	0.0093	0.0041
Fluorides	5.08	22.3

Ammonia: slip shall not exceed 50 ppmv

4.1.1 Proposed Emissions

As part of the Best Available Control Technology (BACT) evaluation, discussed below, and informal discussions with the Department, ICLP is proposing changes to its permit limits as part of this application. The changes provide a rate-based emission limit for all pollutants, and reduce the permitted emission rate for NO_x,

fluorides, and ammonia slip. Proposed emissions are summarized in Table 4-2, below:

**TABLE 4-2
PC BOILER PROPOSED EMISSION RATES**

<u>Pollutant</u>	<u>(lb/MMBtu)</u>	<u>(ton/yr)</u>
Nitrogen Oxides	0.125*	2245
Carbon Monoxide	0.092	1647
Hydrocarbons	0.003	54
Particulate Matter	0.015	270
Sulfur Dioxide	0.142*	2549
Lead	0.000016	0.28
Beryllium	0.0000023	0.041
Mercury	0.00001	0.172
Arsenic	0.000044	0.765
H ₂ SO ₄	0.00035	0.0041
Fluorides	0.000744	13.4

Ammonia: slip shall not exceed 10 ppmv

* or 480 lb/hr, whichever is less stringent

The proposed emission rates are the same as or lower than the existing permitted emission rates on a mass-emissions basis, and are lower for all pollutants on a rate basis. The documentation for each pollutant level chosen is provided in the BACT analysis, below. The proposed PSD permit conditions reflecting the proposed limits are included in Section 5.

Any alternative fuel approved through the permit language requested in Section 5 will behave similarly to the existing coal, and will meet the proposed permit limits above.

4.2 Best Available Control Technology Evaluation

The BACT analysis shown below is repeated in bulk from the initial air permit application for the PC boiler, and updated where appropriate. For all pollutants, the

facility proposes to use the same emissions controls to meet *at least* the existing pound-per-hour and ton-per-year emission limits. This will correspond to a decrease in the emission rate on a pound-per-million-Btu basis. For three pollutants (nitrogen oxides, fluorine, and ammonia slip) a further reduction is proposed.

Since the facility was permitted based on 100% capacity (8,760 hours per year), additional electricity will be made available without any increase in permitted emission rates.

4.2.1 Control Technology

The air pollution control system for the PC boiler consists of SCR, spray dryer absorbers (SDAs) for desulfurization and acid gas control, and a baghouse for particulate matter (including trace metals) controls.

Flue gas from the air heater enters the two 50-percent capacity SDAs, where it is humidified and cooled by spraying with lime slurry. Simultaneously, the flue gas provides drying energy to the atomized slurry. The cooled gas, along with the entrained reaction products and fly ash, flows to the fabric filter where solids are separated from the gas.

The system uses lime (calcium hydroxide) slurry as the absorbing medium. Pebble lime is slaked in the lime preparation system, diluted and stored in the lime feed tanks. Lime slurry is pumped from the feed tank to the agitated atomizer head tank, from which the slurry is pumped to the absorbers.

Lime is delivered to the site by rail or self-unloading truck and stored in a totally enclosed structure to eliminate fugitive emissions.

Flue gas from the FGD system enters the baghouse through an inlet manifold, which distributes the gas to the bag filter compartments. Gas passes through the fabric of the bags from the inside to the outside; collected particulate is retained on the inside surface of the bags. When the particulate buildup on the surface of the bags produces a preset flue gas pressure drop, an automatic reverse-air cleaning cycle is initiated.

Hoppers below the bags collect the particulate released from the bags during the cleaning cycle. A pneumatic transfer system transports the particulate ash from the hoppers to the ash storage silo, in preparation for off-site disposal.

The facility is an emission source of nitrogen oxides, sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO), Volatile Organic Compounds (VOCs) and other regulated pollutants.

ICLP expects that the only physical modifications that may be needed to meet the new proposed permit limits will be enhancements to the NO_x control system. All other permit limits can be met using the existing equipment (spray dryer absorber system and fabric filter baghouse).

4.2.2 Emission Rate: Nitrogen Oxides

For the pulverized coal boiler, the original proposed BACT level for NO_x was on the basis of 0.17 lb/MMBtu, achieved through the use of Selective Non-Catalytic Reduction (SNCR) and advanced combustion controls. Subsequent documentation allowed compliance with the NO_x limit on the basis of SNCR, Selective Catalytic Reduction (SCR), advanced combustion controls, or any combination. An SCR system was installed.

ICLP now proposes a full-load emission limit of 0.125 lb/MMBtu, on a 24-hour block average basis. This reduction keeps the ICLP emission rate on par with permitted emission rates for new facilities firing coal (including facilities using circulating fluidized bed technology).

Because of system design characteristics, it is difficult to document and maintain compliance with a rate based emission limit at low or variable load. ICLP therefore proposes a minimum pound-per-hour NO_x limit as the simplest way to allow for low-load operation. Using a mass emission limit at reduced loads has three advantages. First, it is more straightforward and accurate during periods when load is shifting. Second, it avoids the need to clearly define conditions that qualify as "reduced load," and the need to carefully monitor parameters to document when the "reduced load" permit conditions apply. Third, it avoids the need to request multiple stepped-off emission limits at different operating conditions.

ICLP proposes a NO_x mass emission limit of 480 pounds per hour on a 24-hour block average basis. This limit would become effective at reduced loads (*i.e.* below 3840 MMBtu/hr), and would still represent a significant reduction from the current permitted limit.

ICLP will continue to monitor and document compliance with the NO_x emission limits using continuous emissions monitoring systems.

Specific Condition 6 of the PSD permit allows the Facility "to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation" for the PC boiler. To comply with the proposed NO_x limit, ICLP may wish to enhance the facility's NO_x control system. Per existing Condition of Certification (1).A.2., ICLP will provide details of the enhanced NO_x reduction system upon completion of final

design, and at least 90 days prior to commencing on-site construction for the modification.

While final system design is still in progress, ICLP is considering the use of an SNCR system to augment the existing SCR system. The supplemental SNCR system would ensure compliance with the NO_x limitation at increased loads.

4.2.2 Emission Rate: Sulfur Dioxide

The original proposed BACT level of SO₂ was on the basis of 0.17 lb/MMBtu, achieved through the use of lime spray drying. The current proposed emission rate is 0.142 lb/MMBtu, on a 24-hour block average basis. As discussed for NO_x, above, ICLP is proposing a minimum pound-per-hour emission rate to allow for system fluctuations at reduced or variable loads. ICLP proposes an SO₂ mass emission limit of 480 pounds per hour, on a 24 hour block average basis. This limit would become effective at reduced loads (*i.e.*, below 3380 MMBtu/hr), and would still represent a significant reduction from the current permitted limit.

ICLP will continue to monitor and document compliance with the SO₂ emission limits using continuous emissions monitoring systems.

4.2.3 Emission Rate: Carbon Monoxide

For CO, the original proposed BACT levels were on the basis of 0.11 lb/MMBtu, achieved through advanced combustion controls. ICLP now proposes a rate-based emission limit of 0.092 lb/MMBtu.

ICLP will continue to monitor and document compliance with the CO emission limits using periodic stack testing. ICLP believes that a CO CEMS is prohibitively costly.

A detailed analysis of the cost effectiveness of the CEMS will be provided under separate cover.

4.2.4 Emission Rate: Other Pollutants

For each pollutant with a permit limit, ICLP proposes a rate-based emission limit that corresponds to zero increase in full-load emissions for the PC boiler. This results in a reduction of the rate equivalent emission rate for all pollutants. This also reflects current BACT for all pollutants, with the exception of fluorides and ammonia slip. ICLP proposes a further reduction in the fluoride emission rate to 0.000744 lb/MMBtu; this limit corresponds with over a 50% reduction in the rate-based emission rate from the original permit, and provides the same emission rate as recently approved by the Department for the Cedar Bay Generating Plant.

ICLP proposes a reduction in the allowable ammonia slip from 50 ppmv to 10 ppmv. This limit corresponds with a five-fold reduction in the emission rate, and provides the same emission rate as recently approved by the Department for the Cedar Bay Generating Plant.

4.2.5 Alternative Fuel Use

The alternative fuel currently being reviewed is coal agglomerated with an adhesive binder. This material will behave similarly to coal. Therefore, emissions and emission control options are essentially the same, and BACT for combustion of alternative fuels is the same as BACT for coal combustion.

5.0 PROPOSED CHANGES TO PSD PERMIT

The proposed changes to the facility's operations will require changes in PSD Permit PSD-FL-168 as follows.

The first sentence of Specific Condition 3 needs to be revised to read;

The maximum heat input to the PC boiler shall not exceed 4100 MMBtu/hr while firing coal.

The first sentence of Specific Condition 5 needs to be revised to read;

Based on a permitted heat input of 4100 MMBTU/hr heat input, the stack emissions from the main boiler shall not exceed any of the following limitations:

The table in Specific Condition 5 needs to change to the following:

Pollutant	Emission Limitation	
	(lb/MMBtu)	(ton/yr)
SO ₂	0.142 ^{1,2}	2549
NO _x	0.125 ^{1,3}	2245
PM	0.015	270
PM ₁₀	0.015	270
CO	0.092 ¹	1647
VOC	0.003	54
H ₂ SO ₄	0.00035	0.0041
Beryllium	0.0000023	0.041
Mercury	0.00001	0.172
Lead	0.000016	0.28
Fluorides	0.000744	13.4
Arsenic	0.000044	0.765

1: 24 hour daily block average (midnight to midnight)

2: or 480 lb/hr (24-hr daily block average), whichever is less stringent

3: or 480 lb/hr (24-hr daily block average), whichever is less stringent

The first sentence of Specific Condition 6 should be removed, so that the condition reads;

~~6. The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation. The permittee is allowed to use any combustion technology...~~

Specific Condition 7 needs to be revised to read;

NH₃ (Ammonia) – Slip from exhaust gases shall not exceed 10 ppmv.

Finally, we request the addition of a new Specific Condition (Specific Condition 31) as follows:

Subject to the emission limits and other conditions in this permit, and subject to the following, the permittee may burn an alternative fuel in the PC boiler. At least ninety (90) days prior to burning the alternative fuel, the permittee shall submit documentation to the Department including at least:

- a. A thorough description of the fuel and proposed process;*
- b. A complete chemical analysis of the fuel; and*
- c. A Professional Engineer-certified stoichiometric calculation of the predicted emissions.*

The permittee shall notify the Department at least thirty (30) days prior to burning the alternative fuel. The Department may require stack testing to document actual emissions firing alternative fuels. In that event, the results of the stack testing and the permittee's analysis shall be reported to the Department within forty-five (45) days of completion of the testing.

Appendix I

Permit Application Forms

26109/1-halpin3.doc

August 18, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Subject: Indiantown Cogeneration, L.P. Air Permit Modifications
Permit No.: PSD-FL-168, 0850102-001-AV

Dear Mr. Halpin:

Per your recent discussions with David Burrage of Indiantown Cogeneration, we are submitting the attached revisions to the request to modify the PSD permit for the PC boiler.

This is a revision to the December 1999 PSD permit application for the megawatt increase. The revision includes the revised BACT analysis and proposed emission rates as discussed with Mr. Burrage. It also requests language to allow the use of alternative fuel. We are currently preparing submissions related to air quality modeling and carbon monoxide monitoring, and will be submitting them under separate cover.

Telephone
978.371.4000
Facsimile
978.371.2468

Thank you for your time and consideration. Please contact me at 978-371-4339 or David Burrage at 561-597-6500 ext. 19 with any questions or comments.

Sincerely,



Andrew Jablonowski, P.E.
Senior Air Quality Engineer

cc: S. Sorrentino, C. Allen, D. Burrage, D. Bullock, Indiantown Cogeneration LP
R. DeHart, PG&E Generating



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Indiantown Cogeneration, L.P.	
2. Site Name: Indiantown Cogeneration Plant	
3. Facility Identification Number: 0850102	[] Unknown
4. Facility Location: Street Address or Other Locator: 19140 SW Warfield Blvd City: Indiantown County: Martin Zip Code: 34956	
5. Relocatable Facility? [] Yes [X] No	6. Existing Permitted Facility? [X] Yes [] No

Application Contact

1. Name and Title of Application Contact: David Burrage, Environmental Manager	
2. Application Contact Mailing Address: Organization/Firm: Indiantown Cogeneration, L.P. Street Address: PO Box 1620 City: Indiantown State: FL Zip Code: 34956	
3. Application Contact Telephone Numbers: Telephone: (561) 597-6500 Fax: (561) 597-6520	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

Initial Title V air operation permit for an existing facility which is classified as a Title V source.

Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit number to be revised: _____

Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: _____

Reason for revision: _____

Air Construction Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

Air construction permit to construct or modify one or more emissions units.

Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Air construction permit for one or more existing, but unpermitted, emissions units.

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature George D. Eyal

Date December 22, 1999

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Pulverized Coal Fired Main Boiler	ACM1	

Application Processing Fee

Check one: Attached - Amount: \$_____ Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Modify PC Boiler to increase MW output to 390 MW.

2. Projected or Actual Date of Commencement of Construction: ~~about April, 2000~~

3. Projected Date of Completion of Construction: ~~about May, 2000~~

Application Comment

*No construction required. ICLP will increase MW output upon approval
(about December, 2000).*

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates:			
Zone:	East (km):	North (km):	
2. Facility Latitude/Longitude:			
Latitude (DD/MM/SS): 27/2/20		Longitude (DD/MM/SS): 80/30/45	
3. Governmental Facility Code:	4. Facility Status Code:	5. Facility Major Group SIC Code:	6. Facility SIC(s):
0	A	49	4911, 4961
7. Facility Comment (limit to 500 characters):			

Facility Contact

1. Name and Title of Facility Contact: David Burrage, Environmental Manager			
2. Facility Contact Mailing Address:			
Organization/Firm: Indiantown Cogeneration, L.P.			
Street Address: PO Box 1620			
City: Indiantown	State: FL	Zip Code: 34956	
3. Facility Contact Telephone Numbers:			
Telephone: (561) 597 - 6500		Fax: (561) 597 - 6210	

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input checked="" type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters):	
Major source of HAPs based on current estimates of HCL emissions.	

List of Applicable Regulations

62-210.300	62-213
62-210.350	62-273.300
62-210.370	62-297
62-210.500	62-296.405
62-210.550	62-204.800
62-210.700	40 CFR 60.Subpart Da
62-212.300	40 CFR 60,Subpart Db
62-212.400 (PSD-FL-168)	40 CFR 60,Subpart Y
62-212.410	
62-296.711	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
CO	A				
PB	B				
NOX	A				
PM	A				
PM10	A				
S02	A				
VOC	B				
SAM	B				
H021	B				
H114	B				
FL	B				
H015	B				
H106	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: ___1___ [] Not Applicable [] Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: ___2___ [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: ___3___ [] Not Applicable [] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [] Attached, Document ID: _____ [] Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: [] Attached, Document ID: _____ [] Not Applicable <input checked="" type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: ___4___ [] Not Applicable
7. Supplemental Requirements Comment: Document I.D. 1,2,3 found in Appendix II Document I.D. 4 is addressed as the main body of text.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP. (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

1. Type of Emissions Unit Addressed in This Section: (Check one)			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
<input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
<input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			
2. Regulated or Unregulated Emissions Unit? (Check one)			
<input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
<input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):			
4. Emissions Unit Identification Number:			
ID: 001		<input type="checkbox"/> No ID <input type="checkbox"/> ID Unknown	
5. Emissions Unit Status Code: A	6. Initial Startup Date: July 1, 1995	7. Emissions Unit Major Group SIC Code: 49	8. Acid Rain Unit? <input type="checkbox"/>
9. Emissions Unit Comment: (Limit to 500 Characters)			

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Air preheater, Low NOx burner, overfire air. Combustion control/O2 control, ammonia injection and catalytic reduction SCR system, spray dryer absorber, and fabric filter baghouse.

2. Control Device or Method Code(s): 027

Emissions Unit Details

1. Package Unit:		
Manufacturer:	NA	Model Number:
2. Generator Nameplate Rating: 390		MW
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	4100	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

40 CFR 60.1 – 60.15	
40 CFR 60.17	
40 CFR 60.19	
40 CFR 60.40a	
40 CFR 60.41a	
40 CFR 60.42a (a), (b)	
40 CFR 60.43a (a)(2), (b)(2), (g), (h)(2)	
40 CFR 60.44a (a), (c)	
40 CFR 60.46a (a-c, e-h)	
40 CFR 60.46a (a), (b)(3), (c-j)	
40 CFR 60.48a (a-e)	
40 CFR 60.49a (a-c, f-I)	

**D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)**

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Main Stack		2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Main Stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: PC boiler (001), Proposed CO2 Plant (007)			
5. Discharge Type Code: V	6. Stack Height: 495 feet	7. Exit Diameter: 16 feet	
8. Exit Temperature: 140 180 °F	9. Actual Volumetric Flow Rate: 1181774 acfm 1123700	10. Water Vapor: 15.00 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): Airflow in dscfm not listed because the PC boiler has no emission limits in grains/dscfm. Acfm listed are approximate.			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal firing		
2. Source Classification Code (SCC): 1-01-001-01		3. SCC Units: Tons burned (all solid fuels)
4. Maximum Hourly Rate: 145.00	5. Maximum Annual Rate: 1,270,200.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur: 2.00	8. Maximum % Ash: 12.00	9. Million Btu per SCC Unit: 24
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): No.2 Oil firing		
2. Source Classification Code (SCC): 1-01-005-01		3. SCC Units: Thousands Gallons Burned (all liquid fuels)
4. Maximum Hourly Rate: 12.70	5. Maximum Annual Rate: 111,135.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment (limit to 200 characters): PC Boiler does not currently fire No. 2 oil. No.2 oil would be fired during startup, shutdown and load changes. Firing capacity no more than 50% rated boiler heat input.		

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural Gas firing		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million cubic feet burned (all gaseous fuels)
4. Maximum Hourly Rate: 1.80	5. Maximum Annual Rate: 15,777.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 950
10. Segment Comment (limit to 200 characters): Fired during stratup, shutdown and load changes. No more than 50% rated boiler heat input.		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane (LPG) Firing		
2. Source Classification Code (SCC): 1-01-010-02		3. SCC Units: Thousands Gallons Burned (all liquid fuels)
4. Maximum Hourly Rate: 18.90	5. Maximum Annual Rate: 165,617.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 90
10. Segment Comment (limit to 200 characters): Burned during startup, shutdown and load changes. No more than 50% rated boiler heat input.		

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO	025	033	EL
PB	017		EL
NOX	032	065	EL
PM	017		EL
PM10	017		EL
SO2	067	017	EL
VOC	025	033	EL
SAM	067	017	EL
H021	017		EL
H114		042	EL
FL	067	017	EL
H015	017		EL
H106	067	017	EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: CO		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 376.00 lb/hour 1,649.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit			
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PB		2. Total Percent Efficiency of Control: 99.00%	
3. Potential Emissions: 0.03 lb/hour 0.15 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
10. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control: 37.00 %	
3. Potential Emissions: 582.00 lb/hour <u>512.5</u> ^{2,245} 2,549.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ____ to ____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
11. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM	2. Total Percent Efficiency of Control: 99.70
3. Potential Emissions: 61.60 lb/hour 270.00 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions	
12. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10	2. Total Percent Efficiency of Control: 99.70
3. Potential Emissions: 61.60 lb/hour 270.00 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions	
13. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**(Regulated Emissions Units -****Emissions-Limited and Preconstruction Review Pollutants Only)****Potential/Fugitive Emissions**

1. Pollutant Emitted: SO ₂	2. Total Percent Efficiency of Control: 95.00
3. Potential Emissions: 582.00 lb/hour 2,549.00 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit	
14. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

Emissions Unit Information Section _____ of _____

Pollutant Detail Information Page _____ of _____

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC	2. Total Percent Efficiency of Control:
3. Potential Emissions: 12.32 lb/hour 54.00 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ____ to ____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit	
15. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SAM		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 1.45 lb/hour 6.51 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
16. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H021	2. Total Percent Efficiency of Control: 99.00
3. Potential Emissions: 0.01 lb/hour 0.04 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ___ to ___ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions	
17. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H114		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.04 lb/hour 0.17 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ___ to ___ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit			
18. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: FL		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 5.08 lb/hour 13.4 3.05 22.30 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
19. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)**Potential/Fugitive Emissions**

1. Pollutant Emitted: H015	2. Total Percent Efficiency of Control: 99.00
3. Potential Emissions: 0.18 lb/hour 0.77 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions	
20. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H106		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 10.70 lb/hour 47.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters): Mass balance on 2/96 grab sample test for chlorine content in coal. Chlorine weight fraction times maximum expected coal firing rate, assume all chlorine becomes HCl, assume 97% control in spray dryer/baghouse.			
21. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

**J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)**

Supplemental Requirements

1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>3</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>4</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>March, 1996</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>4</u> <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment: Document I.D. 3 is located in appendix II Document I.D. 4 is addressed as the main body of text.

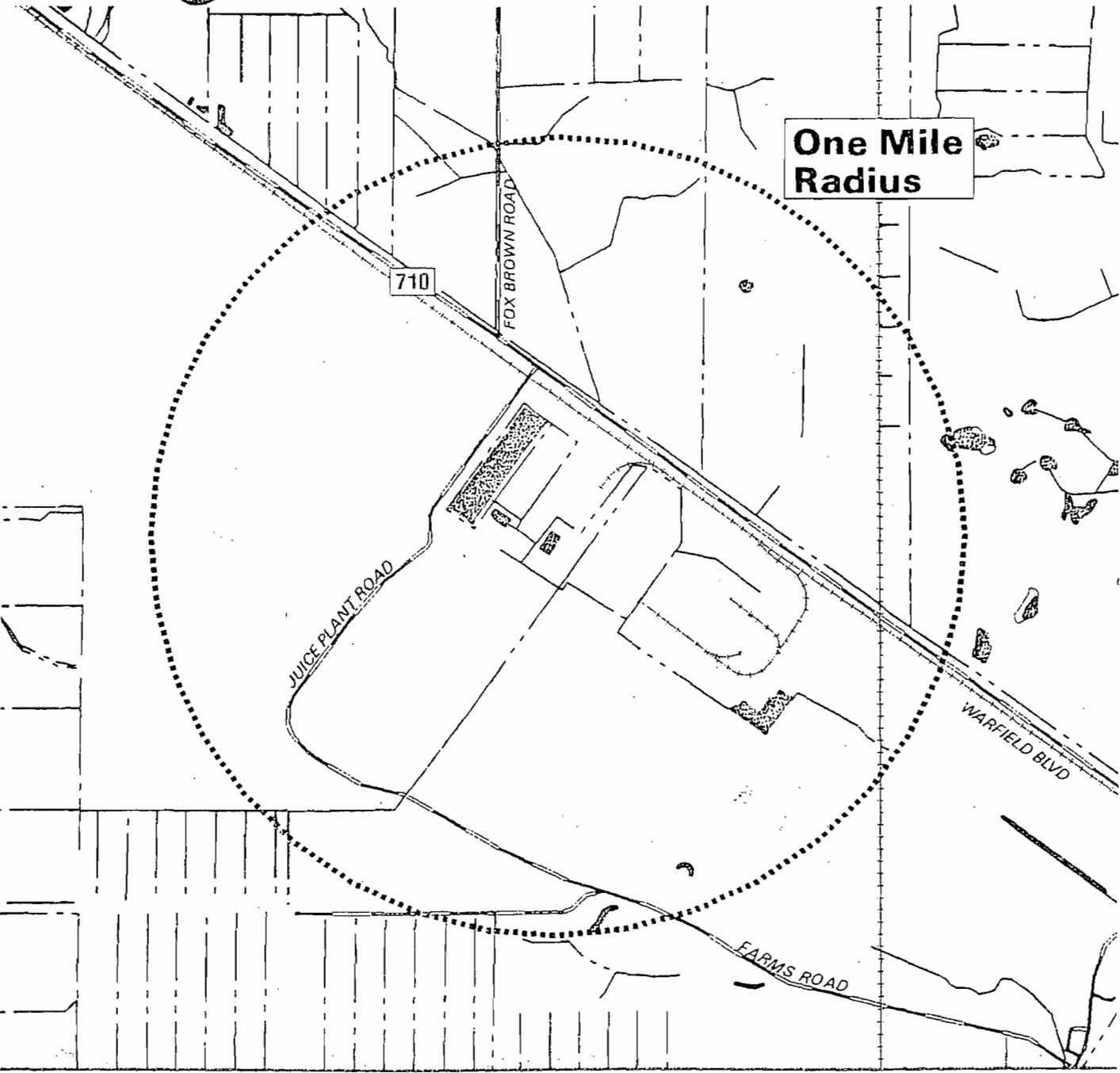
Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation [] Attached, Document ID: _____ [] Not Applicable
12. Alternative Modes of Operation (Emissions Trading) [] Attached, Document ID: _____ [] Not Applicable
13. Identification of Additional Applicable Requirements [] Attached, Document ID: _____ [] Not Applicable
14. Compliance Assurance Monitoring Plan [] Attached, Document ID: _____ [] Not Applicable
15. Acid Rain Part Application (Hard-copy Required) [] Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ [] Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ [] New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ [] Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ [] Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ [] Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ [] Not Applicable

08/08/00

Appendix II

Drawings



One Mile Radius

710





FOX BROWN ROAD

JUICE PLANT ROAD

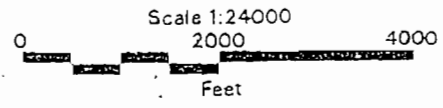
WARFIELD BLVD

FARMS ROAD

Date: 10 Nov 99 11:44:45 Tuesday
j:\export\home\mike\mart\loc\1mile1.map

-  Road or Highway
-  Railroad
-  River or Stream
-  Ditch or Canal

Area Within One Mile of Site



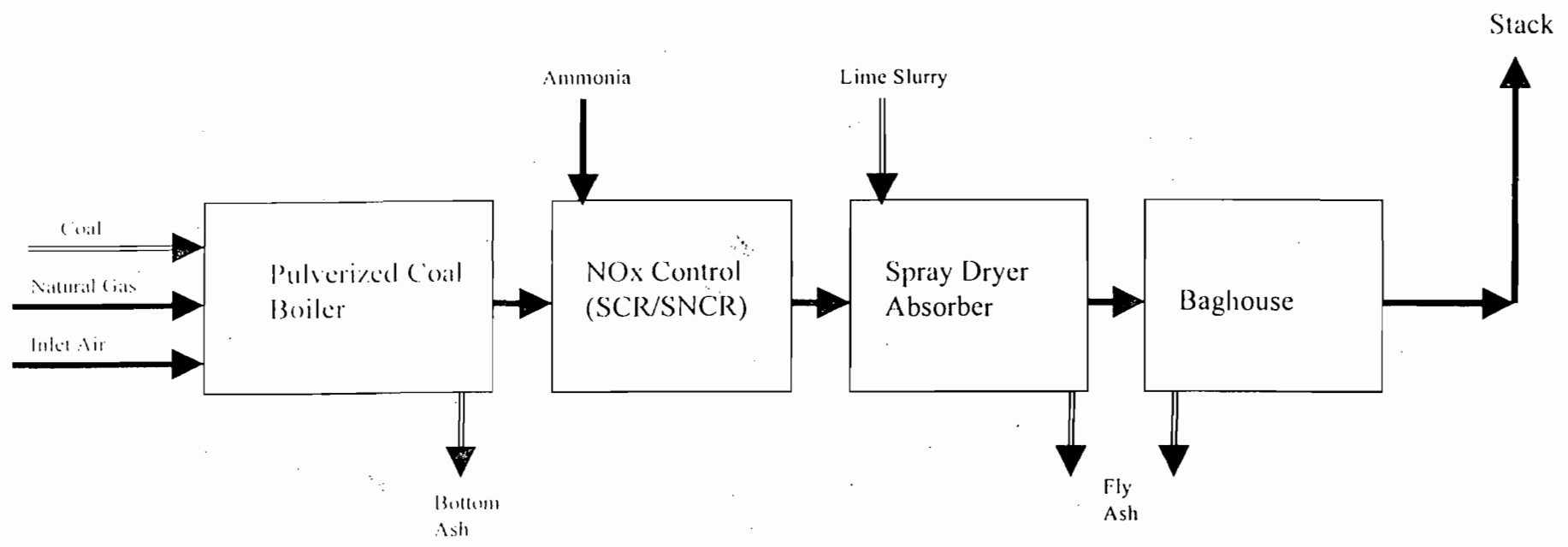
PC Boiler Plant Simplified Process Diagram

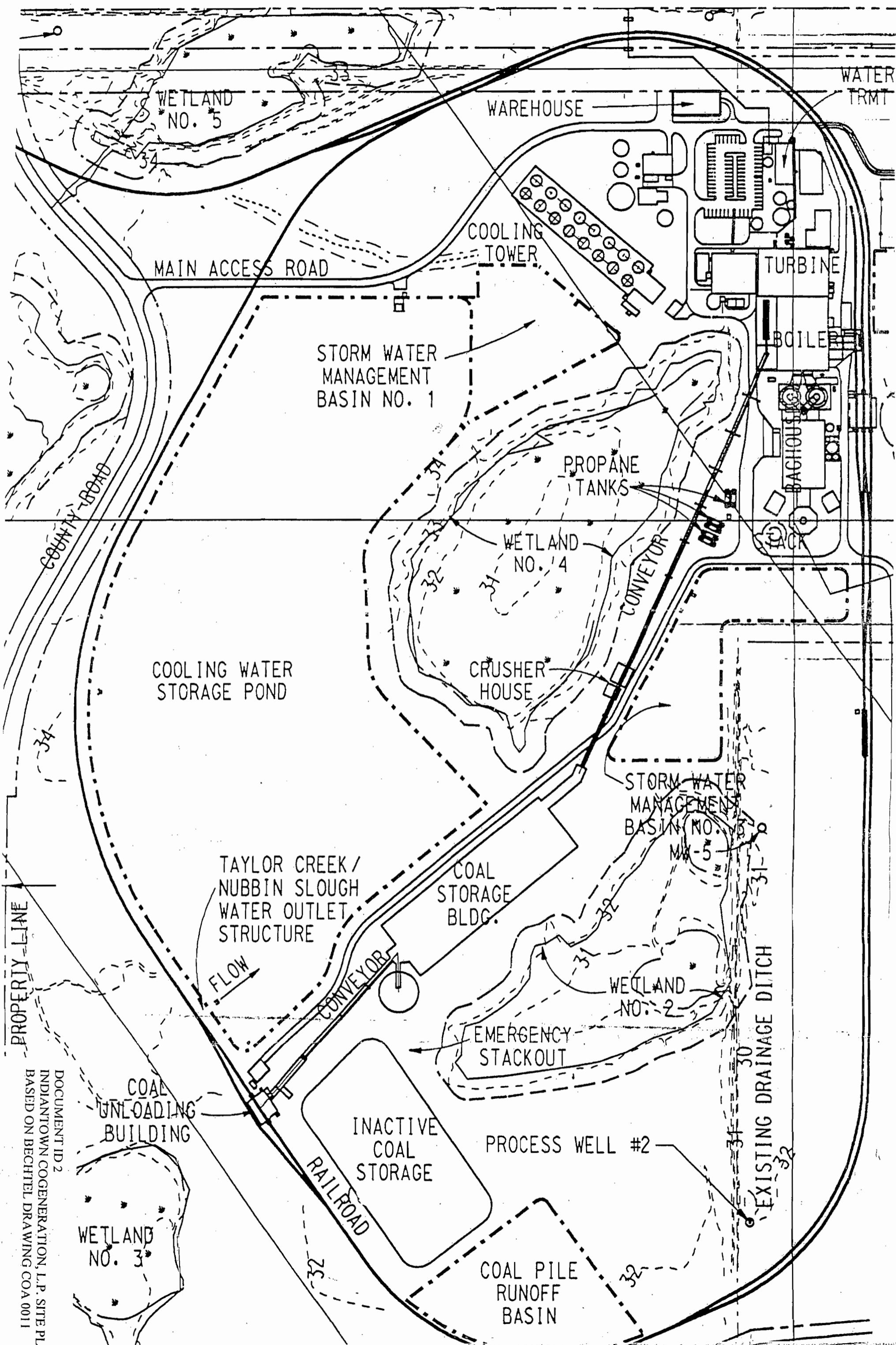


A Jablonowski 12/23/99

Vapor Streams
→

Liquid/Solid Streams
⇨





WATER TRMT

WETLAND NO. 5

WAREHOUSE

MAIN ACCESS ROAD

COOLING TOWER

TURBINE

STORM WATER MANAGEMENT BASIN NO. 1

BOILER

COUNTY ROAD

PROPANE TANKS

WETLAND NO. 4

COOLING WATER STORAGE POND

CRUSHER HOUSE

STORM WATER MANAGEMENT BASIN NO. 2

TAYLOR CREEK / NUBBIN SLOUGH WATER OUTLET STRUCTURE

COAL STORAGE BLDG.

PROPERTY LINE

FLOW

CONVEYOR

WETLAND NO. 2

EMERGENCY STACKOUT

COAL UNLOADING BUILDING

INACTIVE COAL STORAGE

PROCESS WELL #2

WETLAND NO. 3

RAILROAD

EXISTING DRAINAGE DITCH

COAL PILE RUNOFF BASIN

DOCUMENT ID 2
 INDIANTOWN COGENERATION, L.P. SITE PL
 BASED ON BECHTEL DRAWING COA 0011

**F. EMISSIONS UNIT POLLUTANTS
(All Emissions Units)**

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
CO	025	033	EL
PB	017		EL
NOX	032	065	EL
PM	017		EL
PM10	017		EL
SO2	067	017	EL
VOC	025	033	EL
SAM	067	017	EL
H021	017		EL
H114		042	EL
FL	067	017	EL
H015	017		EL
H106	067	017	EL

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: CO	2. Total Percent Efficiency of Control:
3. Potential Emissions: 376.00 lb/hour 1,649.00 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit	
9. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PB		2. Total Percent Efficiency of Control: 99.00%	
3. Potential Emissions: 0.03 lb/hour 0.15 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
10. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: NOX		2. Total Percent Efficiency of Control: 37.00 %	
3. Potential Emissions: 582.00 lb/hour ^{2,245} 512.5 2,549.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
11. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM		2. Total Percent Efficiency of Control: 99.70	
3. Potential Emissions: 61.60 lb/hour 270.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
12. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: PM10		2. Total Percent Efficiency of Control: 99.70	
3. Potential Emissions: 61.60 lb/hour 270.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ____ to ____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
13. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: SO2		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 582.00 lb/hour 2,549.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit			
14. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: VOC		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 12.32 lb/hour 54.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit			
15. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION**(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)****Potential/Fugitive Emissions**

1. Pollutant Emitted: SAM	2. Total Percent Efficiency of Control: 95.00
3. Potential Emissions: 1.45 lb/hour 6.51 tons/year	4. Synthetically Limited? []
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year	
6. Emission Factor: Reference:	7. Emissions Method Code: 3
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions	
16. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit	

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:	2. Future Effective Date of Allowable Emissions:
3. Requested Allowable Emissions and Units:	4. Equivalent Allowable Emissions: lb/hour tons/year
5. Method of Compliance (limit to 60 characters):	
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):	

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION

(Regulated Emissions Units -

Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H021		2. Total Percent Efficiency of Control: 99.00	
3. Potential Emissions: 0.01 lb/hour 0.04 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 to tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
17. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

**G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)**

Potential/Fugitive Emissions

1. Pollutant Emitted: H114		2. Total Percent Efficiency of Control:	
3. Potential Emissions: 0.04 lb/hour 0.17 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ___ to ___ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit			
18. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: FL		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 5.08 lb/hour ^{13.4} 22.30 _{3.05} tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
19. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H015		2. Total Percent Efficiency of Control: 99.00	
3. Potential Emissions: 0.18 lb/hour 0.77 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 _____ to _____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 3	
8. Calculation of Emissions (limit to 600 characters): Limit per PSD permit Control efficiency not used to calculate potential emissions			
20. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters): Limit per PSD permit			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

G. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION
(Regulated Emissions Units -
Emissions-Limited and Preconstruction Review Pollutants Only)

Potential/Fugitive Emissions

1. Pollutant Emitted: H106		2. Total Percent Efficiency of Control: 95.00	
3. Potential Emissions: 10.70 lb/hour 47.00 tons/year		4. Synthetically Limited? []	
5. Range of Estimated Fugitive Emissions: [] 1 [] 2 [] 3 ____ to ____ tons/year			
6. Emission Factor: Reference:		7. Emissions Method Code: 2	
8. Calculation of Emissions (limit to 600 characters): Mass balance on 2/96 grab sample test for chlorine content in coal. Chlorine weight fraction times maximum expected coal firing rate, assume all chlorine becomes HCl, assume 97% control in spray dryer/baghouse.			
21. Pollutant Potential/Fugitive Emissions Comment (limit to 200 characters):			

Allowable Emissions Allowable Emissions _____ of _____

1. Basis for Allowable Emissions Code:		2. Future Effective Date of Allowable Emissions:	
3. Requested Allowable Emissions and Units:		4. Equivalent Allowable Emissions: lb/hour tons/year	
5. Method of Compliance (limit to 60 characters):			
6. Allowable Emissions Comment (Desc. of Operating Method) (limit to 200 characters):			

H. VISIBLE EMISSIONS INFORMATION
 (Only Regulated Emissions Units Subject to a VE Limitation)

Visible Emissions Limitation: Visible Emissions Limitation _____ of _____

1. Visible Emissions Subtype:	2. Basis for Allowable Opacity: [] Rule [] Other
3. Requested Allowable Opacity: Normal Conditions: % Exceptional Conditions: % Maximum Period of Excess Opacity Allowed: min/hour	
4. Method of Compliance:	
5. Visible Emissions Comment (limit to 200 characters):	

I. CONTINUOUS MONITOR INFORMATION
 (Only Regulated Emissions Units Subject to Continuous Monitoring)

Continuous Monitoring System: Continuous Monitor _____ of _____

1. Parameter Code:	2. Pollutant(s):
3. CMS Requirement:	[] Rule [] Other
4. Monitor Information: Manufacturer: _____ Model Number: _____ Serial Number: _____	
5. Installation Date:	6. Performance Specification Test Date:
7. Continuous Monitor Comment (limit to 200 characters):	

J. EMISSIONS UNIT SUPPLEMENTAL INFORMATION
(Regulated Emissions Units Only)

Supplemental Requirements

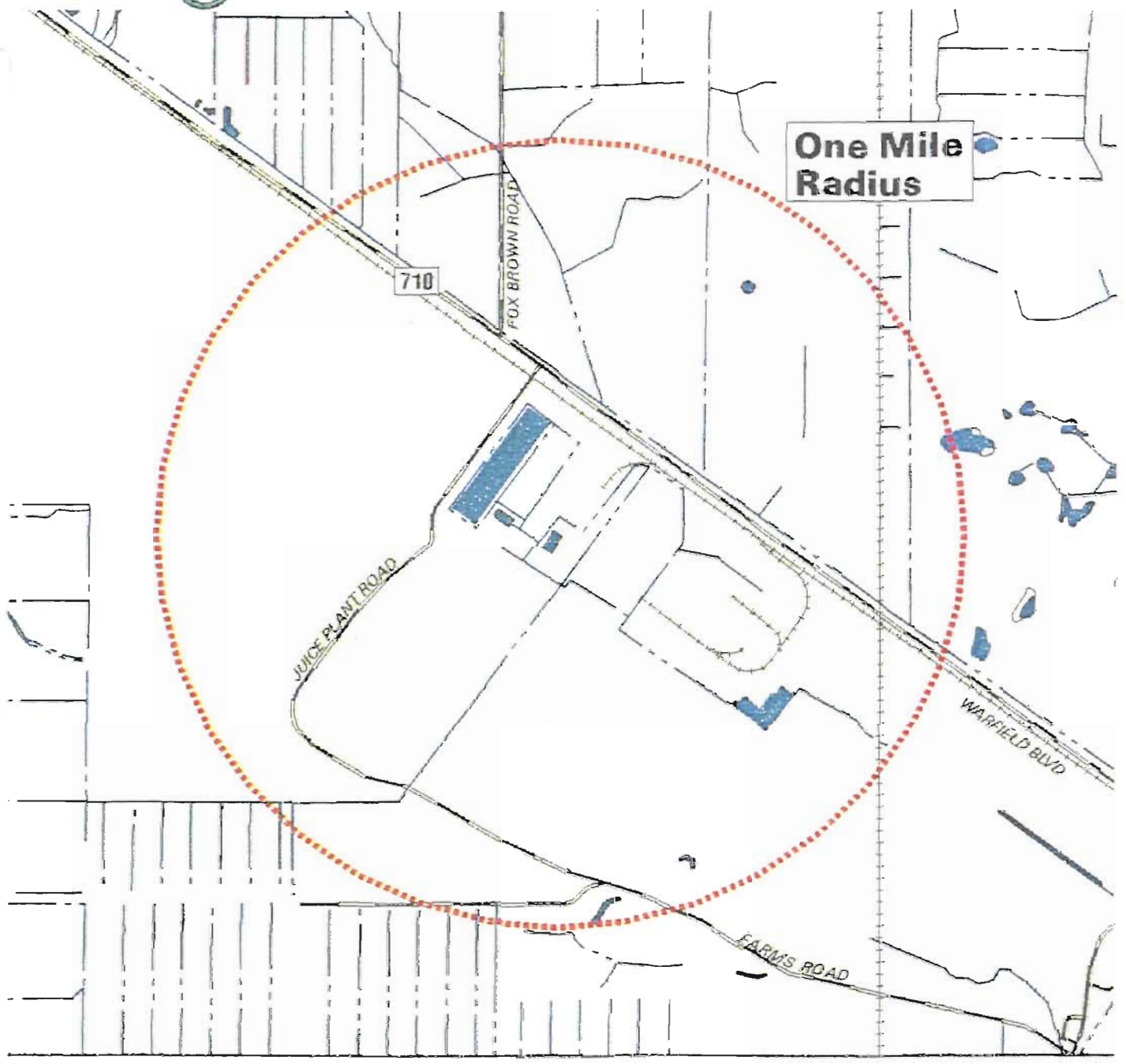
1. Process Flow Diagram <input checked="" type="checkbox"/> Attached, Document ID: <u>3</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
2. Fuel Analysis or Specification <input checked="" type="checkbox"/> Attached, Document ID: <u>4</u> <input type="checkbox"/> Not Applicable <input type="checkbox"/> Waiver Requested
3. Detailed Description of Control Equipment <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
4. Description of Stack Sampling Facilities <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Compliance Test Report <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously submitted, Date: <u>March, 1996</u> <input type="checkbox"/> Not Applicable
6. Procedures for Startup and Shutdown <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
7. Operation and Maintenance Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable <input checked="" type="checkbox"/> Waiver Requested
8. Supplemental Information for Construction Permit Application <input checked="" type="checkbox"/> Attached, Document ID: <u>4</u> <input type="checkbox"/> Not Applicable
9. Other Information Required by Rule or Statute <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable
10. Supplemental Requirements Comment: Document I.D. 3 is located in appendix II Document I.D. 4 is addressed as the main body of text.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

11. Alternative Methods of Operation <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Alternative Modes of Operation (Emissions Trading) <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Identification of Additional Applicable Requirements <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
14. Compliance Assurance Monitoring Plan <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Acid Rain Part Application (Hard-copy Required) <input type="checkbox"/> Acid Rain Part - Phase II (Form No. 62-210.900(1)(a)) Attached, Document ID: _____ <input type="checkbox"/> Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) Attached, Document ID: _____ <input type="checkbox"/> New Unit Exemption (Form No. 62-210.900(1)(a)2.) Attached, Document ID: _____ <input type="checkbox"/> Retired Unit Exemption (Form No. 62-210.900(1)(a)3.) Attached, Document ID: _____ <input type="checkbox"/> Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.) Attached, Document ID: _____ <input type="checkbox"/> Phase NOx Averaging Plan (Form No. 62-210.900(1)(a)5.) Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

Appendix II

Drawings

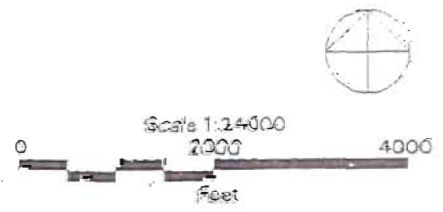


One Mile Radius

Date: 10 Nov 99 11:44:56 Tuesday
exp:\ghem\mike\mactinc\1m1d1.mxd

- Road or Highway
- Railroad
- River or Stream
- Ditch or Canal

Area Within One Mile of Site



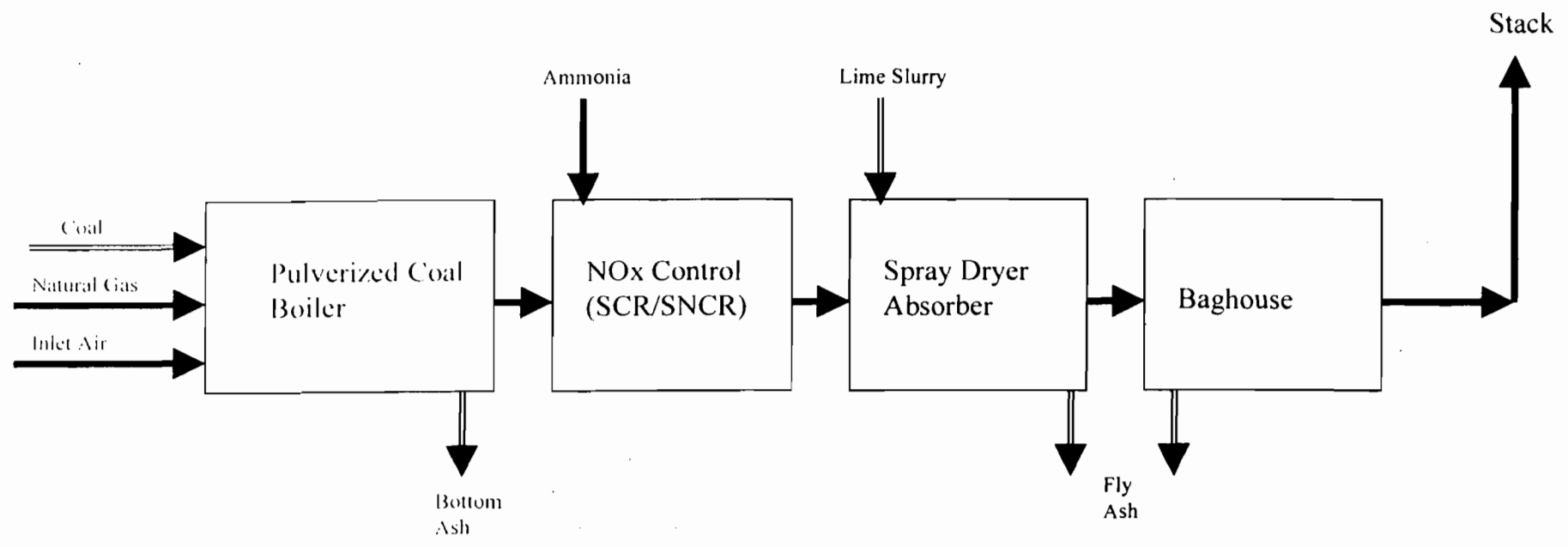
PC Boiler Plant Simplified Process Diagram



A Jablonowski 12/23/99

Vapor Streams
→

Liquid/Solid Streams
⇒



Appendix III

Supporting Calculations and Emission Data

Indiantown Cogeneration Facility
 Review of PSD Applicability

future potential versus current actual (1997 and 1998 annual emissions)

Pollutant	Permit Limits			Emissions		Comparison			Significant Emission Rates	
	Max. Emissions lb/MMBtu	Emission Limitation lb/hr	tpy	1998 tpy	1997 tpy	future PTE to 1998 tpy	future PTE to 1997 tpy	future PTE to ave actual tpy	PSD tpy	PSD needed?
Sulfur Dioxide	0.142 *	582	2549	1436.4	1385.94	1112.6	1163.06	1137.83	40	YES
Nitrogen Oxide	0.125 *	512.5	2245	1992	1959.01	252.75	285.74	269.245	40	YES
Particulate Matter	0.015	61.6	270	81.77	89.07	188.23	180.93	184.58	25	YES
PM10	0.015	61.6	270	81.77	89.07	188.23	180.93	184.58	15	YES
Carbon Monoxide	0.092	376	1649	89.94	97.98	1559.06	1551.02	1555.04	100	YES
Volatile Organic Compounds	0.0030	12.32	54	0	0	54	54	54	40	YES
Sulfuric Acid Mist	0.00035	1.45	6.51	0.5711	0.6235	5.9389	5.8865	5.9127	7	no
Beryllium	0.0000023	0.0094	0.041	0.0007132	0.000787	0.0402868	0.040213	0.0402499	0	YES
Mercury	0.000010	0.039	0.17	0.010203	0.01122	0.159797	0.15878	0.1592885	0.1	YES
Lead	0.000016	0.064	0.28	0.020406	0.02405	0.259594	0.25595	0.257772	0.6	no
Fluorides	0.000744		13.4	1.06027	1.16	12.300482	12.200752	12.250617	3	YES
Arsenic	0.000044	0.18	0.77	0.010203	0.01139	0.759797	0.75861	0.7592035	0	YES

September 15, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90-31, PSD-FL-168A
Indiantown Cogeneration Facility
Increased Heat Input Project

Dear Mr. Sorrentino:

Enclosed is one copy of the Draft PSD Permit Modification for the Indiantown Cogeneration Plant located at 19140 SW Warfield Blvd, Martin County. The Department's Intent to Issue PSD Permit Modification and the Public Notice of Intent to Issue PSD Permit Modification are also included.

The Public Notice of Intent to Issue PSD Permit Modification must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin at 850/921-9530.

Sincerely,

C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/mph
Enclosures

In the Matter of an
Application for Permit by:

Stephen Sorrentino, General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

DEP File No. PA-90-31, PSD-FL-168A
Indiantown Cogeneration Plant
Increased Heat Input Project
Martin County

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification (copy of Draft permit attached) for the proposed project, detailed in the application specified above, for the reasons stated below.

The applicant, Stephen Sorrentino, General Manager, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a PSD Permit Modification for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The applicant provided a revised application on August 21, 2000 clarifying the request, to increase the allowable heat input and to allow the use of an alternative (coal briquette) fuel.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD Permit Modification is required to increase the heat input and to burn alternative fuels in the main boiler.

The Department intends to issue this PSD Permit Modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue PSD Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 30 days from the date of publication of Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each

rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.

C. H. Fancy, P.E., Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue PSD Permit Modification (including the Public Notice of Intent to Issue PSD Permit Modification and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Oven
Mr. David S. Dee
Mr. A.J. Jablonski, Earthtech
Mr. Gregg Worley, EPA
Mr. 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.

(Clerk)

(Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PA 90-31, PSD-FL-168A

Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to allow for increased heat input into the main boiler as well as to allow for the combustion of an alternate fuel (coal briquettes) at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The heat input increase is approximately 20% and will provide for a new heat input limit of 4100 MMBtu/hr, although the boiler will require no physical modifications. The alternative fuel is an agglomeration of coal fines and referred to as coal briquettes.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was conducted. Emissions from this project are less than significant, will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 30 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401
Telephone: 561/681-6600
Fax: 561/681-6755

The complete project file includes the application, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

TECHNICAL EVALUATION
AND
PRELIMINARY DETERMINATION

PG & E Indiantown Cogeneration, L.P.
Increased Heat Input Project
Indiantown, Martin County
Florida

DEP File No. PA 90-31
PSD-FL-168A

State of Florida
Department of Environmental Protection
Division of Air Resources Management
Bureau of Air Regulation

September 15, 2000

1. **APPLICATION INFORMATION**

1.1 **Applicant Name and Address**

Indiantown Cogeneration, L.P.
P.O. Box 1799
19140 SW Warfield Blvd.
Indiantown, Florida 34956
Authorized Representative: Stephen Sorrentino, General Manager

1.2 **Reviewing and Process Schedule**

12-30-99: Date of Receipt of Application
01-31-00: Request for Additional Information
05-16-00: 2nd Request for Additional Information
07-08-00: Response to Request for Additional Information
08-02-00: FDEP/ Indiantown meeting; Revised Application requested
08-21-00: Date of Receipt of Revised Application
09-15-00: Intent Issued

2. **FACILITY INFORMATION**

2.1 **Facility Information**

The Indiantown Cogeneration, L.P. (ICLP) 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 currently rated at 3,422 MMBtu/hour heat input, with 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 main boiler is offline, as well as during main 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.

The Indiantown Cogeneration Plant is located in Martin County. It is approximately 142 kilometers from the Everglades National Park, a Class I PSD Area. The UTM coordinates of this facility are Zone 17; 548.3 km E; 2990.8 km N.



2.2 Standard Industrial Classification Codes (SIC)

Industry Group No.	49	Electric, Gas, and Sanitary Services
Industry No.	4911	Electric Services

2.3 Facility Category

ICLP is classified as a major facility under the Prevention of Significant Deterioration (PSD) program and has been assigned the facility identification number 0850102 in the Department database (ARMS system). Indiantown is subject to the Acid Rain program.

ICLP is identified within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. The Indiantown Increased Heat Input Project is considered a “major modification” with respect to Rule 62-212.400, Prevention of Significant Deterioration. This is based on potential emission increases at rates above the PSD Significant Emission Rates listed in Table 212.400-2, F.A.C., for the following parameters:

- Carbon Monoxide (CO)
- Sulfur Dioxide (SO₂)
- Nitrogen Oxides (NO_x)
- Particulate Matter (PM/PM₁₀)
- Volatile Organic Compounds (VOC)
- Mercury (Hg)
- Total Fluorides (HF)

For these PSD pollutants, a determination of Best Available Control Technology (BACT) is required (see attached table, page 12).

3. PROJECT DESCRIPTION

This permit addresses the following existing emissions units:

EMISSION UNIT NO.	SYSTEM	EMISSION UNIT DESCRIPTION
001	Steam Generation	Pulverized Coal Main Boiler - a 3,422 MMBtu per hour fossil fuel-fired steam generator.
004	Materials Handling	Coal Handling System - an 1100 TPH coal handling system, with crushing, transport and storage abilities
005	Materials Handling	Ash Handling System – a 250 TPH ash handling system, comprised of several conveying and storage units.
006	Materials Handling	Lime Handling System – a 25 TPH ash handling system, comprised of several conveying and storage units.

The Increased Heat Input Project will include an increase in ICLP’s electrical generating capacity, a direct consequence of the heat input increase. Accordingly, the ancillary equipment, including coal, ash, limestone handling, storage, and processing facilities are all subject to PSD review as a result of the main boiler heat input increase and the direct dependence of the main boiler upon these systems. Additionally, ICLP has requested the authority to burn an alternative fuel in the main (pulverized coal) boiler. This will be addressed within the BACT Determination.

ICLP requests to increase the facility's electrical output rating from a nominal 330 MW to a nominal 390 MW. According to ICLP, this will be effected by utilizing the maximum capabilities of the existing boiler and steam turbine. The physical capacities of each component are not being changed, but an increase in heat input will be required. As stated on Page 2-12 of the December 1999 application, "By modifying the NO_x reduction system, and adjusting the lime slurry flow to the spray dryer absorber, the fuel flow through the generation unit may be increased while keeping emissions within the permitted limits".

As previously noted, this modification will not only affect existing EU-001 (Main Boiler), but will also affect existing emissions units EU-004 (Coal handling system), EU-005 (Ash handling system) and EU-006 (Lime handling system) as these systems directly support the main boiler.

Based on the information presented in the application, the modification will trigger PSD review for SO₂, NO_x, PM/PM₁₀, CO, VOC, Total Fluorides (HF) and Hg since emissions will increase by more than their respective significant emissions rates. For PM_{2.5}, the project increases are considered significant since "any" increase triggers PSD review. However, current EPA guidance on PM_{2.5} instructs reviewing agencies to use PM10 as a surrogate until additional rules are promulgated. (EPA Memorandum Regarding "Interim Implementation of NSR Requirements for PM_{2.5}, dated October 24, 1997).

4. MAIN BOILER P.T.E. EMISSION TOTALS

The proposed PTE emission totals (TPY) for the main boiler portion of the project are summarized below:

Pollutant	Main Boiler	Total
Nitrogen Oxides	2245	2245
Carbon Monoxide	1649	1649
Hydrocarbons (VOC)	54	54
Particulate Matter	270	270
Sulfur Dioxide	2549	2549
Fluoride	13.36	13.36
Beryllium*	0.041	0.041
Mercury	0.172	0.172
Arsenic*	0.765	0.765

* Not subject to PSD review.

5. RULE APPLICABILITY

ICLP is located in Martin County, an area designated as attainment for all criteria pollutants in accordance with Rule 62-204.360, F.A.C. The proposed project is subject to review under Rule 62-212.400., F.A.C., Prevention of Significant Deterioration (PSD), because the potential emission increases for SO₂, CO, NO_x, PM/PM₁₀, VOC, Hg, and Total Fluorides (HF) exceed the significant emission rates given in Chapter 62-212, Table 62-212.400-2, F.A.C.

This PSD review includes a determination of Best Available Control Technology (BACT) for SO₂, CO, NO_x, PM/PM₁₀, VOC, Be, As, Hg, and Total Fluorides (HF), although beryllium and arsenic are not required to be reviewed. A determination of Maximum Achievable Control Technology (MACT) was not required (40 CFR 63.40(c)). An analysis of the air quality impacts from the proposed project upon soils, vegetation and visibility along with air quality impacts resulting from associated commercial, residential, and industrial growth was completed in December of 1990. The applicant updated that analysis and provided it within the revised application.

The emissions units affected by this PSD permit shall comply with all applicable provisions of the Florida Administrative Code (including applicable portions of the Code of Federal Regulations incorporated therein) and, specifically, the following Chapters and Rules:

5.1 State Regulations

Chapter/Rule	Description
Chapter 62-4	Permits
Rule 62-204.220	Ambient Air Quality Protection
Rule 62-204.240	Ambient Air Quality Standards
Rule 62-204.260	Prevention of Significant Deterioration Increments
Rule 62-204.800	Federal Regulations Adopted by Reference
Rule 62-210.300	Permits Required
Rule 62-210.350	Public Notice and Comments
Rule 62-210.370	Reports
Rule 62-210.550	Stack Height Policy
Rule 62-210.650	Circumvention
Rule 62-210.700	Excess Emissions
Rule 62-210.900	Forms and Instructions
Rule 62-212.300	General Preconstruction Review Requirements
Rule 62-212.400	Prevention of Significant Deterioration
Rule 62-213	Operation Permits for Major Sources of Air Pollution
Rule 62-214	Requirements For Sources Subject To The Federal Acid Rain Program
Rule 62-296.320	General Pollutant Emission Limiting Standards
Rule 62-297.310	General Test Requirements
Rule 62-297.401	Compliance Test Methods
Rule 62-297.520	EPA Continuous Monitor Performance Specifications

5.3 Federal Rules

Regulation	Description
40 CFR 60	NSPS Subparts A, Da, Y, and OOO (applicable sections)
40 CFR 72	Acid Rain Permits (applicable sections)
40 CFR 73	Allowances (applicable sections)
40 CFR 75	Monitoring (applicable sections including applicable appendices)
40 CFR 77	Acid Rain Program-Excess Emissions (future applicable requirements)

6. SOURCE IMPACT ANALYSIS

6.1 Air Quality Analysis

6.1.1 Introduction

The proposed project will result in a net increase in emissions of seven pollutants at levels in excess of PSD significant amounts: SO₂, CO, NO_x, PM/PM₁₀, VOC, Hg, and Total Fluorides (HF). The air quality impact analyses required by the PSD regulations for these pollutants include:

- An analysis of existing air quality;
- A significant impact analysis;
- A PSD increment analysis for SO₂ and NO₂;
- An Ambient Air Quality Standards (AAQS) analysis for PM₁₀, CO, and NO₂; and
- An analysis of impacts on soils, vegetation, and visibility and of growth-related air quality modeling impacts.

For CO the significant impact analyses performed by the applicant predicted maximum off-site impacts less than the significance levels of 2,000 µg/m³/m³, 1-hour average, and 500 µg/m³/m³, 8-hour average.

For NO_x the significant impact analyses performed by the applicant predicted no maximum off-site impacts of greater than the significance level of 1 µg/m³, annual average, in the vicinity of the facility.

For PM no analyses by the applicant are required since there are no longer any AAQS's nor PSD significant impact levels or increments for the pollutant. The analysis for particulate matter is covered under the pollutant PM₁₀.

Based on the analyses performed, the Department has reasonable assurance that the proposed project, as described in this report and subject to the conditions of approval proposed herein, will not cause or significantly contribute to a violation of any AAQS or PSD increment. A discussion of the required analyses follows.

6.1.2 *Analysis of Existing Air Quality and Determination of Background Concentrations*

Preconstruction ambient air quality monitoring is required for all pollutants subject to PSD review unless otherwise exempted or satisfied. This monitoring requirement may be satisfied by using previously existing representative monitoring data, if available. An exemption to the monitoring requirement may be obtained if the maximum air quality impact resulting from the projected emissions increase, as determined by air quality modeling, is less than a pollutant-specific de minimis concentration. In addition, if an acceptable monitoring method for the specific pollutant has not been established by EPA, monitoring may not be required.

If preconstruction ambient monitoring is exempted, determinations of background concentrations for PSD significant pollutants with established AAQS may still be necessary for use in any required AAQS analysis. These concentrations may be established from the required preconstruction ambient air quality monitoring analysis or from previously existing representative monitoring data. These background ambient air quality concentrations are added to pollutant impacts predicted by modeling and represent the air quality impacts of sources not included in the modeling.

The table below shows that SO₂, PM₁₀, NO₂, CO, HF, and Hg impacts from the project are predicted to be less than the de minimis levels; therefore, preconstruction ambient air quality monitoring is not required for these pollutants.

MAXIMUM PROJECT AIR QUALITY IMPACTS FOR COMPARISON TO THE DE MINIMIS AMBIENT LEVELS				
Pollutant	Averaging Time	Maximum Predicted Impact (µg/m³)	Impact Greater than De Minimis (Yes/No)	De Minimis Level (µg/m³)
SO ₂	24-hr	11.6	No	13
PM ₁₀	24-hr	0.92	No	10
CO	8-hr	50.9	No	575
NO ₂	Annual	4.42	No	14
HF	24-hr	0.05	No	0.25
Hg	24-hr	0.0007	No	0.25

6.1.3 Models and Meteorological Data Used in Significant Impact, PSD Increment and AAQS Analyses

The EPA-approved Industrial Source Complex Short-Term (ISCST3) dispersion model was used to evaluate the pollutant emissions from the proposed project and other existing major facilities. The model determines ground-level concentrations of inert gases or small particles emitted into the atmosphere by point, area, and volume sources. The model incorporates elements for plume rise, transport by the mean wind, Gaussian dispersion, and pollutant removal mechanisms such as deposition. The ISCST3 model allows for the separation of sources, building wake downwash, and various other input and output features. A series of specific model features, recommended by the EPA, are referred to as the regulatory options. The applicant used the EPA recommended regulatory options in each modeling scenario. Direction-specific downwash parameters were used for all sources for which downwash was considered. The stack associated with this project satisfies the good engineering practice (GEP) stack height criteria.

Initially, the applicant conducted preliminary modeling for the purpose of determining the worst case fuel/load scenarios for each applicable averaging time. Preliminary modeling runs were conducted using one year of meteorological data at three loads (100%, 75% and 50%) for coal. Two additional runs were conducted at 100% load using gas and oil. Thus, a total of 5 preliminary modeling runs were conducted. As a result of these runs, the applicant determined by that the 100% load using coal produced the “worst case” predicted ground-level ambient air quality impacts for the short-term averaging periods (1-hr, 3-hr, 8-hr and 24-hr) for all pollutants.

Meteorological data used in the ISCST3 model for all modeling (except the preliminary “worst case” determination modelling) consisted of a concurrent 5-year period of hourly surface weather observations and twice-daily upper air soundings from the National Weather Service (NWS) station at West Palm Beach NWS Station, Florida. The 5-year period of meteorological data was from 1984 through 1988. These NWS stations were selected for use in the study because they are the closest primary weather stations to the study area and are most representative of the project site. The surface observations included wind direction, wind speed, temperature, cloud cover, and cloud ceiling.

Because five years of data are used in ISCST3, the highest-second-high (HSH) short-term predicted concentrations were compared with the appropriate AAQS or PSD increments. For the annual averages, the highest predicted yearly average was compared with the standards. For determining the project’s significant impact area in the vicinity of the facility and if there are significant impacts from the project on any PSD Class I area, both the highest short-term predicted concentrations and the highest predicted yearly averages were compared to their respective significant impact levels.

6.1.4 Significant Impact Analysis

Initially, the applicant conducted modeling using only the proposed project’s worst-case emission scenario for each pollutant and applicable averaging time. A total of zzz receptors were placed along the site boundary and within 10 km of the facility, which is located in a PSD Class II area. For each pollutant subject to PSD and also subject to PSD increment and/or AAQS analyses, this modeling compared maximum predicted impacts due to the project with PSD significant impact levels to determine whether significant impacts due to the project were predicted in the vicinity of the facility or in the two Class I areas. The tables below show the results of this modeling. The radius of significant impact, if any, for each pollutant and applicable pollutant averaging time is also shown in the tables below.

MAXIMUM PROJECT AIR QUALITY IMPACTS FOR COMPARISON TO THE PSD CLASS II SIGNIFICANT IMPACT LEVELS IN THE VICINITY OF THE FACILITY					
Pollutant	Averaging Time	Maximum Predicted Impact ($\mu\text{g}/\text{m}^3$)	Significant Impact Level ($\mu\text{g}/\text{m}^3$)	Significant Impact (Yes/No)	Radius of Significant Impact (km)
SO ₂	Annual	1.15	1	Yes	100°/250 m
	24-hr	11.6	5	Yes	110°/250 m
	3-hr	24.7	25	No	100°/250 m
PM ₁₀	Annual	0.09	1	No	
	24-hr	0.92	5	No	
CO	8-hr	50.9	500	No	
	1-hr	78.2	2,000	No	
NO ₂	Annual	4.42	1	Yes	100°/250 m

6.1.5 Receptor Networks for PSD Increment and AAQS Analyses

For the AAQS and PSD Class II analyses, receptor grids normally are based on the size of the significant impact area for each pollutant. The size of the significant impact areas for the required SO₂ and NO₂ analyses were 250 m radii, as discussed in the significant impact analysis section above.

Both preliminary and refined modeling runs were performed for these analyses. The results of these analyses are discussed below.

6.1.6 PSD Increment Analysis

The PSD increment represents the amount that new sources in an area may increase ambient ground level concentrations of a pollutant. The results of the PSD Class II increment analysis presented in the table below show that all of the maximum predicted multi-source impacts are less than the allowable Class II increments.

PSD CLASS II INCREMENT ANALYSIS				
Pollutant	Averaging Time	Maximum Predicted Impact (µg/m ³)	Impact Greater than Allowable Increment (Yes/No)	Allowable Increment (µg/m ³)
SO ₂	Annual	1.15	No	20
	24-hr	11.6	No	91
	3-hr	24.7	No	512
PM ₁₀	Annual	0.09	No	17
	24-hr	0.92	No	31
NO ₂	Annual	4.42	No	25

The results of the PSD Class I increment analysis presented in the tables below show that all of the maximum predicted multi-source impacts are less than the allowable increments.

6.1.7 AAQS Analysis

For pollutants subject to an AAQS review, the total impact on ambient air quality is obtained by adding a “background” concentration to the maximum modelled concentration. This “background” concentration takes into account all sources of a particular pollutant that are not explicitly modelled. The results of the AAQS analysis are summarized in the table below. As shown in this table, emissions from the proposed facility are not expected to cause or significantly contribute to a violation of any AAQS.

AMBIENT AIR QUALITY IMPACTS						
Pollutant	Averaging Time	ICLP Sources Impact ($\mu\text{g}/\text{m}^3$)	Background Concentration ($\mu\text{g}/\text{m}^3$)	Interactive Background Sources ($\mu\text{g}/\text{m}^3$)	Total Impact ($\mu\text{g}/\text{m}^3$)	Florida AAQS ($\mu\text{g}/\text{m}^3$)
SO ₂	Annual	0.11	1.3	6.77	8.18	60
	24-hr	0	12.6	48.5	61.1	260
	3-hr	0	61	182	243	1,300
PM ₁₀	Annual	0.26	13.3	0	13.56	50
	24-hr	3.3	39	0	42.3	150
NO ₂	Annual	4.42	5.4	1.68	11.5	100

6.2 Additional Impacts Analysis

6.2.1 Visibility Impact Analysis

There are no Federal PSD Class I areas within 100 km of the site. The closest PSD Class I area is the Everglades National Park located about 142 km south of the site. A visibility screening analysis was performed to determine the potential visibility impairment. The FDEP suggested using the VISCREEN model (EPA, 1988c) to perform this analysis.

6.2.2 Impacts on Soils and Vegetation

The maximum ground-level concentrations predicted to occur, as a result of the proposed project, including background concentrations and all other nearby sources, will be below the associated AAQS. The AAQS are designed to protect both the public health and welfare. As such, this project is not expected to have a harmful impact on soils and vegetation in the PSD Class II area.

6.2.3 Growth-Related Air Quality Impacts

There will be no measurable growth associated with this project, as the facility is existing and there is little potential for new industrial development nearby as a result of it. Although it is not possible to reliably quantify the emissions and impacts resulting from this project, they are expected to be very small.

7. CONCLUSION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations, provided the Department's BACT determination is implemented.

Michael P. Halpin, P.E., Review Engineer
Cleve Holladay, Meteorologist

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NET EMISSIONS INCREASES OF PSD POLLUTANTS FOR MAIN BOILER

Pollutants	Requested Emissions (PTE) ²	1998 Actual ¹ Emissions	1997 Actual ¹ Emissions	PTE Compared to 1998	PTE Compared to 1997	PTE Compared to 97/98 Average	PSD Significance	PSD REVIEW ?
Sulfur Dioxide	2549	1436.4	1385.94	1112.6	1163.06	1137.83	40	Yes
Nitrogen Oxide	2245	1992	1959.01	253	285.99	269.495	40	Yes
Particulate Matter	270	81.77	89.07	188.23	180.93	184.58	25/15	Yes
Carbon Monoxide	1649	89.94	97.98	1559.06	1551.02	1555.04	100	Yes
Ozone(VOC)	54	0	0	54	54	54	40	Yes
Sulfuric Acid Mist	6.29	0.5711	0.6235	5.7189	5.6665	5.6927	7	No
Beryllium*	0.041	0.0007132	0.000787	0.0402868	0.040213	0.0402499	0	N/A
Mercury	0.17	0.010203	0.01122	0.159797	0.15878	0.1592885	0.1	Yes
Lead	0.28	0.020406	0.02405	0.259594	0.25595	0.257772	0.6	No
Total Fluorides (HF)	13.36	1.06027	1.16	12.29973	12.2	12.249865	3	Yes
Arsenic*	0.77	0.010203	0.01139	0.759797	0.75861	0.7592035	0	N/A

* Not subject to PSD.

NOTES:

1. Actual Annual Emissions based applicant's submittals.
2. Based on proposed BACT and requested emission limits.

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

PG & E Indiantown Cogeneration, L.P.
Permit No. PA 90-31 (PSD-FL-168A)
Indiantown, Martin County, Florida

BACKGROUND

The applicant, Indiantown Cogeneration (ICLP), proposes changes to its Indiantown facility including the following:

- 1) An increase to the electrical (megawatt) rating
- 2) An increase in the heat input rating while firing coal
- 3) Authority to combust alternative fuels

ICLP is located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The proposed project will result in "significant increases" with respect to Table 62-212.400-2, Florida Administrative Code (F.A.C.) for emissions of sulfur dioxide (SO₂), nitrogen oxides (NO_x), particulate matter (PM and PM₁₀), carbon monoxide (CO), volatile organic compounds (VOC), total fluorides (Fl) and mercury (Hg). The project is therefore subject to review for the Prevention of Significant Deterioration (PSD) and a determination of Best Available Control Technology (BACT) in accordance with Rules 62-212.400, F.A.C. for these pollutants.

The applicant indicated in the original submittal, that by modifying the NO_x reduction system and adjusting the lime slurry flow to the spray dryer absorber, that the fuel flow through the generating unit may be increased while keeping emissions within the existing permit limits. Subsequent meetings as well as a revised submittal led to a more stringent proposal for emissions. This project will cause ICLP's generating capacity to increase from a nominal 330 megawatt rating to a nominal 390 megawatt rating.

Descriptions of the process, project, air quality effects, and rule applicability are given in the Technical Evaluation and Preliminary Determination dated September 15, 2000, accompanying the Department's Intent to Issue.

DATE OF RECEIPT OF A BACT APPLICATION:

The original application was received on December 30, 1999 and included a BACT proposal prepared by the applicant's consultant, Earth Tech, Inc. A revised application and BACT proposal was received on August 21, 2000.

REVIEW GROUP MEMBERS:

Michael P. Halpin, P.E., Review Engineer

BACT DETERMINATION REQUESTED BY THE APPLICANT:

Main Boiler

PSD Pollutant	Control Technology	Projected Project Emissions	Projected Project Emission Rates
PM/PM ₁₀	Fabric Filter	61.6 lb/hr and 270 TPY	0.015 lb/MMBtu 10% opacity
SO ₂	Lime Spray Dryer	582 lb/hr and 2549 TPY	0.142 lb/MMBtu (24-hour block average)
NO _x	SCR & SNCR	512.5 lb/hr and 2245 TPY	0.125 lb/MMBtu (24-hour block average)
CO	Good Combustion	376 lb/hr and 1649 TPY	0.092 lb/MMBtu
VOC	Good Combustion	12.3 lb/hr and 54 TPY	0.0030 lb/MMBtu
Pb	Fabric Filter	0.0656 lb/hr and 0.287 TPY	0.000016 lb/MMBtu
Fl	Fabric Filter and FGD	3.05 lb/hr and 13.36 TPY	0.000744 lb/MMBtu
Be	Fabric Filter	0.0094 lb/hr and 0.041 TPY	0.0000023 lb/MMBtu
As	Fabric Filter	0.175 lb/hr and 0.765 TPY	0.000043 lb/MMBtu
Hg	Fabric Filter and FGD	0.039 lb/hr and 0.172 TPY	0.00001 lb/MMBtu
SAM	Lime Spray Drier	1.435 lb/hr and 6.29 TPY	0.00035 lb/MMBtu

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

Materials Handling & Storage Operations - Particulate Matter

Handling & Storage Operation	Control Technologies	Projected Project Emission Levels
Coal Handling System	2,3,4 & 5	0.010 grains/acf and 10% opacity
Ash Handling System	2,4,5 & 6	0.010 grains/acf and 5% opacity
Lime Handling Systems	1,2& 5	0.010 grains/acf and 5% opacity
<p>[Note: When adding, moving or removing coal from the coal pile an opacity of 20% is allowed.]</p> <p>Control Strategies:</p> <ol style="list-style-type: none"> 1. Negative pressure transport system with exhaust vented to control system 2. Wet Suppression, as needed 3. Inactive coal storage piles shaped, compacted, oriented to minimize wind erosion and covered 4. Enclosures for conveyors and conveyor transfer points (Except for coal stacker/reclaimer which is infeasible) 5. Best Operating Practices 6. Totally enclosed and vented through fabric filters 		

BACT DETERMINATION PROCEDURE:

In accordance with Chapter 62-212, F.A.C., this BACT determination is based on the maximum degree of reduction of each pollutant emitted which the Department of Environmental Protection (Department or FDEP), on a case-by-case basis taking into account energy, environmental and economic impacts and other costs, determines is achievable through application of production processes and available methods, systems, and techniques. In addition, the regulations state that, in making the BACT determination, the Department shall give consideration to:

- Any Environmental Protection Agency determination of BACT pursuant to Section 169, and any emission limitation contained in 40 CFR Part 60 - Standards of Performance for New Stationary Sources or 40 CFR Part 61 - National Emission Standards for Hazardous Air Pollutants.
- All scientific, engineering, and technical material and other information available to the Department.
- The emission limiting standards or BACT determination of any other state.
- The social and economic impacts of the application of such technology.

The EPA currently stresses that BACT should be determined using the "top-down" approach. The first step in this approach is to determine, for the emission unit in question, the most stringent control available for a similar or identical emission unit or emission unit category. If it is shown that this level of control is technically or economically infeasible for the emission unit in question, then the next most stringent level of control is determined and similarly evaluated. This process continues until the BACT level under consideration cannot be eliminated by any substantial or unique technical, environmental, or economic impacts.

For the proposed project, the applicable New Source Performance Standards (NSPS) include the following:

- 40 CFR Part 60, Subpart Da - Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978.
- 40 CFR Part 60, Subpart Y - Standards of Performance for Coal Preparation Plants.
- 40 CFR Part 60, Subpart OOO - Standards of Performance for Nonmetallic Mineral Processing Plants

No National Emission Standards for Hazardous Air Pollutants (NESHAPs) exist for fossil-fuel fired steam generators; coal, limestone, fly ash, and bottom ash materials handling systems; nor any limestone dryer/mill. A determination of the Maximum Achievable Control Technology (MACT) was not required based on 40 CFR Part 63.40(c) which provides an exemption for electric steam generating units, nor for the limestone dryers/mills or materials handling and storage operations which are not major emitters of HAPs.

STANDARDS OF PERFORMANCE FOR STATIONARY SOURCES:

The boiler is subject to 40 CFR Part 60, Subpart Da which establishes potential combustion concentrations, emission limitations, and percent reduction requirements for all electric utility steam generating units constructed, reconstructed

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or modified after September 18, 1978. The applicable emission limitations for the proposed project include the recently revised Subpart Da output-based limit of 1.6 lb NO_x/MW-hr (gross output) effective November 16, 1998. The proposed BACT levels and requested emission limits are considered more stringent than the NSPS requirements of Subpart Da and are presented in Table BD-1.

The materials handling and storage operations, with the exception of the open storage piles, are subject to 40 CFR Part 60, Subpart Y when handling coal. For these operations, Subpart Y prohibits visible emissions of 20 percent opacity or greater from any coal processing and conveying equipment, coal storage system (except open storage), or coal transfer and loading systems. The applicant has proposed visible emissions limitations of 5 and 10 percent opacity on the various operations, as appropriate. The proposed BACT levels are more stringent than the existing NSPS requirements of Subpart Y. These limits along with the projected emissions are presented in Table BD-2.

Table BD-1, NSPS Limits for the Main Boiler

Pollutant	NSPS Emission Limitation	Reduction Requirement	Projected Project Emission Levels
Particulate Matter	0.03 lb/MMBtu	99% (7.0 lb/MMBtu)	0.015 lb/MMBtu
Visible Emissions	20% Opacity	N/A	10% Opacity
Sulfur Dioxide ⁽¹⁾			
Coal	0.9 lb/MMBtu	90% (9.0 lb/MMBtu) ⁽²⁾	0.142 lb/MMBtu ⁽³⁾
Natural Gas/Distillate Oil	0.20 lb/MMBtu	0%	0.05 lb/MMBtu
Nitrogen Oxides ⁽³⁾	1.6 lb/MW-hr	N/A	1.31 lb/MW-hr
Notes: (1) NSPS SO ₂ emission limitation is based on a 30-day rolling average.			
(2) Reported NSPS limits are for worst case SO ₂ fuels. Emission limitation varies depending upon fuel quality and establishes a 90% reduction and 1.2 lb/mmBtu limitation or 70% reduction when emissions are below 0.60 lb/MMBtu.			
(3) Requested NO ₂ emission limitation on a 24-hour block average.			

The materials handling and storage operations, with the exception of the open storage piles and truck dumping operations, are also subject to 40 CFR Part 60, Subpart OOO when handling limestone. For these operations, the proposed BACT levels are more stringent than the existing NSPS requirements of Subpart OOO, which are presented in Table BD-2.

Table BD-2, NSPS Limits for the Coal and Limestone Handling Operations

Operation	NSPS Emission Limitations	Projected Project Emission Levels
Coal handling thermal dryers	0.07gr/dscm (0.031gr/dscf) 20% opacity	0.01gr/dscf 10% opacity
Pneumatic coal cleaning equipment	0.04g/dscm (0.018gr/dscf) 10% opacity	0.01gr/dscf 10% opacity
Limestone Receiving Bins, Dryers/Mills, Crusher and Silos	0.05g/dscm (0.022gr/dscf) 7% opacity	0.01gr/dscf 5% opacity
Limestone Conveyors, Transfer Points, and Enclosures	10% opacity	5% opacity
Note: The proposed use of a fabric filters with a maximum allowed grain loading of 0.01 gr/dscf (0.023 g/dscm) is more stringent than the existing NSPS limitation.		

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DETERMINATIONS BY EPA AND STATES:

Table BD-3 contains information on recent BACT/RACT/LAER determinations by EPA and the states for comparable pulverized coal boiler projects. The information was generated using the EPA's RACT/BACT/LAER Clearinghouse database.

Table BD-3, Pulverized Coal Main Boiler BACT Determinations

Pollutant	Determination	Emission Limitations	Control Technology
PM/PM ₁₀	PA-0133 Mon. Valley L.P. WY-0039 Two-Elk Gen. L.P. MD-0022 AES Warrior Run Indiantown Cogen. L.P.	0.015 lb/MMBtu 0.020 lb/MMBtu 0.015 lb/MMBtu 0.015 lb/MMBtu	Fabric Filter (FF) Fabric Filter (FF) Fabric Filter (FF) Fabric Filter (FF)
SO ₂	PA-0132 York County Energy MD-0022 AES Warrior Run SC-0027 Cope Power Station Indiantown Cogen. L.P.	0.25 lb/MMBtu 0.21 lb/MMBtu 0.17 lb/MMBtu 0.142 lb/MMBtu	CFB Technology CFB Technology Spray Drier Spray Drier
NO _x	PA-0132 York County Energy MD-0022 AES Warrior Run WY-0039 Two-Elk Gen. L.P. Indiantown Cogen. L.P.	0.125 lb/MMBtu 0.10 lb/MMBtu 0.15 lb/MMBtu 0.125 lb/MMBtu	SNCR SNCR LNB/OFA/SCR SCR
CO	VA-0181 Clover MD-0022 AES Warrior Run WY-0039 Two-Elk Gen. L.P. Indiantown Cogen. L.P.	0.10 lb/MMBtu 0.15 lb/MMBtu 0.15 lb/MMBtu 0.092 lb/MMBtu	Combustion Controls Combustion Controls Combustion Controls Combustion Controls
VOC	PA-0132 York County Energy VA-0181 Clover WY-0039 Two-Elk Gen. L.P. Indiantown Cogen. L.P.	0.004 lb/MMBtu 0.010 lb/MMBtu 0.015 lb/MMBtu 0.003 lb/MMBtu	Combustion Controls Combustion Controls Combustion Controls Combustion Controls
Fl	SC-0027 Cope Power Station SC-0028 Monck's Corner Fl-Cedar Bay Cogeneration Facility Indiantown Cogen. L.P.	1.00 x 10 ⁻² lb/MMBtu 1.00 x 10 ⁻² lb/MMBtu 7.44 x 10 ⁻⁴ lb/MMBtu 7.44 x 10⁻⁴ lb/MMBtu	FGD/FF FGD/ESP LS Injection/FF Spray Drier/FF
Be	PA-0132 York County Energy SC-0027 Cope Power Station SC-0028 Monck's Corner Indiantown Cogen. L.P.	8.7 x 10 ⁻⁶ lb/MMBtu 1.0 x 10 ⁻³ lb/MMBtu 1.0 x 10 ⁻³ lb/MMBtu 2.28 x 10⁻⁶ lb/MMBtu	FF FF ESP FF
As	VA-0185 Cogentrix Indiantown Cogen. L.P.	1.6 x 10 ⁻⁵ lb/MMBtu 4.3 x 10⁻⁵ lb/MMBtu	FF FF
Hg	PA-0132 York County Energy Fl-Cedar Bay Cogeneration Facility SC-0027 Cope Power Station Indiantown Cogen. L.P.	4.9 x 10 ⁻⁵ lb/MMBtu 7.92 x 10 ⁻⁵ lb/MMBtu 1.0 x 10 ⁻³ lb/MMBtu 9.5 x 10⁻⁶ lb/MMBtu	Fuel Quality Fuel Quality Fuel Quality Fuel Quality
Boiler Sizes VA-0181 Clover Halifax County - 4085 MMBtu/hr VA-0185 Cogentrix - 375 MMBtu/hr WY-0039 Two-Elk Gen. L.P. - 250 MW SC-0027 Cope Power Station - 385 MW SC-0028 Monck's Corner - 500 MW MD-0022 AES Warrior Run - 2,070 MMBtu/HR - 180 MW PA-0132 York County Energy - 2,500 MMBtu/hr - 227 MW PA-0133 Mon. Valley L.P. - 966 MMBtu/hr Fl-Cedar Bay Cogeneration Facility - 1,063 MMBtu/hr			

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BACKGROUND ON PROJECT:

The BACT analysis shown below is repeated in bulk from the initial air permit application and updated where appropriate. The facility proposes to use the same emission controls to meet the proposed pound-per-hour and ton-per-year emission limits, yielding a corresponding slight decrease in emission rates on a pound-per-million-BTU basis. Based upon the applicant's proposal, additional electrical generating capacity will be made available without increases in permitted emissions.

The flue gas cleanup system for the main boiler consists of spray dryer absorbers (SDA) for desulfurization and acid gas control, and a baghouse (FF) for particulate matter (including trace metals) controls. Flue gas from the air heater enters the two 50-percent capacity spray dryer absorbers, where it is humidified and cooled by spraying with lime slurry. The nozzles will atomize lime slurry into the flue gas in each SDA and absorb SO₂ and F1 from the flue gas while the heat from the flue gas evaporates the slurry water. The evaporating water cools the flue gases from about 275°F to approximately 30° to 35° above the adiabatic saturation temperature of the flue gas. The cooling of the flue gases condenses the various heavy metals including mercury and lead. The fly ash, dried SDA reaction products and scrubbed flue gases are vented to a FF to remove 99.9 plus percent of the particulate matter. The FF can collect particle sizes ranging from submicron to several hundred microns in diameter at efficiencies generally in excess of 99 or 99.9 percent. The dust cake collected on the fabric is primarily responsible for such high efficiency.

The system uses lime (calcium hydroxide) slurry as the absorbing medium. Pebble lime is slaked in the lime preparation system, diluted and stored in the lime feed tanks. Lime slurry is pumped from the feed tank to the agitated atomizer head tank, from which the slurry is pumped to the absorbers. Lime is delivered to the site by rail or self-unloading truck and stored in a totally enclosed structure to eliminate fugitive emissions.

Flue gas from the FGD system enters the baghouse through an inlet manifold, which distributes the gas to the bag filter compartments. Gas passes through the fabric of the bags from the inside to the outside; collected particulate is retained on the inside surface of the bags. When the particulate buildup on the surface of the bags produces a preset flue gas pressure drop, an automatic reverse-air cleaning cycle is initiated. Hoppers below the bags collect the particulate released from the bags during the cleaning cycle. A pneumatic transfer system transports the particulate ash from the hoppers to the ash storage silo, in preparation for off-site disposal.

The facility is an emission source of nitrogen oxides (NO_x), sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO), unburned hydrocarbons (VOC) and other regulated pollutants. Hourly and annual emissions are shown on pages BD-1, BD-2 and BD-3. For the main (pulverized coal) boiler, the original proposed BACT level of NO_x was on the basis of 0.17 lb/MMBtu, achieved through the use of Selective Non-Catalytic Reduction (SNCR) and advanced combustion controls. The original proposed BACT level of SO₂ was on the basis of 0.17 lb/MMBtu, achieved through the use of lime spray drying. The original proposed BACT for particulate matter was 0.18 lb/MMBtu, achieved with a fabric filter. For CO and VOC, the original proposed BACT levels were on the basis of 0.11 and 0.0036 lb/MMBtu, respectively, achieved through advanced combustion controls. For beryllium, mercury and arsenic, the original proposed BACT levels were on the basis of 2.73 x 10⁻⁶ and 51.1 x 10⁻⁶ lb/MMBtu respectively. Control of particulate matter through fabric filtration simultaneously achieves control of beryllium and arsenic, while control of SO₂ with spray drying controls mercury emissions.

For the increase in allowable heat input being requested, the facility proposes emissions that are equal to or less than the existing pound per hour emission rates, using the existing control equipment. ICLP expects that the only physical modifications that may be needed to meet the proposed permit limits at increased loads will be enhancements to the NO_x control system (SCR). FDEP will reduce the existing ammonia slip limit of 50 ppmvd and will allow the use of SNCR to meet the reduced BACT established limit. SNCR offers additional NO_x reductions within the boiler by reacting ammonia with NO_x to form water and molecular nitrogen. Within the boiler the ammonia injected works as a reducing agent within an acceptable temperature range of 1,400°F to 2,000°F. Overall, SNCR can reduce NO_x emissions by as much as 70 percent depending upon initial NO_x concentrations and ammonia injection rates.

For the request to combust alternative fuels within the main boiler, the applicant offers to comply with additional permit conditions, which deal with a notice to FDEP, an analysis of the fuel and a certified analysis of predicted emissions. FDEP does not find this request to be specific enough, and will follow established precedent of evaluating

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each fuel individually upon applicant request. However, one specific fuel for which the applicant has indicated a desire to combust is coal briquettes. These briquettes are assimilated utilizing coal fines and oil with a small amount (0.2% by weight) of binder material. The applicant has provided submittals to FDEP, consisting of a description of the fuel, description of the binder material, and an analysis of the fuel combustion byproducts using oxidative pyrolysis. Based upon these and related submittals, FDEP believes that the attendant PSD Review and BACT Determination are sufficient to authorize the combustion of this specific fuel and will provide for same within the attached permit revision.

CONTROL TECHNOLOGIES:

PARTICULATE MATTER (PM₁₀/TSP) CONTROL TECHNOLOGIES

Particulate matter emissions will be generated by the main boiler, the limestone dryers/mills, and the materials handling and storage operations. Review of the available control technologies is presented for each emissions unit classification.

Main Boiler

Particulate matter emissions are generated as a result of inert materials within the fuel, the combustion by-products and the incomplete combustion of the fuel in the form of unburned carbon. For large pulverized coal boilers, the most stringent control technology for particulate matter has been the use of an add-on AQCS to reduce emissions to levels of 0.015 lb/MMBtu. Due to technological requirements (e.g. wet flue gas vs. dry), the PM and SO₂ control equipment will be considered together as a unique control option. Additionally, since this review incorporates natural and reasonable means of SAM control, a separate analysis for Sulfuric Acid Mist shall not be included.

These options are summarized below:

- The use of the ESP in conjunction with a circulating fluidized bed scrubber may be a second option for the direct control of particulate matter and SO₂ emissions. The circulating fluidized bed scrubber is considered a "newer" technology with reportedly lower capital and operating costs over the more conventional spray dryer absorber/fabric filter. The proposed combination has been successfully demonstrated on other projects including the Black Hills Power & Light's Neil Simpson Station where it is meeting a permit limit of 0.02 lb/MMBtu.
- Mechanical Cyclone separators may be considered and represent the lowest capital cost for particulate control. However, for removal efficiencies in the 95% range and higher, this control technology cannot be considered as Best Available.
- The use of a fabric filter in conjunction with a spray dryer absorber (SDA) is proposed for the direct control of particulate matter and sulfur dioxide (SO₂) from the main boiler. Use of a fabric filter in combination with a spray dryer is a proven technology and readily available from vendors. A review of the BACT Clearinghouse indicates that this is the most common selected control option during the nineteen-nineties. Additionally, the proposed BACT emission limit of 0.142 lb/MMBtu is considered acceptable for the setting of BACT for SO₂, as is the proposed limit of 0.00035 lb/MMBtu for SAM emissions. An alternative means of complying with the SO₂ limit will be provided (as requested) in the Department's BACT Determination for reduced output operation.

Limestone Dryers/Mills

Particulate matter emissions are generated as a result of the fuel combustion and the limestone milling operation. For rock dryers/mills, the most stringent control technology has been the use of add-on AQCS to reduce emissions to levels of 0.02 gr/dscf. As part of the applicant's existing configuration, fabric filters are used as the control technology for controlling particulate matter emissions. The applicant's proposed use of fabric filters with a grain loading of 0.01gr/dscf is the most stringent control technology and the most stringent emission limitation, and is therefore BACT.

Coal/Ash Handling and Storage Operations

Particulate matter emissions generated from materials handling and storage operations are typically controlled by one or more strategies. Typical strategies include but are not limited to the following:

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1. Handling and storing bulk materials in a wet or semi-wet condition. These materials are considered "conditioned materials" and will typically have moisture contents greater than 3.5 percent.
2. Direct application of water and/or chemicals to bulk materials for purposes of increasing moisture content and/or stabilizing small particles is considered a "Wet Suppression" technique.
3. Indirect application of water to materials for purposes of knocking down fugitive dust once it is released from the operation is considered the use of "Water Sprays."
4. Total or partial enclosures, or wind breaks/guards to reduce or eliminate particulate emissions or causes of such emissions.
5. Best operating practices includes design features and operating practices to reduce or eliminate the causes of fugitive dust emissions.
6. Dust collection systems which collect and control particulate emissions from partial or totally enclosed operations with the use of an add-on AQCS.

The most stringent control technology is the total enclosure of the emissions unit or activity which is generating the particulate matter. However, in some cases this approach is not practical based on either economic or safety reasons and the other available control strategies must be implemented.

For dry materials handling activities which are totally or partially enclosed and require industrial ventilation (Dust Collection System) for health or safety reasons, which accordingly are vented to the outside, the use of an add-on AQCS is typically required as BACT. The most stringent control technology applied to dust collection systems is the use of a fabric filter. The most stringent emission limitation associated with materials handling operation AQCS's is a grain loading of 0.01 gr/dscf and a 5% opacity standard.

Information provided by the applicant in the original application resulted in the Department's BACT Determination, which reported costs of \$9,244/ton as excessive. The Department concludes that little has changed to alter the prior determination. Therefore, BACT for the individual transfer operations is the use of conditioned materials, partial enclosures, water sprays, and/or wet suppression, as needed and proposed (existing) by the applicant.

NITROGEN OXIDES (NO_x) CONTROL TECHNOLOGIES

NO_x is emitted from main boiler during the combustion process. The formation of NO_x occurs through one of three primary mechanisms which include the following:

- Thermal NO_x;
- Fuel NO_x; and
- Prompt NO_x.

Thermal NO_x refers to the mechanism by which NO_x is formed through the dissociation of molecular nitrogen and oxygen in the combustion air into their atomic states and through various reactions produce NO_x. At temperatures above 2,200 °F, thermal NO_x production is significant and increases exponentially as temperatures increase further. The primary factors impacting thermal NO_x production include temperature, oxygen and nitrogen concentrations, and the residence time within the combustion zone. These same factors impact complete combustion of the fuels.

Fuel NO_x refers to the mechanism by which NO_x is formed through the reduction and oxidation of nitrogen contained within the chemical structure of the fuel. This nitrogen is known as fuel bound nitrogen (FBN) and for solid and liquid fuels can be significant enough to make Fuel NO_x the primary mechanism.

Prompt NO_x refers to the mechanism by which NO_x is formed under fuel rich conditions through the formation of intermediate species and their eventual oxidation. The formation of prompt NO_x has a weak temperature dependence that can become strong under fuel rich conditions. Prompt NO_x typically contributes the smallest magnitude to the total overall NO_x emissions of the three formation methods discussed.

By understanding the mechanisms and chemical reactions which produce NO_x emissions, control strategies can be developed. These strategies include precombustion controls, combustion techniques, and post combustion techniques.

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For pulverized coal-fired boilers, available control technologies that have been commercially demonstrated include the following:

- Precombustion Controls;
- Combustion Controls; and
- Selective Noncatalytic Reduction (SNCR) and/or Selective Catalytic Reduction (SCR).

Precombustion controls focus on fuel quality, specifically the maximum FBN within a given fuel. Information presented within the application indicated the use of coal with an estimated FBN content of 1.2 percent by weight.

Combustion controls focus on reducing the production of both Thermal and Fuel NO_x by reducing combustion temperatures and limiting available oxygen. This is typically done with low NO_x burners, overfire air and/or reburn technology. The Indiantown unit is equipped with low NO_x burners (with dual air registers) as well as overfire air. The unit is not equipped with reburn technology, but it could be applied if necessary to reduce NO_x emissions, at some extra cost.

Selective non-catalytic reduction (SNCR) is a post combustion control technology involving the injection of either ammonia or urea into specific temperature regions of the boiler. The ammonia or urea reacts with the NO_x to produce nitrogen and water. The effectiveness of the SNCR depends on the temperature where the reagents are injected; the mixing of the reagent within the combustion gases; the residence time of the reagent within the temperature window; and the ratio of reagent to NO_x. SNCR can reduce NO_x emissions by 50 to 70 percent over uncontrolled levels.

The existing boiler is already fitted with an SCR unit. SCR technology involves the catalytic reaction of ammonia (NH₃) which is injected into the flue gas containing NO_x to produce molecular nitrogen (N₂) and water vapor. These reactions take place in the SCR reactor. Specifically, hot flue gas leaving the economizer section of the boiler is ducted to the SCR reactor. Prior to entering the reactor, NH₃ is injected into the flue gas at a sufficient distance upstream of the reactor to provide for complete mixing of the NH₃ and flue gas. The quantity of NH₃ can be adjusted as it reacts with the NO_x in the presence of the catalyst to remove NO_x from the flue gas. The flue gas leaving the catalytic reactor enters the air preheater where it transfers heat to the incoming combustion air. Provisions are made for ash removal from the bottom of the reactor since some fallout of fly ash is expected. Ammonia is typically controlled at < 10 ppmvd.

For pulverized coal-fired boilers of the size class proposed by the applicant, NO_x emissions as low as 0.10 lb/MMBtu have been achieved through precombustion controls, combustion controls, and SCR/SNCR. The Department is aware of BACT and LAER determinations on small CFB boilers as low as 0.039 lb/MMBtu. For the subject boiler, the applicant has proposed an emission limit of 0.125 lb/MMBtu through the use of combustion controls, SCR and SNCR (if required). This control strategy represents the most stringent control technology and the Department's proposed emission limit is representative of the most stringent emission limitation for a boiler of this size. The applicant points out that difficulties will be encountered with maintaining this level of control at lower boiler outputs (loads) and requests that an alternative to the 0.125 lb/MMBtu emission limit be allowed for these reduced outputs. The Department will address this in the setting of BACT, but notes that the historical emission limit is 582 lb/hr and the full-load equivalent proposed emission limit is 512.5 lb/hr.

CARBON MONOXIDE (CO) CONTROL TECHNOLOGIES

Carbon monoxide (CO) emissions will be generated by the main boiler as a result of the incomplete combustion of the fuels. The only control strategy currently used for controlling CO emissions from utility steam generators, including pulverized coal boilers, is the use of combustion controls. Combustion controls include the following:

- High Temperatures;
- Sufficient Excess Air;
- Sufficient Residence Times; and
- Perfect Air/Fuel Mixing.

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A review of the BACT Clearinghouse indicated that the applicant's proposal of a 0.092 lb/MMBtu CO emission rate would be at the low end for a pulverized coal boiler using combustion controls. Although most large coal-fired boilers which have been permitted in the past 10 years are of the fluidized bed (CFB) type, the Clover Station in Halifax County, Virginia has a relatively low emission rate as indicated in Table BD-3. Even so, for CFB boilers, the use of good combustion practices to minimize NO_x formation while maximizing combustion efficiency is recognized as the most stringent control technology for CO emissions.

VOLATILE ORGANIC COMPOUNDS (VOC) CONTROL TECHNOLOGIES

Volatile organic compound (VOC) emissions will be generated by the main boiler as a result of the incomplete combustion of the fuels as is CO. Control strategies associated with VOC are the same as for CO.

The applicant has proposed an emissions limit of 12.3 lb/hr (0.003 lb/MMBtu). As with CO emissions, the use of good combustion practices to minimize NO_x formation while maximizing combustion efficiency is recognized as the most stringent control technology for CO emissions. Additionally, the BACT Clearinghouse supports the applicant's proposal as BACT.

TOTAL FLUORIDE CONTROL TECHNOLOGIES

Total fluoride, expected to be emitted as hydrogen fluoride (HF), will be generated from the main boiler as a result of trace amounts of fluoride within the fuel and limestone. For large pulverized-coal fired boilers, the most stringent control technology has been the use of an add-on PM AQCS to reduce total fluorides emissions to levels of 1.0×10^{-3} lb/MMBtu. The fluoride content of the coal is estimated at 0.0001 lb/lb.

The use of a SDA/FF will provide for the indirect control of fluoride from the main boiler. The applicant's proposed Fluoride emission rate of 0.000744 lb/MMBtu (3.05 lb/hr) from the main boiler is lower than most BACT determinations for similar sized boilers. The use of a SDA/FF is considered to be the most stringent control technology available and along with the Department's proposed emission rate constitutes BACT.

BERYLLIUM AND ARSENIC CONTROL TECHNOLOGIES

Although not subject to PSD review, Beryllium (Be) as well as Arsenic (As) will be generated from the main boiler as a result of trace amounts of these constituents within the fuel. For large pulverized-coal fired boilers, the most stringent control technology has been the use of an add-on PM AQCS to reduce emissions. The beryllium and arsenic concentrations within the coal are estimated to yield uncontrolled emissions of 0.00008 lb/MMBtu (.328 lb/hr) and 0.00088 lb/MMBtu (3.61 lb/hr).

The use of a SDA/FF will provide for the indirect control of beryllium and arsenic emissions from the main boiler. The applicant's proposed beryllium and arsenic emission rates of 0.00000228 lb/MMBtu (0.0094 lb/hr) and 0.0000429 lb/MMBtu (0.176 lb/hr) from the main boiler are less than or equal to other BACT determinations for similar sized boilers. The use of a SDA/FF is considered to be the most stringent control technology available and would constitute BACT, if required.

MERCURY (Hg) CONTROL TECHNOLOGIES

Mercury emissions will be generated from the main boiler. The mercury emitted is associated with trace amounts contained within the fuel. For pulverized coal boilers, the most stringent control technology for mercury emissions has been the use of an add-on PM AQCS to reduce mercury emissions to levels of 1.45×10^{-5} lb/MMBtu.

The mercury content of the coal is estimated at 1.70×10^{-7} lb/lb, resulting in uncontrolled mercury emissions of 1.74×10^{-5} lb/MMBtu. The use of the SDA/FF will provide for the indirect control of mercury from the main boiler. The use of a carbon injection system designed to further control Hg emissions was evaluated based on a vendor quote by another applicant. Total capital costs of \$680,000, annualized costs of \$1,000,000 per year, and incremental costs of about $\$9.5 \times 10^6$ per ton to control Hg emissions were estimated. The \$9.5 million per ton incremental cost is excessive and is consistent with other Department determinations, which did not require add-on AQCS's for mercury control of coal-fired boiler emissions. Because of the ability of the proposed AQCS to be superior to the most stringent emission limitation and consideration of the economic impacts the use of a SDA/FF is BACT. The mercury (Hg) emission rate of 0.039 lb/hr (9.5×10^{-6} lb/MMBtu) from the main boiler is lower than other BACT determinations for similar sized boilers.

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DEPARTMENT BACT DETERMINATION

Following are the BACT limits determined for the Indiantown CO₂ Recovery Project. The emission limits as well as the applicable averaging times, are given in the permit Specific Conditions Nos. 5-12 and 19.

Main Boiler

PSD Pollutant	Control Technology	Projected Project Emissions	BACT Emission Standards
PM/PM ₁₀	Fabric Filter	61.6 lb/hr and 270 TPY	0.015 lb/MMBtu 10% opacity
SO ₂	Lime Spray Dryer	582 lb/hr and 2549 TPY	0.142 lb/MMBtu (480 lb/hr reduced output)
NO _x	SCR (and SNCR if required)	512.5 lb/hr and 2245 TPY	0.125 lb/MMBtu (480 lb/hr reduced output) Ammonia slip limited to 9 ppm
CO	Good Combustion	376 lb/hr and 1649 TPY	0.092 lb/MMBtu
VOC	Good Combustion	12.3 lb/hr and 54 TPY	0.0030 lb/MMBtu
Fl	Fabric Filter and FGD	3.05 lb/hr and 13.36 TPY	0.000744 lb/MMBtu
Be	Fabric Filter	0.0094 lb/hr and 0.041 TPY	0.00000228 lb/MMBtu
As	Fabric Filter	0.176 lb/hr and 0.77 TPY	0.0000429 lb/MMBtu
Hg	Fabric Filter and FGD	0.039 lb/hr and 0.17 TPY	0.0000095 lb/MMBtu
SAM	Lime Spray Dryer	3.05 lb/hr and 13.36 TPY	0.00035 lb/MMBtu
Pb	Fabric Filter	0.0656 lb/hr and 0.287 TPY	0.000016 lb/MMBtu

Materials Handling & Storage Operations - Particulate Matter

Handling & Storage Operation	Control Technologies	BACT Emission Standards
Coal Handling System	2,3,4 & 5	0.010 grains/acf and 10% opacity
Ash Handling System	2,4,5 & 6	0.010 grains/acf and 5% opacity
Lime Handling Systems	1,2 & 5	0.010 grains/acf and 5% opacity

[Note: When adding, moving or removing coal from the coal pile an opacity of 20% is allowed.]

Control Strategies:

1. Negative pressure transport system with exhaust vented to control system
2. Wet Suppression, as needed
3. Inactive coal storage piles shaped, compacted, oriented to minimize wind erosion and covered
4. Enclosures for conveyors and conveyor transfer points (Except for coal stacker/reclaimer which is infeasible)
5. Best Operating Practices
6. Totally enclosed and vented through fabric filters

RATIONALE FOR DEPARTMENT'S DETERMINATION

- Indiantown has demonstrated the ability to meet the BACT projected emissions as follows:

Pollutant	Projected Emissions	Actual 1996	Actual 1997	Actual 1998
PM/PM ₁₀	270T / 61.6 lb/hr	112.4T / 28.1 lb/hr	86T / 22.41 lb/hr	81.8T / 19.86 lb/hr
SO ₂	2549T / 582 lb/hr	1551T / 388.1 lb/hr	1386T / 361 lb/hr	1436T / 348.8 lb/hr
NO _x	2245T / 512.5 lb/hr	1825T / 456.6 lb/hr	1959T / 510.3 lb/hr	1992T / 483.8 lb/hr
CO	1649T / 376 lb/hr	112.4T / 28.1 lb/hr	94.6T / 24.6 lb/hr	89.9T / 21.8 lb/hr
VOC ⁽¹⁾	54T / 12.3 lb/hr	0	0	0
Fl	13.36T / 3.05 lb/hr	1.33T / 0.33 lb/hr	1.12T / 0.29 lb/hr	1.06T / 0.26 lb/hr
Be	0.041T / 0.0094 lb/hr	0.009T / 0.0002 lb/hr	0.0008T / 0.0002 lb/hr	0.0007T / 0.0002 lb/hr
As	0.77T / 0.176 lb/hr	0.013T / 0.003 lb/hr	0.011T / 0.003 lb/hr	0.011T / 0.003 lb/hr
Hg	0.17T / 0.039 lb/hr	0.013T / 0.003 lb/hr	0.011T / 0.003 lb/hr	0.010T / 0.002 lb/hr

Source: Department records. ⁽¹⁾ VOC emissions undetectable

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

- NO_x emissions of 0.125 lb/MMBtu from the main boiler are within the range of other BACT determinations for similar sized boilers. The use of SCR in conjunction with SNCR is considered to be the most stringent control technology available. The BACT determination is equivalent to approximately 1.3 lb/MW-hr (gross output) versus the NSPS effective on November 16, 1998, which requires that new Da units meet a limit of 1.6 lb/MW-hr (gross output). Ammonia slip rates of < 10 ppm are routinely achieved with current technology.
- CO and VOC emission rates of 0.092 and 0.003 lb/MMBtu, respectively represent the lowest values determined as BACT for similar units at full load operation. Combustion controls are sufficient to achieve these low levels with the boiler firing coal.
- Particulate Matter (PM/PM₁₀) emissions of 0.015 lb/MMBtu from the main boiler are less than or equal to other BACT determinations for similar sized pulverized coal boilers. The use of a SDA/FF as an add-on AQCS is considered to be the most stringent control technology available and therefore constitutes BACT.
- Mercury (Hg) emissions of 0.0000095 lb/MMBtu are lower than other BACT determinations for similar sized PC boilers. The use of a SDA/FF as add-on AQCS's is considered to be the most stringent control technology available and therefore constitutes BACT.
- SO₂ emissions of 0.142 lb/MMBtu (24-hour block average) represents the lowest BACT-determined SO₂ emission rate found on a PC-fired boiler.
- The fluoride (Fl) emission rate set by the Department represents the lowest emission rate for a coal-fired boiler in the State of Florida.
- A 5% opacity limitation for the lime handling operations is lower than other BACT determinations and lower than the NSPS limitation of 40 CFR Part 60, Subpart OOO. The use of a fabric filter as an add-on AQCS is the most stringent control technology available and therefore constitutes BACT.
- Visible emissions of 10 percent or less from the coal and ash handling operations is as stringent as, or more stringent than other BACT determinations made by the Department for materials handling operations. It is additionally lower than the NSPS limitation of 40 CFR Part 60, Subpart Y.

COMPLIANCE PROCEDURES

E.U. ID No's. -001		Brief Description Main Boiler			
Pollutant Name or Parameter	Fuel(s)	Compliance Method: EPA Method	Testing Time Frequency	Min. Compliance Test Duration	CEMS* limit (Compliance via 24-hour block avg.)
VE	Coal/Alt. Fuel	9	Annual	1 Hour	20% each 6 min avg. 0.142 lb/MMBtu ¹ 0.125 lb/MMBtu ¹
PM/PM ₁₀	Coal/Alt. Fuel	5	Annual	3 Hours	
SO ₂	Coal/Alt. Fuel	6, 6C, or 19	Annual		
NO _x	Coal/Alt. Fuel	7E	Annual		
VOC	Coal/Alt. Fuel	18 and 25	Annual		
CO	Coal/Alt. Fuel	10	Annual		
Beryllium	Coal/Alt. Fuel	Waived	Annual		
Mercury	Coal/Alt. Fuel	101A or 108	Annual		
Fl	Coal/Alt. Fuel	13A or 13B	Annual		
Ammonia	Coal/Alt. Fuel	EPA draft method	Annual		
E.U. ID No's. -004		Brief Description Coal Handling System			
Pollutant Name or Parameter	Fuel(s)	Compliance Method: EPA Method	Testing Time Frequency	Min. Compliance Test Duration	CEMS* limit (Compliance via 24-hour block avg.)
VE		9	Annual	1 Hour	
PM/PM ₁₀		5	Annual	3 Hours	

(¹) An emission limit of 480 pounds/hour is authorized for reduced output operation.

APPENDIX BD
BEST AVAILABLE CONTROL TECHNOLOGY DETERMINATION (BACT)

E.U. ID No's. -005		Brief Description Ash Handling System				
Pollutant Name or Parameter	Fuel(s)	Compliance Method: EPA Method	Testing Time Frequency	Min. Compliance Test Duration	CEMS* limit (Compliance via 24-hour block avg.)	
VE		9	Annual	1 Hour		
PM/PM ₁₀		5	Annual	3 Hours		
E.U. ID No's. -006		Brief Description Lime Handling System				
Pollutant Name or Parameter	Fuel(s)	Compliance Method: EPA Method	Testing Time Frequency	Min. Compliance Test Duration	CEMS* limit (Compliance via 24-hour block avg.)	
VE		9	Annual	1 Hour		
PM/PM ₁₀		5	Annual	3 Hours		

*CEMS [=] Continuous Monitoring System

BACT EXCESS EMISSIONS APPROVAL

Pursuant to the Rule 62-210.700 F.A.C., the Department through this BACT determination will allow excess emissions as follows: Valid hourly emission rates shall not include periods of startup, shutdown, or malfunction as defined in Rule 62-210.200 F.A.C., where emissions exceed the applicable standards. These excess emissions periods shall be reported as required in Specific Condition 28 of the Permit [Rules 62-4.070 F.A.C., 62-210.700 F.A.C and applicant request].

Excess emissions are permitted for a period of up to 2 hours during any start-up, shutdown or malfunction provided the best operating practices are applied. For purposes of complying with the "Best Operating Practices" INDIANTOWN shall submit a written procedure summarizing the start-up and shutdown procedures and anticipated emissions.

DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:

Michael P. Halpin, P.E., Review Engineer, New Source Review Section
 Department of Environmental Protection
 Bureau of Air Regulation
 2600 Blair Stone Road
 Tallahassee, Florida 32399-2400

Recommended By:

Approved By:

 C. H. Fancy, P.E., Chief
 Bureau of Air Regulation

 Howard L. Rhodes, Director
 Division of Air Resources Management

 Date:

 Date:

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

PSD-FL-168 is hereby modified as follows, as shown by ~~strikethrough~~ and underline:

PROJECT DESCRIPTION

The Indiantown Cogeneration, L.P. (ICL) proposes to construct a cogeneration project near Indiantown, Florida. The proposed plant is a pulverized-coal-fired facility that will produce approximately ~~330~~ 390 megawatts (MW) of electricity for sale to the Florida Power and Light Company (FPL) and approximately 225,000 lb/hour of process steam for sale to the Caulkins Indiantown Citrus Company ("Caulkins"). The site, which occupies approximately 232 acres, is located 9 miles east of Lake Okeechobee and about 3 miles northwest of the community of Indiantown in southwestern Martin County.

The proposed facility includes one main boiler and one steam generator, and one or two 50% capacity auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus processing. A CO₂ recovery plant installed via a flue gas slipstream is also authorized. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, the CO₂ absorber column and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emission levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 62-212.400, Florida Administrative Code).

The power plant site certification number for this project is PA 90-31.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

SPECIFIC CONDITIONS

1. Beginning with the fifth quarter of operation, the Permittee shall submit to the Bureau of Air Regulation and the Air Section, Southeast District office, a quarterly report for the previous quarter showing the 12 month rolling average capacity factor for the generating unit.

The 12 month rolling average capacity factor shall be calculated by dividing one unit's megawatt hours output of generation by the product of the official megawatt rating of the unit and the number of hours in the 12 month period.
2. Only coal, natural gas, coal briquettes or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boiler.
3. The maximum heat input to the PC boiler shall not exceed ~~3422~~ 4100 MMBtu/hr while firing ~~coal~~ permitted fuels. The auxiliary boiler shall not exceed 342 MMBtu/hr while firing No. 2 fuel oil and 358 MMBtu/hr firing natural gas or propane.
4. The PC boiler shall be allowed to operate continuously (8760 hrs/yr). A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. Fuel consumption must be continuously measured and recorded by fuel type (coal, coal briquettes, natural gas, propane or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.
5. Based upon a permitted heat input of ~~3422~~ 4100 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis Lb/MMBtu	Emission Limitation	
		Lb/MMBtu lb/hr	TPY
SO ₂	0.170 * <u>0.142</u> *	582 * <u>0.142</u> *	2549
NO _x	0.170 * <u>0.125</u> *	582 * <u>0.125</u> *	2549 <u>2245</u>
PM	0.018	61.6 <u>0.015</u>	270

Indiantown Cogeneration, L.P.

DEP File 0850107-004-AC
Permit PSD-FL-168 (A)

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

PM ₁₀	0.018	61.6 <u>0.015</u>	270
CO	0.110	376 * <u>0.092</u>	1649
VOC	0.0036	12.32 <u>0.0030</u>	54.0
H ₂ SO ₄	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094 <u>0.000000228</u>	0.041
Mercury	0.0000114	0.039 <u>0.0000095</u>	0.17
Lead	0.00001	0.034	0.15
Fluoride	0.0015	5.08 <u>0.000744</u>	22.3 <u>13.36</u>
Arsenic	0.000051	0.18	0.77

*24-hour daily block average (midnight to midnight); 480 lb/hr emission rate permitted at reduced output

6. ~~The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation.~~ The permittee is allowed to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation. Should a technology be chosen which does not meet the specified NO_x limits, the permittee must apply whatever technologies deemed necessary to ensure that the NO_x limitation is met. Plans and specifications must be submitted to ~~DER's~~ DEP's Bureau of Air Regulation in Tallahassee for review within 90 days after they become available.
7. NH₃ (Ammonia) - Slip from exhaust gases shall not exceed ~~50~~ 9.0 ppmvd.
8. Visible Emissions (VE) from each baghouse exhaust shall not exceed 10% opacity (six-minute average) except for one six-minute period per hour of not more than 27 percent opacity. No VE during lime silo loading operations (i.e., less than 5% opacity). VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.
9. The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No.2 fuel oil), shall be limited to a combined total of less than 1.79 x 10¹² British Thermal Units per year. The auxiliary boilers are each permitted to operate 5000 full load equivalent hours per calendar year, with no more than 1000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No.2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO _x	68.0	34
SO ₂	18.0	9
PM	1.4	0.70
PM ₁₀	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Beryllium	4.0 x 10 ⁻⁵	2.0 x 10 ⁻⁵
Mercury	5.2 x 10 ⁻⁴	2.6 x 10 ⁻⁴
Lead	3.6 x 10 ⁻²	1.8 x 10 ⁻²
Arsenic	6.8 x 10 ⁻³	3.4 x 10 ⁻³

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

10. Particulate emissions from the coal, and limestone handling facilities shall be controlled by enclosing all conveyors and conveyor transfer points (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in Specific Condition No. 19. Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered. Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent. When adding, moving or removing coal from the coal pile an opacity of 20% is allowed. The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system. The fly ash handling system (including transfer and silo storage) shall be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

Submit for approval to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and the lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and the major design parameters such as air/cloth ratio and flow rate. The Department shall issue a response within 30 days of receipt of the technical data.

11. Particulate emissions from bag filter exhausts from the coal, lime and flyash-handling systems shall be limited to 0.010 gr/acf. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test. Verification and recording of the above requirements for particulate emissions shall be done at least annually.
12. Emissions shall not be visible more than 2 minutes in any 15-minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/~~DER~~ DEP reference Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).
13. Coal or coal briquettes shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollution control devices are to be recorded; including duration, cause, and description of repair.
14. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall contain not more than 0.05% sulfur, by weight, based on each shipment analysis report.
15. A. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years and must be available for ~~FDER's~~ FDEP's inspection.
- B. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.
1. The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

2. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.
 3. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the District Office, detailing best practices for the minimization of secondary pollutant emissions.
16. All fuel oil and coal (including briquettes) shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all analyses shall be kept for ~~FDER~~ FDEP inspection for a minimum of two years after the data is recorded.
17. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).
18. Within 60 calendar days after achieving the permitted capacity at which the unit will be operated, but no later than 180 calendar days after initial startup, the permittee shall conduct stack tests for particulates, SO₂, NO_x, and visible emissions and furnish the Department a written report of the results of such tests within 45 days of completion of the tests. The tests shall be conducted in accordance with the provisions specified in 40 CFR 60 and shall be conducted within 90% - 100% capacity.
19. Compliance with emission limitation standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Chapter 62.297. CEMS shall additionally be used to determine compliance with the BACT standards established for NO_x and SO₂.

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 & 3A	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
6, 6C or 19	Sulfur dioxide emissions from stationary sources.
7E	Nitrogen oxide emissions from stationary sources.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime vehicle unloading into the lime silo (from start to finish)
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 and 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by Department to test for ammonia.

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

20. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.
21. The permittee shall provide written notice to the Southeast District Office 30 days prior to the tests in order to afford the Department the opportunity to have an observer present.
22. Stack tests for particulates (PM and PM₁₀), CO, NO_x and SO₂ and visible emissions shall be performed annually.
23. Stack emission monitoring shall include a flue gas oxygen meter to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback controls to continuously maintain air/fuel ratio parameters at an optimum. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O₂ and/or CO₂ content. The monitoring devices shall meet the applicable requirements of Section ~~47-2~~ 62-297, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.
24. The permittee shall operate two continuous air monitoring sites for sulfur dioxide in accordance with ~~FDER FDEP~~ quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient air monitoring sites for suspended particulates, and one continuous NO_x monitor site. The ambient monitoring site locations shall be approved by the Department's Bureau of Air Monitoring and Assessment. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Monitoring and Assessment. During construction and operation, wind speed/wind direction will be recorded and reported with the ambient data.
25. The permittee shall provide stack-sampling facilities as required by Rule ~~47-2-700(4)~~ 62-297.310(6), F.A.C.
26. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation. The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.
27. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.
28. Stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section ~~47-2-08~~ 62-204.800, F.A.C.
29. Utilizing the Aerometric Information and Retrieval System (AIRS) or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.
30. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental ~~Regulation~~ Protection, 2600 Blair Stone Road, Tallahassee, Florida, 32301.
31. In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate

AIR CONSTRUCTION PERMIT MODIFICATION PSD-FL-168(A)

Department order, provided that the Permittee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments. During such malfunction or shutdown, operation of the facility shall comply with all other requirements of this permit and all applicable state and federal emission standards not affected by the malfunction or shutdown, which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems are to be reported to the Southeast District office. Operational malfunctions, which do not stop operation but may prevent compliance with emission limitations, must also be reported to the Southeast District office.

32. Should the facility elect to combust coal briquettes, the following data and information shall be submitted to the Department within 30 days of firing. Additionally, FDEP retains its right to revise permit conditions which may be associated with the use of this fuel based upon review of data and results of inspection:
- A) Fuel Handling – ICLP shall provide details concerning the methods for fuel receiving, handling and storage for Department review.
 - B) Fuel Properties – ICLP shall provide a representative ultimate, proximate and mineral analysis of the as-delivered fuel as well as the coal presently combusted. Additionally, an analysis of the constituents of the as-delivered fuel shall be provided including any conditioners, binders, oils and additives; the sources, descriptions and chemical make-up of each of the constituents shall be provided.
 - C) Boiler Performance – ICLP shall provide a summary report to FDEP which compares the combustion of 100% coal to the combustion of the alternate fuel at the maximum desired firing percentage. This report shall review such items as oxygen requirement, flame and ignition characteristics, boiler (heat transfer) efficiencies, burner performance, soot-blowing of boiler and air preheater surfaces, and effects on pollution control equipment.
 - D) Stack Emissions – ICLP shall conduct stack tests and provide an analysis of emissions of all permitted pollutants, comparing the combustion of 100% coal to the combustion of the alternate fuel at the maximum desired firing percentage. The test results shall be included with the analysis.



Corrected

File

State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

February 22, 1991

To: Buck Oven

From: Preston Lewis

Preston

Subject: Indiantown Permit - Insufficiency

*PING WANG
BECTEL
(301) 417-3144*

Barry, Alex and I have reviewed the Indiantown submittal and find it insufficient in the following ways:

1. Table 2.3.7-6, 3.4.4-1 and 1.1 (Section 10.1.5) appear to be incomplete. They exclude some of the regulated pollutants which require BACT review (fluoride and sulfuric acid mist). Please provide air emission information and discussion of controls utilized for all sources.

2. Also, in accordance with EPA policy developments all toxic non-regulated pollutants emitted by the proposed facility need to be addressed with respect to the proposed and alternative control technologies. These pollutants are identified in the publications entitled "Compiling Air Toxic Emission Inventories", EPA-450/4-96-010 and "Control Technologies for Hazardous Air Pollutants", EPA/625/6-86/014. In accordance with those publications and the fuel analyses presented in the application, the following pollutants need to be addressed: Antimony, barium, cadmium, chromium, cobalt, copper, vanadium, formaldehyde, manganese, nickel, zinc, polycyclic organic matter, phosphorus, phenol, chlorine (hydrogen chloride), pyridine, acetaldehyde, acetic acid, and dioxin.

3. Table 1.1 (Section 10.1.5) lists the cooling tower as an emission source. Please provide emission estimates and controls for the cooling towers.

4. Our copy of the application is not P.E. stamped. If yours is not we suggest that this be done.

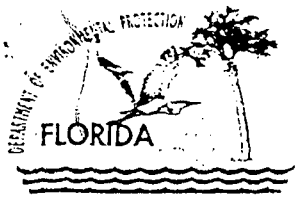
5. PM and PM10 should be viewed as separate pollutants and emissions and controls discussed separately.

6. On page 3.4.-4 please estimate the minimum recirculation (below 25% expected) of flue gas recirculated and the impact on the emission control systems. Recalculate the emissions, if required and provide the necessary tables.

7. Table 3.4.3-1 provides a capital cost advantage for SNCR compared to SCR of about 5:1 with the same amount of control. What is the basis of the cost estimates (firm manufacture quotes, etc.) and the basis of the estimated emissions control (manufacture guarantee, etc.). Considering reasonable maintenance practices what, if any, will be the degradation of air emissions control over the life of the project. Use probabilities to demonstrate uncertainty.
8. Discuss fuel availability/long term contracts, prices and emissions at 8760 hours/year and expected 1000 hours/year using natural gas and #2 fuel oil as a primary fuel on the auxiliary boiler and as a secondary fuel for the PC boiler.
9. What level of NOx emissions are expected using low NOx burners with natural gas as a fuel in the auxiliary boiler?
10. The analyses for using the alternative control technologies for the PC boiler (i.e., scrubbers and SNCR) should consider controlling emissions from the auxiliary boiler as well. Please provide feasibility and cost information.
11. Please discuss the capability of using either conventional or Gore-Tex bags in the baghouse. Provide basis for all cost estimates (firm manufacture quotes, etc) - Reference Page 3.4.3-17.
12. Over the life of the facility please discuss the availability of "low sulfur coal" for this project (long term contracts, etc.). Provide contingency plans for continuing facility operation after the plant stockpile of "low sulfur coal" is used (supply interruption).

cc: B. Andrews
A. Meng

GPL/GPL



File

Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

July 11, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Ms. Michelle Griffin
Indiantown Cogeneration Facility
Post Office Box 1620
Indiantown, Florida 34956

RE: Indiantown Cogeneration, L. P.
PSD-Fl-168; Permit Modification

Dear Ms Griffin:

The Department received your letter on June 9, 1995, requesting to revise Specific Conditions No. 19 to use EPA Reference Methods 3, 3A, 5, 7E, 18, and 25A instead of EPA Reference Methods 3, 7, 7C, 19, 201, 201A, 18 and 25.

The Department evaluated your request and will allow you to change all proposed Reference Methods except for EPA VOC Reference Methods 18 and 25A. Please refer to the attached FDEP Guidance Memo dated March 17, 1994, and submit a request for an Alternate Standard Procedure (ASP) addressed to Mike Harley of the DEP Emission Monitoring Section.

As indicated above Specific Condition No. 19 will be changed as follows:

SPECIFIC CONDITION No. 19

FROM:

Compliance with emission limitations standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Rule 17-2.700.

Ms. Michelle Griffin
July 11, 1995
Page Two

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM ₁₀ emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7, 7C, or 19	Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead Concentration from stationary sources.

Ms. Michelle Griffin
July 11, 1995
Page Three

13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by Department to test for ammonia.

TO:

Compliance with emission limitations standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Chapter 62.297.

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3 & 3A	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
6, 6C, or 19	Sulfur dioxide emissions from stationary sources.
7E	Nitrogen oxide emissions from stationary sources.

Ms. Michell Griffin
July 11, 1995
Page four

- 8 Sulfuric acid mist from stationary source.
- 9 Visible emission determination of opacity.
 - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
 - At least one lime vehicle unloading into the lime silo (from start to finish).
- 22 Fugitive emissions from transfer points.
- 10 Carbon monoxide emissions from stationary sources.
- 12 or 101A Lead Concentration from stationary sources.
- 13A or 13B Fluoride emissions from stationary sources.
- 18 and 25 Volatile organic compounds concentration.
- 101A or 108 Mercury emissions.
- 104 Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by Department to test for ammonia.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner

Ms. Michelle Griffin
July 11, 1995
Page Five

shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

The Petition shall contain the following information:

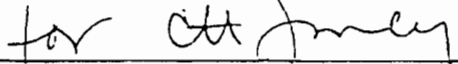
- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c)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

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

Ms. Michelle Griffin
July 11, 1995
Page Six

A copy of this amendment letter shall be attached to and shall become a part of Air Construction Permit PSD-FL-168.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

This is to certify that this Permit Amendment and all copies were mailed to the listed persons before the close of business on _____.

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to
Chapter 120.52(9), Florida
Statutes, with the designated
Deputy Clerk, receipt of which
is hereby acknowledged.

(Clerk)

(Date)

Enclosure: Ms Griffin's letter received on June 9, 1995

Copies furnished to:

John Bunyak, NPS
Jewell A. Harper, EPA
Isidore Goldman, SED
Mike Harley, DARM



Best Available Copy
Department of
Environmental Protection

Control No. 7465
Reference No. FDEP10
File No. 6.3.1.5

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

December 2, 1996

File 6.3.1.5

DEC 23 1996

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen A. Sorrentino
Environmental Coordinator
Indiantown Cogeneration
Post Office Box 1799
Indiantown, Florida 34956

COPY

Re: Amendment of Permit: PSD-FL-168
Indiantown Cogeneration Project
Removal of H₂SO₄ test requirement due to interferences

Dear Mr. Sorrentino:

The Department has reviewed Indiantown Cogeneration's November 2 letter requesting to withdraw the recent Amendment to Standard Procedure (ASP) and amend the above referenced permit, by removing Specific Condition 19, "Method 8 for Sulfuric acid mist from stationary source". Your request was justified based on initial testing using Method 8 which produced erratic results due to flue gas conditions and probable interferences from ammonia and chlorides. Since the applicability section for Reference Method 8 warns of interferences due to ammonia, this method should not have been specified for this source which is equipped with a selective catalytic reduction (SCR) system. The Department hereby withdraws your request for an ASP and amends Specific Condition 19 by removing the testing requirement for sulfuric acid mist, Method 8.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 904/488-9730, fax: 904/487-4938. Petitions must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code.

A petition must contain the following information: (a) The name, address, and telephone number of each petitioner, the applicant's name and address, the Permit File Number and the county in which the project is proposed; (b) A statement of how and when each petitioner received notice of the Department's

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

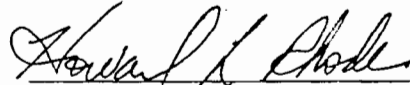
Mr. Sorrentino
December 2, 1996
Page 2

action or proposed action; (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action; (d) A statement of the material facts disputed by petitioner, if any; (e) A statement of the facts that the petitioner contends warrant reversal or modification of the Department's action or proposed action; (f) A statement identifying the rules or statutes that the petitioner contends require reversal or modification of the Department's action or proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action that the petitioner wants the Department to take with respect to the action or proposed action addressed in this notice of intent.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice of intent. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources Management

HLD/hh

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this AMENDMENT was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 12-18-96 to the person(s) listed:

Mr. Hamilton Oven, Siting
Mr. Thomas Tittle, SED
Mr. Mike Harley, EMS

Clerk Stamp

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

Kuni Jaker
(Clerk)

12-18-96
(Date)



Department of Environmental Protection

Lawton Chiles
Governor

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

Virginia B. Wetherell
Secretary

April 9, 1998

CLACKEN 4-13-98

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Steve Sorrentino, Plant Director
Indiantown Cogeneration, L.P.
19140 Southwest Warfield Blvd.
Indiantown, Florida 34956

Re: Final Permit Amendment to PSD-FL-168
Indiantown Coal Fired Boiler
Opacity Limits

Dear Mr. Sorrentino

The Department has reviewed your February 27, 1998 letter requesting that an exception of 27% opacity for one six minute period per hour is authorized in the New Source Performance Standard Subpart Da applicable to the Indiantown Cogeneration coal fired boiler. Specific Condition No. 8 of the permit is hereby amended as follows:

Visible Emissions (VE) from each baghouse exhaust shall not exceed 10% opacity (six minute average) except for one six minute period per hour of not more than 27 percent opacity. No VE during lime silo loading operations (i.e., less than 5% opacity). VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

A person whose substantial interests are affected by this permit amendment may petition for an administrative hearing in accordance with Sections 120.569 and 120.57 F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000, telephone: 850/488-9730, fax: 850/487-4938. Petitions must be filed within fourteen days of receipt of this permit amendment. A petitioner must mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-5.207 of the Florida Administrative Code. Mediation is not available for this action.

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

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Indiantown Cogeneration, L.P.

February 27, 1998

Mr. Al Linero
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

MAR 10 1998

BUREAU OF
AIR REGULATION

VIA FEDERAL EXPRESS

Re: Indiantown Cogeneration, L.P. Preconstruction Permit Amendment

Dear Mr. Linero:

Enclosed is Indiantown Cogeneration, L.P.'s application to amend their preconstruction permit, PSD-FL-168. Indiantown Cogeneration is operating under this permit while the Title V Operating Permit Application is under review.

This amendment is to correct an oversight in the visible emissions' limitation for the pulverized coal fired main boiler. The permit limits the visible emissions from this source to 10% opacity during normal operation, but does not provide for exceptional circumstances. To be consistent with the federal New Source Performance Standards (NSPS) for this source, we are requesting one 6-minute period per hour of opacity up to 27%. This would allow for maintenance of the system (bag changes, etc.).

No pollutant emission rates are affected. Page 44 of the application shows the new requested allowable opacity. The other information in the enclosed application is identical to that listed in the Title V Operating Permit Application currently under review by Tom Cascio, (FDEP) and is consistent with the current permit. We have discussed this application with Tom, and our goal is to obtain approval of this application in time to have the change incorporated into the Title V Operating Permit.

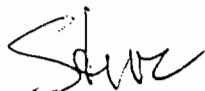
No attachments are provided in this application because they are available as part of the Title V Operating Permit application. If you need any additional data, or copies of the data submitted with the Title V Operating permit application, please contact us.



We have also included a check for \$250. Based on our review of the permit fee schedule in Rule 62-4, this is our best interpretation of the appropriate fee for a permit modification of this type. If a different fee (or no fee) should be submitted, please contact us.

If you have any questions, please contact myself at (561) 597-6500 or A.J. Jablonowski, consultant with Earthtech at (978) 371-4339.

Sincerely,



Steve Sorrentino
Plant Director

Enclosure: 1

bc: V. Zambito
B. Veech
M. Golden
V. Gill

cc: Hamilton "Buck" Owen, FDEP, Tallahassee
Tom Tittle, FDEP, SE District
Doc. Control No.: 980522
Project File: 6.3.1.5

cc: J. Cascio, BAR

Z 031 391 956

US Postal Service
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to		Stephen Sorrentino	
Street & Number		Indiantown Cogen	
Post Office, State, & ZIP Code		Indiantown FL	
Postage		\$	
Certified Fee			
Special Delivery Fee			
Restricted Delivery Fee			
Return Receipt Showing to Whom & Date Delivered			
Return Receipt Showing to Whom, Date, & Addressee's Address			
TOTAL Postage & Fees		\$	
Postmark or Date		4-20-00	
		PA 90-31	
		P50-F1-168	

PS Form 3800, April 1995

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1 Article Addressed to:

Stephen Sorrentino, GM
 Indiantown Cogen
 P O Box 1799
 Indiantown, FL
 34956

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly) K. Davies
 B. Date of Delivery 4-26-00

C. Signature X K. Davies
 Agent
 Addressee

D. Is delivery address different from item 1? Yes
 If YES, enter delivery address below: No

3. Service Type
 Certified Mail Express Mail
 Registered Return Receipt for Merchandise
 Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2 Article Number (Copy from service label)

Z 031 391 956

UNITED STATES POSTAL SERVICE



First-Class Mail
Postage & Fees Paid
USPS
Permit No. G-10

• Sender: Please print your name, address, and ZIP+4 in this box •

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APR 28 2008

BUREAU OF AIR REGULATION

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





Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

April 20, 2000

CERTIFIED MAIL – RETURN RECEIPT REQUESTED

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90-31; Modification of Permit No. PSD-FL-168
Indiantown Cogeneration Facility / Martin County

The applicant, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a modification to PSD permit number PSD-FL-168 for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The modification is to allow install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Project Description:

The proposed facility includes one main boiler and one steam generator, and one or two 50% capacity auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus processing. A CO₂ recovery plant installed via a flue gas slipstream is also authorized. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, the CO₂ absorber column and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emission levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500 62-212.400, Florida Administrative Code).

Specific Condition No. 4.:

The PC boiler shall be allowed to operate continuously (8760 hrs/yr). A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. ~~The auxiliary boiler or boilers shall operate a maximum of 5000 hrs at the combined total heat input rates with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane.~~ Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas, propane or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Specific Condition No. 9:

The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No.2 fuel oil), shall be limited to ~~a maximum of 5000 hours/year at the combined total heat input rates with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5000 full load equivalent hours per calendar year, with no more than 1000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No.2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

POLLUTANT	LBS/HR	TONS/YEAR
NO _x	68.0	34
SO ₂	18.0	9
PM	1.4	0.70
PM ₁₀	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0×10^{-5}	2.0×10^{-5}
Hg	5.2×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-3}

Specific Condition No. 15.:

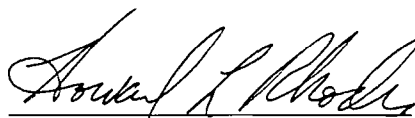
- A. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.
- B. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.
 - 1. The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.
 - 2. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.

3. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the District Office, detailing best practices for the minimization of secondary pollutant emissions.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., 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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 4-20-00 to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Oven
Mr. David S. Dee

Mr. A.J. Jablonski, Earthtech
Mr. Gregg Worley, EPA
Mr. 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.

Kimi Jaber
(Clerk)

4-20-00
(Date)

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

The Department distributed a Public Notice package on March 23, 2000 for the project allowing for the installation of a slipstream carbon dioxide recovery plant on the main boiler and to clarify allowable operation rates of auxiliary boilers. The subject facility is the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The Public Notice of Intent to Issue was published on April 2 in The Palm Beach Post.

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).

No comments were received from the applicant.

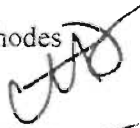



CONCLUSION

This project is beneficial and will not cause or significantly contribute to a violation of any National Ambient Air Quality Standard or applicable increment.

The final action is to issue the permit as proposed.

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes 
THRU: Clair Fancy 
Al Linero 
FROM: Michael P. Halpin 
DATE: April 18, 2000
SUBJECT: Indiantown Cogeneration, L.P. PSD Permit Modifications

Attached for approval and signature is a modification to the PSD permit for the subject facility. The Public Notice requirements have been met on April 16, 2000 by publishing in the Palm Beach Post.

No comments were received.

I recommend your approval and signature.

Day 90 is 04/28/00.

Attachments

/mph

**INDIANTOWN
COGENERATION, L.P.
PSD PERMIT
APPLICATION TO
MODIFY PULVERIZED
COAL BOILER**

RECEIVED

AUG 21 2000

BUREAU OF AIR REGULATION

Submitted By:

Indiantown Cogeneration, L.P.
19140 SW Warfield Blvd.
Indiantown, FL 34956

Prepared by:

Earth Tech, Inc.
196 Baker Avenue
Concord, MA

December 1999

REVISED August 2000

earthtech for the planet.
engineering and technology

**INDIANTOWN
COGENERATION, L.P.
PSD PERMIT
APPLICATION TO
MODIFY PULVERIZED
COAL BOILER**

Submitted By:

Indiantown Cogeneration, L.P.
19140 SW Warfield Blvd.
Indiantown, FL 34956

Prepared by:

Earth Tech, Inc.
196 Baker Avenue
Concord, MA

December 1999

REVISED August 2000

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1.0 INTRODUCTION/PROJECT SUMMARY

The Indiantown Cogeneration L.P. (ICLP) facility is proposing to modify the operations at its site located along Highway 710 approximately three miles northwest of the community of Indiantown and 9 miles east of Lake Okeechobee, Florida. The facility is southwest of and abuts the Caulkins Citrus Processing facility and the Florida Steel Corporation Indiantown steel mill property. The site occupies the central portion of Section 35, Township 39 South, Range 38 East, Martin County, Florida.

ICLP received authorization to construct the 330 megawatt (MW) electric and the 225,000 pound per hour process steam cogeneration facility on March 26, 1992, Permit Number PSD-FL-168. The Power Plant site certification number for the project is PA 90-13. ICLP is proposing to modify the operation of the pulverized-coal-fired boiler to increase the electrical generation output to 390 MW. To achieve this output, ICLP is applying to modify the existing heat input permit limitation from 3,422 million British Thermal Units per hour (MMBtu/hr) to 4,100 MMBtu/hr.

In addition, ICLP is requesting an amendment to the language of PSD permit PSD-FL-168 to allow the combustion of alternative fuels, and to establish a procedure for Florida Department of Environmental Protection (Department) approval of alternative fuels.

The U.S. Environmental Protection Agency (EPA) has promulgated Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) which require a permit review and approval for new or modified existing sources which emit criteria pollutants in amounts greater than the significant emission levels. Although ICLP is

not proposing any increase in the existing pollutant emission limitations for the facility, a comparison of baseline actual emissions to the allowable maximum emissions in the future shows a net increase in annual emissions. Since the net emission increase will exceed the significant levels, the proposed modification at the ICLP plant is subject to PSD review. Based on Florida Administration Code (FAC) Rule 62-212.400, the State of Florida has delegated authority to review and issue PSD construction permits.

The following sections include:

- A detailed description of the facility and proposed modifications (Section 2.0).
- A discussion of the regulatory rationale as it applies to the project (Section 3.0).
- A discussion of the project emissions and Best Available Control Technology (BACT) Evaluation (Section 4.0); and
- Proposed PSD permit condition modifications (Section 5.0)

Air quality impact analyses for this modification are being submitted under separate cover.

2.0 PROJECT DESCRIPTION

This section provides an overview of the project and summarizes the basis for identifying the air quality regulations with which the project must comply.

The proposed modification will be an increase from 330 MW net to 390 MW net for the existing pulverized-coal-fired facility. Presently, the ICLP facility includes one main pulverized-coal-fired boiler and one steam generator, two auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Indiantown Citrus Company, and material handling/conveying equipment. The main primary source of air emissions is the main boiler, firing pulverized coal. Exhaust gas from the main boiler is vented through a series of pollution control devices (PCDs) which include: a selective catalytic reduction (SCR) system for the control of NO_x emissions, spray dryer absorbers for SO₂ removal, and a multi-compartment fabric filter (baghouse) to remove particulates. Secondary air emission sources include the auxiliary boilers firing natural gas or No. 2 fuel oil and the material handling systems for coal, ash and lime. Bin vent filters are provided for material handling equipment to control visible particulate emissions. The exhaust stack is slightly below good engineering practice (GEP) stack height specifications at a height of 495 feet above grade.

Ash is removed by rail or truck for off-site disposal. Cooling at the plant is achieved by means of a mechanical draft-cooling tower.

The primary fuel is eastern bituminous coal having a maximum sulfur content of 2.0 percent. Typical sulfur content is under 1 percent. Natural gas and propane is used for lightoff and startup.

Coal is delivered by rail, unloaded, and stored in an enclosed storage facility on site. An emergency coal pile, sized for 30 days storage at full load, is also provided. Lime used for sulfur capture in the flue gas cleanup system is delivered by train or in enclosed, self-unloading trucks and stored in an enclosed structure. Fugitive emissions from coal storage and material handling are controlled by enclosing most of these operations and venting through fabric filters. No modifications to the material handling equipment are being proposed.

Propane is stored in aboveground tanks, and is delivered by truck.

Presently, the main boiler heat input at full load is 3,422 MMBtu/hr. The heat input of the auxiliary boilers firing #2 fuel oil is 342 MMBtu/hr (358 MMBtu/hr firing natural gas). ICLP is proposing to increase the heat input for the main pulverized-coal-fired boiler to 4,100 MMBtu/hr.

As described in Section 4.2.5 there are currently new fuels (e.g., coal agglomerated with a binder) available which could be fired in ICLP's pulverized-coal-fired boiler. These fuels should behave very similarly to the coal currently being combusted, and should have very similar air emissions. ICLP is requesting this amendment to gain the flexibility to use alternative fuels, subject to the emission limits and other conditions contained in this permit.

3.0 REGULATORY APPLICABILITY EVALUATION

3.1 Chapter 62-210 Stationary Sources -General Requirements

3.1.1 62-210.300 Permits Required

The owner or operator of any emissions unit which emits or can reasonably be expected to emit any air pollutant must obtain an appropriate permit from the Department of Environmental Protection (Department) prior to beginning construction, modification, or initial or continued operation of the emissions unit unless exempted pursuant to Department rule or statute. Since the proposed modification to ICLP's facility can not meet the categorical exemptions provided in Rule 62-210.300 (3)(a) or the generic exemptions provided in Rule 62-210.300 (3)(b), ICLP must obtain a preconstruction permit prior to increasing the heat input.

3.2 Chapter 62-212 Stationary Sources - Preconstruction Review

3.2.1 62-212.300 General.

The proposed modification will take place at an existing major source. If a proposed modification at a facility results in a net emissions increase that exceeds the significant emission rate for a regulated pollutant, the project is subject to major new source preconstruction review regulation. As discussed in Section 4.0 of this application, the net emissions increases at ICLP's facility will exceed the significance levels for most regulated pollutants and, therefore, ICLP is applying for a modification to its PSD air construction permit pursuant to Rule 62-212.400.

3.2.2 62-212.400 *Prevention of Significant Deterioration (PSD)*

The U.S. Environmental Protection Agency (EPA) has promulgated Prevention of Significant Deterioration (PSD) regulations (40 CFR 52.21) which require a permit review and approval for new or modified existing sources which have the potential to emit criteria pollutants in amounts greater than the significant emission levels. Similarly, the Department has promulgated PSD preconstruction review regulations in Rule 62-212.400.

Pursuant to these requirements, the Facility was issued a Permit to Construct and PSD Permit (PSD Permit/Permit to Construct) dated March 26, 1992, with revisions dated July 16, 1992 (PSD-FL-168). This permit was amended to remove the H₂SO₄ testing requirement in December, 1996. It was further amended in April, 1998 to allow opacity levels for one six minute period per hour of not more than 27 percent opacity, and in May, 2000 to allow construction of a carbon dioxide recovery plant and to clarify auxiliary boiler operating requirements.

“Major stationary sources” and “major modifications” located in areas designated as attainment or unclassifiable for national Ambient Air Quality Standards (NAAQS) are subject to the PSD regulations. Martin County and the surrounding counties are designated as “in attainment or cannot be classified” for all criteria pollutants.

A “major stationary source” is defined as any one of 28 specified sources which has a potential to emit 100 tons per year or more, or any other stationary source which has the potential to emit 250 tons per year or more of any regulated pollutant (40 CFR 52.21). ICLP’s facility is listed as a 100-ton per year source (fossil-fueled steam electric plants of more than 250 million Btu/hr heat input) having the potential to emit more than 100-tons of a criteria pollutant. Since the proposed

modification to ICLP's facility will result in a net emission increase above significance levels ("past actual to future potential"), the modification is subject to PSD review.

Under PSD, each pollutant emitted from a major source in significant quantities, as defined in Table 3-1, and for which the area is designated as "in attainment" for the pollutant, must undergo a PSD analysis. The PSD analysis involves the following:

- BACT analysis
- PSD Increment Consumption Analysis, including other increment-consuming sources in the area (if applicable)
- NAAQS impact analysis, including other significant sources in the area (if applicable)

Impacts on Class 1 PSD Areas. The facility is approximately 142 kilometers north of the Everglades National Park (the nearest Class 1 area). Based on discussions with John Notar of the National Park Service, an analysis of the impacts on this Class I area will be required. The analysis will be submitted under separate cover.

Additional Impacts Analysis. Any source subject to the PSD regulations must also provide an analysis of any adverse air quality-related impacts to:

- Visibility
- Soils
- Vegetation
- Commercial, residential, and industrial growth that the project might cause

**TABLE 3-1
TOTAL FACILITY EMISSION**

	Baseline (1997-1998) Annual Tons	Allowable* Annual Tons	PSD Significance	PSD Applies?
Nitrogen Oxides	1992	2245	40	Yes
Carbon Monoxide	90	1649	100	Yes
Volatile Organic Compounds	0	54	40	Yes
Particulate Matter	82	270	25	Yes
Sulfur Dioxide	1436	2549	40	Yes
Lead	0.02	0.28	0.6	No
Beryllium	0.0007	0.041	0.0004	Yes
Mercury	0.01	0.17	0.1	Yes
Fluorides	1.1	13.4	3	Yes
Sulfuric Acid Mist	0.6	6.51	7	No
Arsenic	0.01	0.765	0	Yes

*Based on proposed BACT levels in Section 4.

3.2.3 62-212.500 Non-Attainment

The proposed modification will take place at an existing facility located in Martin County which has been designated as "in attainment or cannot be classified" for all criteria pollutants. Therefore, non-attainment new source review is not applicable to the proposed project.

3.3 Chapter 62-204 Air Pollution Control: General

3.3.1 62-204.800 Federal Regulations Adopted by Reference

Emission standards contained in 40 CFR 60, 61, 63, 64, 72, 73, 75, 76, 77, and 78 have been adopted by reference pursuant to Rule 62-204.800

The New Source Performance Standards (NSPS) apply to new, modified, and reconstructed sources of emissions for which the U.S. EPA has promulgated

standards. The EPA promulgated NSPS for fossil-fuel-fired steam generators (40 CFR 60, Subpart D) with a heat input greater than 250 MMBtu per hour in 1971. Since its promulgation, the EPA has proposed revisions and amendments to Subpart D a number of times. One of the amendments, Subpart Da, applies to the ICLP plant. Subpart Da was proposed in 1978 and promulgated in 1979 and specifically applies to electric utility steam generating units.

Electric utility steam generating units are subject to NSPS Subpart Da provided they meet all three of the following criteria. If the plant does not meet any one of the criteria, it may still be subject to NSPS (e.g., the promulgated and proposed emission limits in Subpart Db). Subpart Da is applicable to electric steam generating units that:

- Are capable of combusting more than 73 MW (250 MMBtu/hr) heat input of fossil fuel either alone or in combination with any other fuel
- Supply more than 25 MW electricity to any utility power distribution system for sale
- Supply more than one-third of their potential electric output capacity to any utility power distribution system for sale

Table 3-4 provides a summary of the performance standards that apply to the ICLP facility.

TABLE 3-4
NSPS FOR ELECTRIC UTILITY STEAM GENERATING UNITS

Affected Facility	Pollutant	Emission Level	Requirement
Coal-fired boilers (and coal-derived fuels)	Particulate	0.03 lb/million Btu	Average of three 1-hr test runs
	Opacity	<20% except for one six-minute period/hr <27%	6-minute block average
	SO ₂	0.6 lb/million Btu and 70% reduction	30-day rolling average
	NO _x	0.60 lb/million Btu	30-day rolling average

Source: 40 CFR 60, Subpart Da.

Under 40 CFR 60, Subpart Da, a lower nitrogen oxide requirement applies to facilities where “modification or reconstruction commenced after July 9, 1997.” The lower NO_x emission limit under 40 CFR 60.44a(d)(2) (0.15 lb/MMBtu NO_x, 30-day rolling average), does *not* apply to the ICLP facility because the operational changes being requested do not meet the definition of “modification or reconstruction” in the NSPS. The NSPS defines modification (in 40 CFR 60.2) as follows:

Modification means any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility or which results in the emission of any air pollution (to which a standard applies) into the atmosphere not previously emitted.

The proposed operational change at ICLP’s facility will not increase the permitted emissions rate for any air pollutant, nor will it result in any new pollutant being emitted. The proposed changes also do not constitute a reconstruction because there

will not be any significant capital expenditures associated with the proposed change in operations.

3.3.2 Acid Rain - Title IV of CAAA

Pursuant to Title IV of the CAAA of 1990 and EPA's implementing regulations regarding acid rain requirements (40 CFR Part 72), the Facility does not have any "affected" units. The PC boiler is exempt from Title IV acid rain requirements because the Facility is a qualifying cogeneration facility that had as of 11/15/90 a qualifying power purchase agreement for at least 15% of the total output capacity. This specific exemption is authorized in 40 CFR 72.6(b)(5).

The proposed increase in operations at ICLP's facility does not affect the exemption from the acid rain requirements. The proposed net output is not more than 130% of the original net planned output, so the exemption in 40 CFR 72.6(b)(5) still applies.

3.4 Chapter 62-296 Stationary Sources-Emission Standards

3.4.1 62-296.405 Fossil Fuel Steam Generators with more than 250 million Btu per Hour Heat Input.

This DEP regulation limits emissions from the PC boiler. Emission limits listed in this requirement are less stringent than the existing limits in the PSD permit and the Title V operating permit. The facility will continue to comply with the existing limits in the PSD permit and the Title V operating permit.

3.4.2 62-296.711 Materials Handling, Sizing, Screening, Crushing and Grinding Operations

These regulations address solid material handling operations at ICLP. There are no changes to the capacity or operating method of the solid material handling operations at ICLP. ICLP will continue to comply with this regulation through its PSD and Title V operating permits.

4.0 PROJECT EMISSIONS AND CONTROL TECHNOLOGY REVIEW

4.1 Project Emissions

4.1.1 Existing Emissions

As mentioned previously, ICLP is not requesting an increase in the existing emission limits for the facility.

Table 4-1 provides a summary of the existing emission limits for the pulverized-coal-fired boiler .

**TABLE 4-1
PC BOILER EXISTING EMISSION RATES**

<u>Pollutant</u>	<u>(lb/hr)</u>	<u>(ton/yr)</u>
Nitrogen Oxides	582	2549
Carbon Monoxide	376	1647
Hydrocarbons	12.3	54
Particulate Matter	61.6	270
Sulfur Dioxide	582	2549
Lead	0.064	0.28
Beryllium	0.0093	0.041
Mercury	0.039	0.172
Arsenic	0.175	0.765
H ₂ SO ₄	0.0093	0.0041
Fluorides	5.08	22.3

Ammonia: slip shall not exceed 50 ppmv

4.1.1 Proposed Emissions

As part of the Best Available Control Technology (BACT) evaluation, discussed below, and informal discussions with the Department, ICLP is proposing changes to its permit limits as part of this application. The changes provide a rate-based emission limit for all pollutants, and reduce the permitted emission rate for NO_x,

fluorides, and ammonia slip. Proposed emissions are summarized in Table 4-2, below:

**TABLE 4-2
PC BOILER PROPOSED EMISSION RATES**

<u>Pollutant</u>	<u>(lb/MMBtu)</u>	<u>(ton/yr)</u>
Nitrogen Oxides	0.125*	2245
Carbon Monoxide	0.092	1647
Hydrocarbons	0.003	54
Particulate Matter	0.015	270
Sulfur Dioxide	0.142*	2549
Lead	0.000016	0.28
Beryllium	0.0000023	0.041
Mercury	0.00001	0.172
Arsenic	0.000044	0.765
H ₂ SO ₄	0.00035	0.0041
Fluorides	0.000744	13.4

Ammonia: slip shall not exceed 10 ppmv

* or 480 lb/hr, whichever is less stringent

The proposed emission rates are the same as or lower than the existing permitted emission rates on a mass-emissions basis, and are lower for all pollutants on a rate basis. The documentation for each pollutant level chosen is provided in the BACT analysis, below. The proposed PSD permit conditions reflecting the proposed limits are included in Section 5.

Any alternative fuel approved through the permit language requested in Section 5 will behave similarly to the existing coal, and will meet the proposed permit limits above.

4.2 Best Available Control Technology Evaluation

The BACT analysis shown below is repeated in bulk from the initial air permit application for the PC boiler, and updated where appropriate. For all pollutants, the

facility proposes to use the same emissions controls to meet *at least* the existing pound-per-hour and ton-per-year emission limits. This will correspond to a decrease in the emission rate on a pound-per-million-Btu basis. For three pollutants (nitrogen oxides, fluorine, and ammonia slip) a further reduction is proposed.

Since the facility was permitted based on 100% capacity (8,760 hours per year), additional electricity will be made available without any increase in permitted emission rates.

4.2.1 Control Technology

The air pollution control system for the PC boiler consists of SCR, spray dryer absorbers (SDAs) for desulfurization and acid gas control, and a baghouse for particulate matter (including trace metals) controls.

Flue gas from the air heater enters the two 50-percent capacity SDAs, where it is humidified and cooled by spraying with lime slurry. Simultaneously, the flue gas provides drying energy to the atomized slurry. The cooled gas, along with the entrained reaction products and fly ash, flows to the fabric filter where solids are separated from the gas.

The system uses lime (calcium hydroxide) slurry as the absorbing medium. Pebble lime is slaked in the lime preparation system, diluted and stored in the lime feed tanks. Lime slurry is pumped from the feed tank to the agitated atomizer head tank, from which the slurry is pumped to the absorbers.

Lime is delivered to the site by rail or self-unloading truck and stored in a totally enclosed structure to eliminate fugitive emissions.

Flue gas from the FGD system enters the baghouse through an inlet manifold, which distributes the gas to the bag filter compartments. Gas passes through the fabric of the bags from the inside to the outside; collected particulate is retained on the inside surface of the bags. When the particulate buildup on the surface of the bags produces a preset flue gas pressure drop, an automatic reverse-air cleaning cycle is initiated.

Hoppers below the bags collect the particulate released from the bags during the cleaning cycle. A pneumatic transfer system transports the particulate ash from the hoppers to the ash storage silo, in preparation for off-site disposal.

The facility is an emission source of nitrogen oxides, sulfur dioxide (SO₂), particulate matter (PM), carbon monoxide (CO), Volatile Organic Compounds (VOCs) and other regulated pollutants.

ICLP expects that the only physical modifications that may be needed to meet the new proposed permit limits will be enhancements to the NO_x control system. All other permit limits can be met using the existing equipment (spray dryer absorber system and fabric filter baghouse).

4.2.2 Emission Rate: Nitrogen Oxides

For the pulverized coal boiler, the original proposed BACT level for NO_x was on the basis of 0.17 lb/MMBtu, achieved through the use of Selective Non-Catalytic Reduction (SNCR) and advanced combustion controls. Subsequent documentation allowed compliance with the NO_x limit on the basis of SNCR, Selective Catalytic Reduction (SCR), advanced combustion controls, or any combination. An SCR system was installed.

ICLP now proposes a full-load emission limit of 0.125 lb/MMBtu, on a 24-hour block average basis. This reduction keeps the ICLP emission rate on par with permitted emission rates for new facilities firing coal (including facilities using circulating fluidized bed technology).

Because of system design characteristics, it is difficult to document and maintain compliance with a rate based emission limit at low or variable load. ICLP therefore proposes a minimum pound-per-hour NO_x limit as the simplest way to allow for low-load operation. Using a mass emission limit at reduced loads has three advantages. First, it is more straightforward and accurate during periods when load is shifting. Second, it avoids the need to clearly define conditions that qualify as "reduced load," and the need to carefully monitor parameters to document when the "reduced load" permit conditions apply. Third, it avoids the need to request multiple stepped-off emission limits at different operating conditions.

ICLP proposes a NO_x mass emission limit of 480 pounds per hour on a 24-hour block average basis. This limit would become effective at reduced loads (*i.e.* below 3840 MMBtu/hr), and would still represent a significant reduction from the current permitted limit.

ICLP will continue to monitor and document compliance with the NO_x emission limits using continuous emissions monitoring systems.

Specific Condition 6 of the PSD permit allows the Facility "to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation" for the PC boiler. To comply with the proposed NO_x limit, ICLP may wish to enhance the facility's NO_x control system. Per existing Condition of Certification (1).A.2., ICLP will provide details of the enhanced NO_x reduction system upon completion of final

design, and at least 90 days prior to commencing on-site construction for the modification.

While final system design is still in progress, ICLP is considering the use of an SNCR system to augment the existing SCR system. The supplemental SNCR system would ensure compliance with the NO_x limitation at increased loads.

4.2.2 Emission Rate: Sulfur Dioxide

The original proposed BACT level of SO₂ was on the basis of 0.17 lb/MMBtu, achieved through the use of lime spray drying. The current proposed emission rate is 0.142 lb/MMBtu, on a 24-hour block average basis. As discussed for NO_x, above, ICLP is proposing a minimum pound-per-hour emission rate to allow for system fluctuations at reduced or variable loads. ICLP proposes an SO₂ mass emission limit of 480 pounds per hour, on a 24 hour block average basis. This limit would become effective at reduced loads (*i.e.*, below 3380 MMBtu/hr), and would still represent a significant reduction from the current permitted limit.

ICLP will continue to monitor and document compliance with the SO₂ emission limits using continuous emissions monitoring systems.

4.2.3 Emission Rate: Carbon Monoxide

For CO, the original proposed BACT levels were on the basis of 0.11 lb/MMBtu, achieved through advanced combustion controls. ICLP now proposes a rate-based emission limit of 0.092 lb/MMBtu.

ICLP will continue to monitor and document compliance with the CO emission limits using periodic stack testing. ICLP believes that a CO CEMS is prohibitively costly.

A detailed analysis of the cost effectiveness of the CEMS will be provided under separate cover.

4.2.4 Emission Rate: Other Pollutants

For each pollutant with a permit limit, ICLP proposes a rate-based emission limit that corresponds to zero increase in full-load emissions for the PC boiler. This results in a reduction of the rate equivalent emission rate for all pollutants. This also reflects current BACT for all pollutants, with the exception of fluorides and ammonia slip. ICLP proposes a further reduction in the fluoride emission rate to 0.000744 lb/MMBtu; this limit corresponds with over a 50% reduction in the rate-based emission rate from the original permit, and provides the same emission rate as recently approved by the Department for the Cedar Bay Generating Plant.

ICLP proposes a reduction in the allowable ammonia slip from 50 ppmv to 10 ppmv. This limit corresponds with a five-fold reduction in the emission rate, and provides the same emission rate as recently approved by the Department for the Cedar Bay Generating Plant.

4.2.5 Alternative Fuel Use

The alternative fuel currently being reviewed is coal agglomerated with an adhesive binder. This material will behave similarly to coal. Therefore, emissions and emission control options are essentially the same, and BACT for combustion of alternative fuels is the same as BACT for coal combustion.

5.0 PROPOSED CHANGES TO PSD PERMIT

The proposed changes to the facility's operations will require changes in PSD Permit PSD-FL-168 as follows.

The first sentence of Specific Condition 3 needs to be revised to read;

The maximum heat input to the PC boiler shall not exceed 4100 MMBtu/hr while firing coal.

The first sentence of Specific Condition 5 needs to be revised to read;

Based on a permitted heat input of 4100 MMBTU/hr heat input, the stack emissions from the main boiler shall not exceed any of the following limitations:

The table in Specific Condition 5 needs to change to the following:

<u>Pollutant</u>	<u>Emission Limitation</u>	
	<u>(lb/MMBtu)</u>	<u>(ton/yr)</u>
SO ₂	0.142 ^{1,2}	2549
NO _x	0.125 ^{1,3}	2245
PM	0.015	270
PM ₁₀	0.015	270
CO	0.092 ¹	1647
VOC	0.003	54
H ₂ SO ₄	0.00035	0.0041
Beryllium	0.0000023	0.041
Mercury	0.00001	0.172
Lead	0.000016	0.28
Fluorides	0.000744	13.4
Arsenic	0.000044	0.765

- 1: 24 hour daily block average (midnight to midnight)
- 2: or 480 lb/hr (24-hr daily block average), whichever is less stringent
- 3: or 480 lb/hr (24-hr daily block average), whichever is less stringent

The first sentence of Specific Condition 6 should be removed, so that the condition reads;

~~6. The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation. The permittee is allowed to use any combustion technology...~~

Specific Condition 7 needs to be revised to read;

NH₃ (Ammonia) – Slip from exhaust gases shall not exceed 10 ppmv.

Finally, we request the addition of a new Specific Condition (Specific Condition 31) as follows:

Subject to the emission limits and other conditions in this permit, and subject to the following, the permittee may burn an alternative fuel in the PC boiler. At least ninety (90) days prior to burning the alternative fuel, the permittee shall submit documentation to the Department including at least:

- a. A thorough description of the fuel and proposed process;*
- b. A complete chemical analysis of the fuel; and*
- c. A Professional Engineer-certified stoichiometric calculation of the predicted emissions.*

The permittee shall notify the Department at least thirty (30) days prior to burning the alternative fuel. The Department may require stack testing to document actual emissions firing alternative fuels. In that event, the results of the stack testing and the permittee's analysis shall be reported to the Department within forty-five (45) days of completion of the testing.

Appendix I

Permit Application Forms

26109/l-halpin3.doc

August 18, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

**Subject: Indiantown Cogeneration, L.P. Air Permit Modifications
Permit No.: PSD-FL-168, 0850102-001-AV**

Dear Mr. Halpin:

Per your recent discussions with David Burrage of Indiantown Cogeneration, we are submitting the attached revisions to the request to modify the PSD permit for the PC boiler.

This is a revision to the December 1999 PSD permit application for the megawatt increase. The revision includes the revised BACT analysis and proposed emission rates as discussed with Mr. Burrage. It also requests language to allow the use of alternative fuel. We are currently preparing submissions related to air quality modeling and carbon monoxide monitoring, and will be submitting them under separate cover.

Telephone
978-371-4000
Facsimile
978-371-2468

Thank you for your time and consideration. Please contact me at 978-371-4339 or David Burrage at 561-597-6500 ext. 19 with any questions or comments.

Sincerely,



Andrew Jablonowski, P.E.
Senior Air Quality Engineer

cc: S. Sorrentino, C. Allen , D. Burrage, D. Bullock, Indiantown Cogeneration LP
R. DeHart, PG&E Generating



Department of Environmental Protection

Division of Air Resources Management

APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

I. APPLICATION INFORMATION

Identification of Facility

1. Facility Owner/Company Name: Indiantown Cogeneration, L.P.	
2. Site Name: Indiantown Cogeneration Plant	
3. Facility Identification Number: 0850102	<input type="checkbox"/> Unknown
4. Facility Location: Street Address or Other Locator: 19140 SW Warfield Blvd City: Indiantown County: Martin Zip Code: 34956	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Name and Title of Application Contact: David Burrage, Environmental Manager	
2. Application Contact Mailing Address: Organization/Firm: Indiantown Cogeneration, L.P. Street Address: PO Box 1620 City: Indiantown State: FL Zip Code: 34956	
3. Application Contact Telephone Numbers: Telephone: (561) 597-6500 Fax: (561) 597-6520	

Application Processing Information (DEP Use)

1. Date of Receipt of Application:	
2. Permit Number:	
3. PSD Number (if applicable):	
4. Siting Number (if applicable):	

Purpose of Application

Air Operation Permit Application

This Application for Air Permit is submitted to obtain: (Check one)

Initial Title V air operation permit for an existing facility which is classified as a Title V source.

Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: _____

Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: _____

Operation permit number to be revised: _____

Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: _____

Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: _____

Reason for revision: _____

Air Construction Permit Application

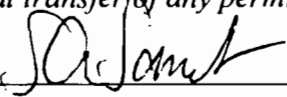
This Application for Air Permit is submitted to obtain: (Check one)

Air construction permit to construct or modify one or more emissions units.

Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Air construction permit for one or more existing, but unpermitted, emissions units.

Owner/Authorized Representative or Responsible Official

1. Name and Title of Owner/Authorized Representative or Responsible Official: Stephen Sorrentino, General Manager
2. Owner/Authorized Representative or Responsible Official Mailing Address: Organization/Firm: Indiantown Cogeneration, L.P. Street Address: PO Box 1620 City: Indiantown State: FL Zip Code: 34956
3. Owner/Authorized Representative or Responsible Official Telephone Numbers: Telephone: (561) 597- 6500 Fax: (561) 597 - 6210
4. Owner/Authorized Representative or Responsible Official Statement: <i>I, the undersigned, am the owner or authorized representative*(check here [], if so) or the responsible official (check here [✓], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i>  <p>_____</p> Signature Date 12/22/99

* Attach letter of authorization if not currently on file.

Professional Engineer Certification

1. Professional Engineer Name: George S. Lipka Registration Number: 0050359
2. Professional Engineer Mailing Address: Organization/Firm: Earth Tech Street Address: 196 Baker Avenue City: Concord State: MA Zip Code: 01742
3. Professional Engineer Telephone Numbers: Telephone: (978) 371- 4000 Fax: (978) 371- 2468

4. Professional Engineer Statement:

I, the undersigned, hereby certify, except as particularly noted herein, that:*

(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and

(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here [] , if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [✓] , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [] , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.

Signature George D. Lytle

Date December 22, 1999

(seal)

* Attach any exception to certification statement.

Scope of Application

Emissions Unit ID	Description of Emissions Unit	Permit Type	Processing Fee
001	Pulverized Coal Fired Main Boiler	ACM1	

Application Processing Fee

Check one: [] Attached - Amount: \$_____ [] Not Applicable

Construction/Modification Information

1. Description of Proposed Project or Alterations:

Modify PC Boiler to increase MW output to 390 MW.

2. Projected or Actual Date of Commencement of Construction: ~~about April, 2000~~

3. Projected Date of Completion of Construction: ~~about May, 2000~~

Application Comment

*No construction required. ICLP will increase MW output upon approval
(about December, 2000).*

Facility Regulatory Classifications

Check all that apply:

1. <input type="checkbox"/> Small Business Stationary Source?	<input type="checkbox"/> Unknown
2. <input checked="" type="checkbox"/> Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
3. <input type="checkbox"/> Synthetic Minor Source of Pollutants Other than HAPs?	
4. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)?	
5. <input type="checkbox"/> Synthetic Minor Source of HAPs?	
6. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS?	
7. <input type="checkbox"/> One or More Emission Units Subject to NESHAP?	
8. <input checked="" type="checkbox"/> Title V Source by EPA Designation?	
9. Facility Regulatory Classifications Comment (limit to 200 characters): Major source of HAPs based on current estimates of HCL emissions.	

List of Applicable Regulations

62-210.300	62-213
62-210.350	62-273.300
62-210.370	62-297
62-210.500	62-296.405
62-210.550	62-204.800
62-210.700	40 CFR 60,Subpart Da
62-212.300	40 CFR 60,Subpart Db
62-212.400 (PSD-FL-168)	40 CFR 60,Subpart Y
62-212.410	
62-296.711	

B. FACILITY POLLUTANTS

List of Pollutants Emitted

1. Pollutant Emitted	2. Pollutant Classif.	3. Requested Emissions Cap		4. Basis for Emissions Cap	5. Pollutant Comment
		lb/hour	tons/year		
CO	A				
PB	B				
NOX	A				
PM	A				
PM10	A				
S02	A				
VOC	B				
SAM	B				
H021	B				
H114	B				
FL	B				
H015	B				
H106	A				

C. FACILITY SUPPLEMENTAL INFORMATION

Supplemental Requirements

1. Area Map Showing Facility Location: <input checked="" type="checkbox"/> Attached, Document ID: ___1___ [] Not Applicable [] Waiver Requested
2. Facility Plot Plan: <input checked="" type="checkbox"/> Attached, Document ID: ___2___ [] Not Applicable [] Waiver Requested
3. Process Flow Diagram(s): <input checked="" type="checkbox"/> Attached, Document ID: ___3___ [] Not Applicable [] Waiver Requested
4. Precautions to Prevent Emissions of Unconfined Particulate Matter: [] Attached, Document ID: _____ [] Not Applicable <input checked="" type="checkbox"/> Waiver Requested
5. Fugitive Emissions Identification: [] Attached, Document ID: _____ [] Not Applicable <input checked="" type="checkbox"/> Waiver Requested
6. Supplemental Information for Construction Permit Application: <input checked="" type="checkbox"/> Attached, Document ID: ___4___ [] Not Applicable
7. Supplemental Requirements Comment: Document I.D. 1,2,3 found in Appendix II Document I.D. 4 is addressed as the main body of text.

Additional Supplemental Requirements for Title V Air Operation Permit Applications

8. List of Proposed Insignificant Activities: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9. List of Equipment/Activities Regulated under Title VI: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Equipment/Activities On site but Not Required to be Individually Listed <input type="checkbox"/> Not Applicable
10. Alternative Methods of Operation: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
11. Alternative Modes of Operation (Emissions Trading): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
12. Identification of Additional Applicable Requirements: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
13. Risk Management Plan Verification: <input type="checkbox"/> Plan previously submitted to Chemical Emergency Preparedness and Prevention Office (CEPPO). Verification of submittal attached (Document ID: _____) or previously submitted to DEP (Date and DEP Office: _____) <input type="checkbox"/> Plan to be submitted to CEPPO (Date required: _____) <input type="checkbox"/> Not Applicable
14. Compliance Report and Plan: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
15. Compliance Certification (Hard-copy Required): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

INTEROFFICE MEMORANDUM

Date: 07-Aug-2000 02:59pm
From: Burrage, David
david.burrage@neg.pge.com

Dept:
Tel No:

To: 'Mike.Halpin@dep.state.fl.us' (Mike.Halpin@dep.state.fl.us)
CC: Bullock, Douglas (douglas.bullock@neg.pge.com)
CC: DeHart, Robert (robert.dehart@neg.pge.com)
CC: 'Jablonski, AJ' (AJABLONOWSKI@earthtech.com)
CC: Sorrentino, Stephen (stephen.sorrentino@neg.pge.com)

Subject: ICLP PSD PERMIT

Mike,

Thank you for taking time to meet with Doug Bullock and myself last Wednesday. ICLP will submit an updated PSD permit application for increased MW (4100 MMBtu/hr input) within the next two weeks. We discussed NOx limits of 0.125 lbs./MMBtu or 480 lbs./hr whichever is higher and SO2 limits would correspondingly be 0.142 lbs./MMBtu or 480 lbs./hr whichever is higher. The anticipated breakpoint to switch from lbs./MMBtu to lbs./hr for NOx is 3840 MMBtu/hr and the anticipated breakpoint to switch from lbs./MMBtu to lbs./hr for SO2 is 3380 MMBtu/hr. ICLP continues to believe that a CO CEMS is prohibitively costly. A detailed analysis of the cost of the CEMS versus the reduction of CO admitted (old versus new permit) is forthcoming. We look forward to working with you and the modeling group to bring this project to closure.

David Burrage

PG&E National Energy Group and any other company referenced herein that uses the PG&E name or logo are not the same company as Pacific Gas and Electric Company, the regulated California utility. Neither PG&E National Energy Group nor these other referenced companies are regulated by the California Public Utilities Commission. Customers of Pacific Gas and Electric Company do not have to buy products from these companies in order to continue to receive quality regulated services from the utility.

RECEIVED

AUG 17 2000



BUREAU OF AIR REGULATION

PG&E Generating (PG&E Gen) and any other company referenced herein that uses the PG&E name or logo are not the same company as Pacific Gas and Electric Company, the regulated California utility. Neither PG&E Gen nor these other referenced companies are regulated by the California Public Utilities Commission. Customers of Pacific Gas and Electric Company do not have to buy products from these companies in order to continue to receive quality regulated services from the utility.

Fax Message

Date:	August 17, 2000		
To:	Mike Halpin	Facsimile No.:	850-922-6979
		Phone No.:	850-488-0114
Company:	Florida DEP	No. of Pages:	16 (including this one)
City/State:	Tallahassee, Fl		
From:	Bob DeHart	Phone No.:	(301) 280-6747
Special Instructions:			
If transmittal is incomplete or illegible, please call at (301) 280-			

Message: Mike, attached is the information regarding the latex type binder for a coal derived syfuel that we are evaluating. There are 6 items included:

- 1- a brief description of the Covol process
- 2- an MSDS for the latex material
- 3- Kirkpatric memo of 2/24/99
- 4- ATS letter report on combustion analysis dated 2/23/99
- 5- Kirkpatric memo of 2/24/99 describing additives used on test process
- 6- a coal quality analysis for the Maxine - K-Lee coal blend

Thank you for taking the time to review this information. I look forward to your questions and any concerns you may have about the latex binder.

Bob

CONFIDENTIALITY NOTICE

The information contained in this telefacsimile message is privileged and confidential, and intended only for the use of the individual(s) and/or entity(ies) named above. If you are not the intended recipient, you are hereby notified that any unauthorized disclosure, copying, distribution or taking of any action in reliance on the contents of the telecopy materials is strictly prohibited and review by any individual other than the intended recipient shall not constitute waiver of the attorney/client privilege. If you have received this transmission in error, please immediately notify us by telephone (collect) to arrange for the return of the materials. Thank you.

7500 Old Georgetown Road, 13th floor ... Bethesda, MD 20814-6161 301-280-6800 FAX-

7500 Old Georgetown Road
Bethesda, MD 20814-6161

Site: www.CVOL.com

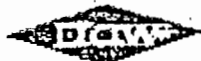
Robert E. Dehart, Jr.
Regional Environmental Manager
Environmental Affairs
Technical Resources

Tel: 301.280.6747
Fax: 301.913.5850
robert.dehart@gen.pge.com
www.gen.pge.com

PG&E Generating is not the same company as Pacific Gas and Electric Company, the regulated Utility. (See back)

Process Description:

PSF's plants use a patented process licensed from Covol Technologies, Inc. ("Covol"). Covol is a public company, and its stock is traded on the Nasdaq National Market under the symbol CVOL. As evidenced by PSF's Private Letter Ruling from the IRS (attached for review), synthetic fuel produced from coal or coal waste by Covol's patented process meets the qualifications for tax credits under Internal Revenue Code, Section 29. In brief, the Covol process uses a proprietary chemical manufactured by Dow Chemical Company which is mixed into coal to produce a solid synthetic fuel that meets the requirements of the Internal Revenue Code. The chemical used is a carboxylated styrene/butadiene polymer, commonly referred to as Latex DL. The chemical binder represents less than two tenths of one percent (.2%) by weight of the final solid synthetic fuel product. Burning PSF's solid synthetic fuel product has been shown to produce no hazardous air pollutants (test report attached for review). In determining which synthetic fuel technology to invest in, PacifiCorp relied upon its vast experience in mining, transporting, processing and burning of coal and purposefully avoided competing technologies which used cement-type or asphalt-based binders/agents. This is due to issues related to fuel handling, ash composition/increase, boiler slagging/fouling, grinding and potential environmental problems associated with some of these materials and their use.



Material Safety Data Sheet

1. CHEMICAL PRODUCT & COMPANY IDENTIFICATION

24-Hour Emergency Phone Number: 517-636-4400

Product: LATEX DL 298NA

Product Code: 61584

Effective Date: 10/07/96 Date Printed: 06/26/98 MSD: 005213

The Dow Chemical Company, Midland, MI 48674

Customer Information Center: 800-258-2436

2. COMPOSITION/INFORMATION ON INGREDIENTS

Proprietary carboxylated styrene/
butadiene polymer
Water

CAS# 007732-18-5 40-62%
38-60%

3. HAZARDS IDENTIFICATION

EMERGENCY OVERVIEW

* Milky white liquid emulsion. Slight odor. No significant immediate *
* hazards for emergency response are known. Dike and contain spills. *
* Avoid dilution of spills. *

POTENTIAL HEALTH EFFECTS (See Section 11 for toxicological data.)

EYE: May cause slight transient (temporary) eye irritation.
Corneal injury is unlikely.

SKIN: Short single exposure not likely to cause significant skin
irritation. Prolonged or repeated exposure may cause slight
skin irritation. Material may stick to skin causing irritation
upon removal. A single prolonged exposure is not likely to
result in the material being absorbed through the skin in
harmful amounts.

INGESTION: Single dose oral toxicity is considered to be
extremely low. No hazards anticipated from swallowing
small amounts incidental to normal handling operations.

(Continued on page 2, over)

(R) Indicates a Trademark of The Dow Chemical Company

MATERIAL SAFETY DATA SHEET

PAGE: 2

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

MSD: 005213

INHALATION: Single exposure to vapors is not likely to be hazardous.

SYSTEMIC & OTHER EFFECTS: No relevant information found.

CANCER INFORMATION: No relevant information found.

TERATOLOGY (BIRTH DEFECTS): No relevant information found.

REPRODUCTIVE EFFECTS: No relevant information found.

4. FIRST AID

EYES: Flush eyes with plenty of water.

SKIN: Wash off in flowing water or shower.

INGESTION: If swallowed, seek medical attention. Do not induce vomiting unless directed to do so by medical personnel.

INHALATION: Remove to fresh air if effects occur. Consult a physician.

NOTE TO PHYSICIAN: No specific antidote. Supportive care. Treatment based on judgment of the physician in response to reactions of the patient.

5. FIRE FIGHTING MEASURES

FLAMMABLE PROPERTIES:

FLASH POINT: Not applicable

METHOD USED: Not applicable

AUTOIGNITION TEMPERATURE: Not applicable

FLAMMABILITY LIMITS:

LFL: Not applicable

UFL: Not applicable

HAZARDOUS COMBUSTION PRODUCTS: Under fire conditions some components of this product may decompose. The smoke may contain unidentified toxic and/or irritating compounds. Hazardous combustion products may include and are not limited to hydrocarbons, carbon monoxide and dense smoke.

OTHER FLAMMABILITY INFORMATION: This material will not burn until the water has evaporated. Residue can burn.

(Continued on page 3)

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MATERIAL SAFETY DATA SHEET

PAGE: 3

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

MSD: 005213

EXTINGUISHING MEDIA: To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

FIRE FIGHTING INSTRUCTIONS: Keep people away. Isolate fire area and deny unnecessary entry. To extinguish combustible residues of this product use water fog, carbon dioxide, dry chemical or foam.

PROTECTIVE EQUIPMENT FOR FIRE-FIGHTERS: Wear positive-pressure, self-contained breathing apparatus (SCBA) and protective fire fighting clothing (includes fire fighting helmet, coat, pants, boots, and gloves). If protective equipment is not available or not used, fight fire from a protected location or safe distance.

6. ACCIDENTAL RELEASE MEASURES (See Section 15 for Regulatory Information)

PROTECT PEOPLE: Avoid contact with eyes and skin.

PROTECT THE ENVIRONMENT: Contain material to prevent contamination of soil, surface water or ground water.

CLEANUP: Recover and recycle spilled latex if possible, otherwise collect with absorbent material and transfer to appropriate containers for disposal. Water may be used for final cleaning of affected area.

7. HANDLING AND STORAGE

HANDLING: Practice reasonable care to avoid repeated, prolonged skin contact. Addition of chemicals may cause coagulation.

STORAGE: Store at temperatures between 40F and 110F. May coagulate if frozen at 32F, 0C. Material may develop bacteria odor on long-term storage. No safety problems known.

8. EXPOSURE CONTROLS/PERSONAL PROTECTION

ENGINEERING CONTROLS: Good general ventilation should be sufficient for most conditions. Local exhaust ventilation may be necessary for some operations.

PERSONAL PROTECTIVE EQUIPMENT

EYE/FACE PROTECTION: Use safety glasses.

(Continued on page 4, over)

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MATERIAL SAFETY DATA SHEET

PAGE: 4

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

MSD: 005213

SKIN PROTECTION: Wear clean, long-sleeved, body-covering clothing. Use gloves impervious to this material.

RESPIRATORY PROTECTION: No respiratory protection should be needed.

EXPOSURE GUIDELINE(S): None established.

9. PHYSICAL AND CHEMICAL PROPERTIES

APPEARANCE: Milky white liquid emulsion. VISCOSITY 400 centipoise
ODOR: Slight odor. Sp. Heat 0.75
VAPOR PRESSURE: 17.5 mmHg @ 20C
VAPOR DENSITY: 0.624 @ 80F
BOILING POINT: 212F, 100C
SOLUBILITY IN WATER: Latex as sold is dilutable. Polymer component is insoluble.
SPECIFIC GRAVITY: .980 - 1.040

The physical data listed are for a series of latexes. For specific properties on any given latex, see the product bulletin.

10. STABILITY AND REACTIVITY

CHEMICAL STABILITY: Stable under recommended storage conditions. See storage section.

CONDITIONS TO AVOID: Active ingredient decomposes at elevated temperatures. Product can decompose at elevated temperatures.

INCOMPATIBILITY WITH OTHER MATERIALS: None known.

HAZARDOUS DECOMPOSITION PRODUCTS: Hazardous decomposition products depend upon temperature, air supply and the presence of other materials.

HAZARDOUS POLYMERIZATION: Will not occur.

11. TOXICOLOGICAL INFORMATION (See Section 3 for Potential Health Effects. For detailed toxicological data, write or call the address or non-emergency number shown in Section 1)

SKIN: The dermal LD50 has not been determined.

INGESTION: The oral LD50 for rats is > 5000mg/kg for similar

(Continued on page 5)

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MATERIAL SAFETY DATA SHEET

PAGE: 5

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

MSD: 005213

materials.

MUTAGENICITY: No relevant information found.

12. ECOLOGICAL INFORMATION (For detailed Ecological data, write or call the address or non-emergency number shown in Section 1)

ENVIRONMENTAL FATE

MOVEMENT & PARTITIONING: No bioconcentration of the polymeric component is expected because of its high molecular weight. Latex dispersions will color water a milky white.

DEGRADATION & TRANSFORMATION: The polymeric component is not expected to biodegrade.

ECOTOXICOLOGY: Material is practically non-toxic to aquatic organisms on an acute basis (LC50 greater than 100 mg/L in most sensitive species).

13. DISPOSAL CONSIDERATIONS (See Section 15 for Regulatory Information)

DISPOSAL: DO NOT DUMP INTO ANY SEWERS, ON THE GROUND OR INTO ANY BODY OF WATER. All disposal methods must be in compliance with all Federal, State/Provincial and local laws and regulations. Regulations may vary in different locations. Waste characterization and compliance with applicable laws are the responsibility solely of the waste generator. THE DOW CHEMICAL COMPANY HAS NO CONTROL OVER THE MANAGEMENT PRACTICES OR MANUFACTURING PROCESSES OF PARTIES HANDLING OR USING THIS MATERIAL. THE INFORMATION PRESENTED HERE PERTAINS ONLY TO THE PRODUCT AS SHIPPED IN ITS INTENDED CONDITION AS DESCRIBED IN MSDS SECTION 2 (Composition/Information On Ingredients).

FOR UNUSED & UNCONTAMINATED PRODUCT, the preferred options include sending to a licensed, permitted: recycler, reclaimer, incinerator or other thermal destruction device.

As a service to its customers, Dow can provide lists of companies which recycle, reprocess or manage chemicals or plastics, and companies that manage used drums. Telephone Dow's Customer Information Center at 800-258-2436 or 517-832-1556 for further details.

14. TRANSPORT INFORMATION

(Continued on page 6 , over)

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MATERIAL SAFETY DATA SHEET

PAGE: 6

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

MSD: 005213

CANADIAN TDG INFORMATION:

For TDG regulatory information, if required, consult transportation regulations, product shipping papers, or your Dow representative.

U. S. DEPARTMENT OF TRANSPORTATION (D.O.T.):

This product is not regulated by DOT when shipped domestically by land.

15. REGULATORY INFORMATION (Not meant to be all-inclusive—selected regulations represented)

NOTICE: The information herein is presented in good faith and believed to be accurate as of the effective date shown above. However, no warranty, express or implied is given. Regulatory requirements are subject to change and may differ from one location to another; it is the buyer's responsibility to ensure that its activities comply with federal, state or provincial, and local laws. The following specific information is made for the purpose of complying with numerous federal, state or provincial, and local laws and regulations. See other sections for health and safety information.

U.S. REGULATIONS

SARA 313 INFORMATION: To the best of our knowledge, this product contains no chemical subject to SARA Title III Section 313 supplier notification requirements.

SARA HAZARD CATEGORY: This product has been reviewed according to the EPA "Hazard Categories" promulgated under Sections 311 and 312 of the Superfund Amendment and Reauthorization Act of 1986 (SARA Title III) and is considered, under applicable definitions, to meet the following categories:

Not to have met any hazard category

CANADIAN REGULATIONS

WHMIS INFORMATION: The Canadian Workplace Hazardous Materials Information System (WHMIS) Classification for this product is:

This product is not a "Controlled Product" under WHMIS.

(Continued on page 7)

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MATERIAL SAFETY DATA SHEET

PAGE: 7

Product: LATEX DL 298NA
Product Code: 61584

Effective Date: 10/07/96

Date Printed: 06/26/98

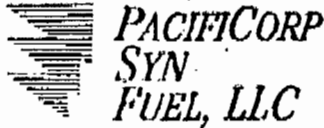
MSD: 005213

REGULATORY INFORMATION (CONTINUED)

16. OTHER INFORMATION

MSDS STATUS: Revised Sections 5, 6, 7, 10, and 13 to standard statements, Section 12 Ecotoxicity, data revised.

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The Information Herein is Given in Good Faith, But No Warranty,
Express Or Implied, is Made. Consult The Dow Chemical Company
For further information.



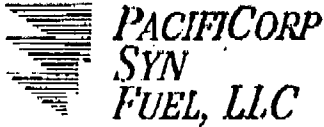
19337 Highway 269
Quinton, Alabama 35130
205/674-5085 FAX: 205/674-6506

February 24, 1999

To: File
From: Barry Kirkpatrick
Re: Analysis of Maxine/K-Lee pellets

A sample of pellets from production of 12/17/98 at Birmingham Syn Fuel, LLC was submitted to Advanced Technology Systems, Inc. for Oxidative Pyrolysis By-Products analysis on February 16, 1999. The attached Advanced Technology Systems, Inc report gives the results of that analysis. The attached memo derived from production records documents the components that were present in the subject samples.

Any questions concerning this report and documentation should be directed to Barry Kirkpatrick at 205-674-5085.



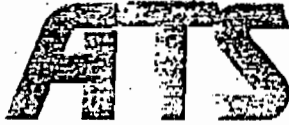
19337 Highway 269
Quinton, Alabama 35130
205/674-5085 FAX: 205/674-6506

February 24, 1999

To: File
From: Barry Kirkpatrick
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Any questions concerning this report and documentation should be directed to Barry Kirkpatrick at 205-674-5085.



639 Alpha Drive
Pittsburgh, Pennsylvania 15238
Telephone (412) 967-1900
FAX (412) 967-1911

ADVANCED TECHNOLOGY SYSTEMS, INC.

February 23, 1999

Mr. Barry Kirkpatrick
PacifiCorp Syn Fuel, I.L.C.
19337 Highway 269
Quinton, AL 35130

RE: LETTER REPORT - OXIDATIVE PYROLYSIS BY-PRODUCTS OF MAXINE/K-LEE BLEND PRODUCT SAMPLES

Dear Mr. Kirkpatrick:

SUMMARY

The Maxine/K-Lee blend pellets you submitted have been tested as you requested and the results are discussed below. The main aim of this testing was to determine the nature and quantity of hazardous air pollutants (HAPs) that may be released as by-products of combustion of the product pellets compared to the parent coal.

There were no by-products of combustion known to be HAPs that were detected at the part per billion levels.

EXPERIMENTAL

Hazardous Air Pollutant Analysis

The chemicals regulated under the Hazardous Pollutants and Accident Prevention Provisions of Title III of the Clean Air Act include potential by-products of combustion of coal. Such compounds includes aromatic hydrocarbons (e.g. benzene, toluene, naphthalene, styrene, xylene etc.), polycyclic organic matter (POM), aliphatics (e.g.: hexane) and phenolics (e.g.: cresol, phenol). Polycyclic organic matter includes substituted and/or unsubstituted polycyclic aromatic hydrocarbons and aromatic heterocyclic compounds with two or more fused rings, one of which is benzenoid. The extent to which this POM is emitted during thermal processes depends on the process involved.

In general, under slow oxidative pyrolysis conditions, the few compounds that survive the oxidation include benzene, toluene, short chain alkylbenzenes and naphthalene. This analysis will focus on these compounds.

Gram quantities of the parent coal and the product coal pellets were each subjected to oxidative combustion in air at 2000°F. The by-products of combustion were collected on charcoal tubes, recovered with carbon disulfide and the extracts were analyzed by Gas Chromatography - Mass Spectroscopic (GC/MS) analysis.

RESULTS AND DISCUSSION

A) HAPs Analysis

Charcoal tubes used to collect the combustion gases of the product coal pellets were extracted each with 2 ml of carbon disulfide. One microliter of the resulting solution was injected each into a Hewlett Packard Gas Chromatograph equipped with a Mass Selective Detector (5971 series). The chromatographic peaks observed were identified using a Wiley Library Database search program.

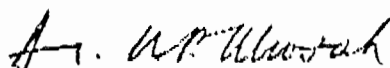
The chromatogram (Figure 1) shows essentially no target HAPs were detectable at the part per billion levels. Figure 2 shows a chromatogram of a reference mixture of HAPs.

CONCLUSION

The results obtained indicated that there were no significant levels of hazardous air pollutants (HAPs) from the combustion of the Maxine/K-Lee blend. This conclusion should be interpreted for combustion conditions similar to the ones employed during this testing.

Thank you for the opportunity to provide PacifiCorp Syn Fuels, LLC with coal combustion evaluation services. Please call me at (412) 967-1900 Ext. 207 if you have any questions

Sincerely yours,



Robinson P. Khosah, Ph.D.
Vice President
Science & Technology

RPK/blc

Figure 1 - GC/MS Analysis of Combustion
By-Products of Coal Blend

File : C:\MPCHEM\1\DATA\DI002450.D
Operator : han
Acquired : 22 Feb 99 12:06 pm using AcqMethod 8270BNA
Instrument : 5972 - In
Sample Name: PRM03383 FRONT, 90509, char, 1ml CS2 , 1ul in
Misc Info : 0.32mmX30m SPBS , B injector , direct intf
Vial Number: 1

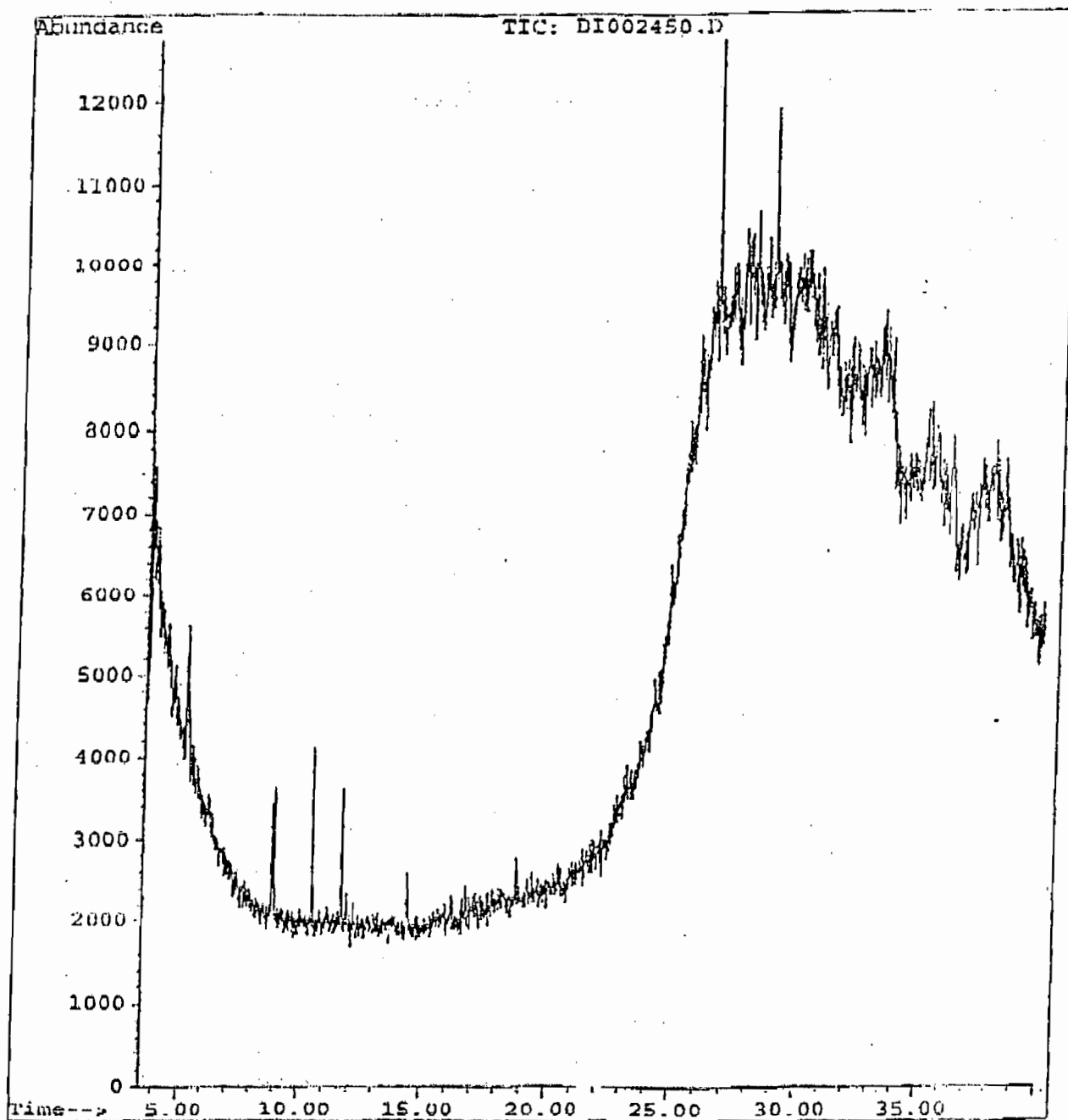
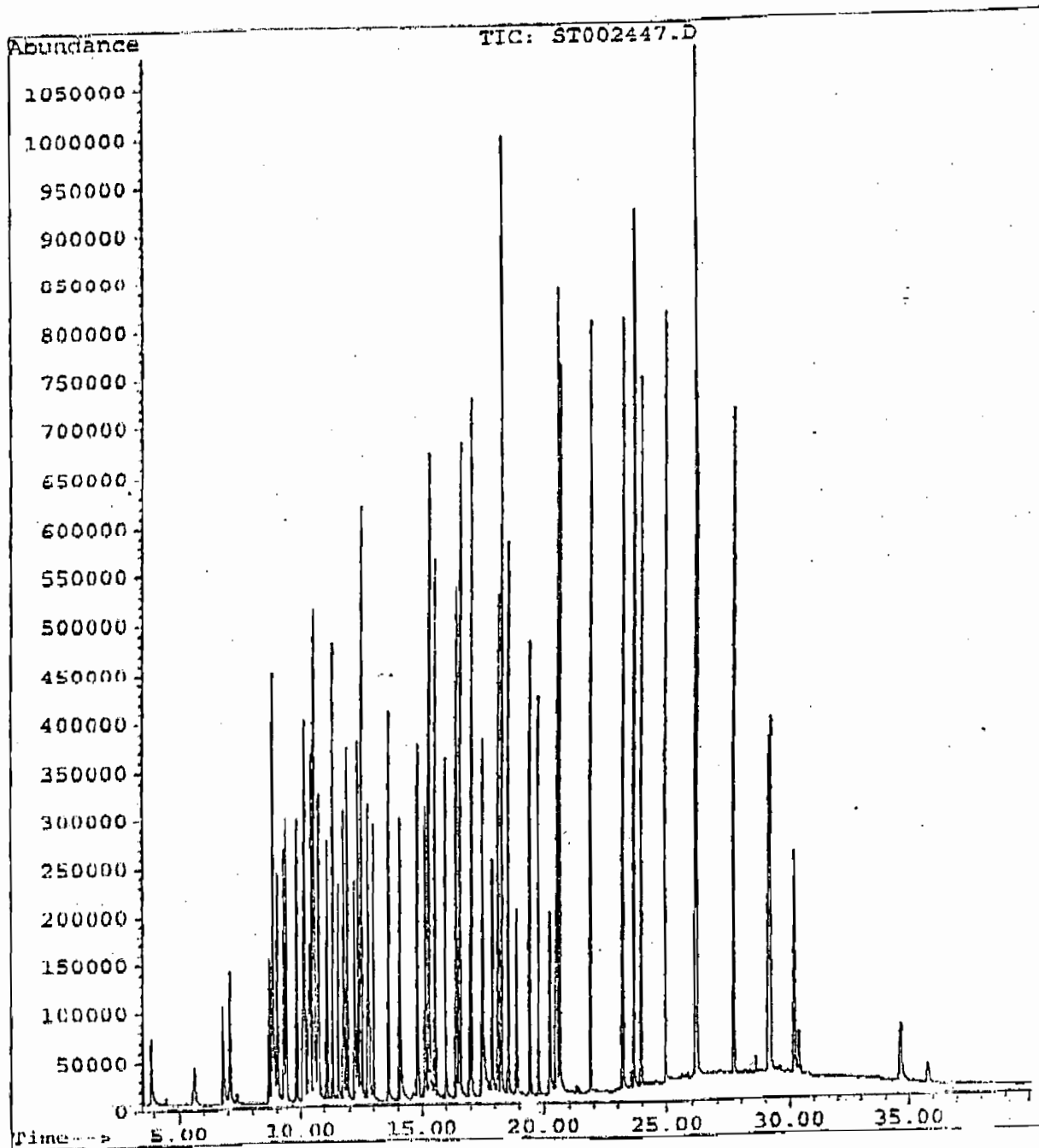


Figure 2 - GC/MS Trace of a HAPs Standard

File : C:\HPCHEM\1\DATA\ST002447.D
Operator : han
Acquired : 22 Feb 99 9:19 am using AcqMethod 8270BNA
Instrument : 5972 - In
Sample Name: std 69-133-02 BNA 100ppm , 1ul inj
Misc Info : 0.32mmX30m SPB5 , B injector , direct intf
Vial Number: 1





**BIRMINGHAM
SYN
FUEL, LLC**

2700 Powhatan Street
Mulga, Alabama 35118
205/436-4568 FAX: 205-436-4099

February 24, 1999

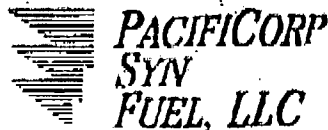
To: File
From: Barry Kirkpatrick
Re: Maxine K-Lee Blend Pellets

On 12/17/98, a sample of pellets was collected at Birmingham Syn Fuel, LLC after a production run of approximate 282 tons. The production run consisted of a blend of 50% Maxine and 50% K-Lee that was thoroughly mixed prior to feeding into the plant.

Additives used in this production run were as follows:

Conditioner a 2% nitric acid solution added at a rate of 1% per dry ton,
Binder a 10% latex emulsion (5% latex) added at a rate of 2% per dry ton.
Oil a mineral oil added at a rate of 0.5% per dry ton,
Additive a dry guar gum added at a rate of 0.175% per dry ton.

From the resulting production run, buckets of the pellets were collected, sealed and placed in storage for distribution to customers and testing laboratories.



19337 Highway 269
 Quinton, Alabama 35130
 205/674-5085 FAX: 205/674-6506

TYPICAL COAL QUALITY ANALYSIS

Proximate Analysis (As Received):

% Total Moisture	6.00
% Ash	14.45
% Volatility	22.20
Btu/lb.	12197
% Sulfur	0.92
Grindability	+100
MAF BTU	15,332

Ultimate Analysis (Dry Basis):

% Carbon	73.75
% Hydrogen	3.81
% Nitrogen	1.51
% Chlorine	0.01
% Sulfur	0.96
% Ash	15.54
% Oxygen	4.41
µg/g Fluorine	0

Ash Analysis

Ash Fusion Temperatures:

Initial Deformation	Red	2541	°F
	Oxidizing	2739 +	°F
Softening (H=W)	Red	2608	°F
	Oxidizing	2742 +	°F
Hemispherical (H=1/2W)	Red	2659	°F
	Oxidizing	2743 +	°F
Fluid	Red	2721 +	°F
	Oxidizing	2745 +	°F

Mineral Analysis of Ash:

Phos Pentoxide (P ₂ O ₅)	0.50
Silica (SiO ₂)	53.34
Ferrous Oxide (Fe ₂ O ₃)	7.56
Alumina (Al ₂ O ₃)	28.83
Titania (TiO ₂)	1.34
Lime (CaO)	1.92
Magnesia (MgO)	1.09
Sulfur Trioxide (SO ₃)	1.31
Potassium Oxide (K ₂ O)	2.93
Sodium Oxide (Na ₂ O)	0.30

T ₂₅₀ Temp:	2830	°F
Base Acid Ratio:	0.19	
Equilibrium Moisture:	4.10	

III. EMISSIONS UNIT INFORMATION

A separate Emissions Unit Information Section (including subsections A through J as required) must be completed for each emissions unit addressed in this Application for Air Permit. If submitting the application form in hard copy, indicate, in the space provided at the top of each page, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application.

**A. GENERAL EMISSIONS UNIT INFORMATION
(All Emissions Units)**

Emissions Unit Description and Status

<p>1. Type of Emissions Unit Addressed in This Section: (Check one)</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).</p> <p><input checked="" type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.</p> <p><input type="checkbox"/> This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.</p>			
<p>2. Regulated or Unregulated Emissions Unit? (Check one)</p> <p><input checked="" type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.</p> <p><input type="checkbox"/> The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.</p>			
<p>3. Description of Emissions Unit Addressed in This Section (limit to 60 characters):</p> 			
<p>4. Emissions Unit Identification Number:</p> <p>ID: 001</p>		<p><input type="checkbox"/> No ID</p> <p><input type="checkbox"/> ID Unknown</p>	
<p>5. Emissions Unit Status Code: A</p>	<p>6. Initial Startup Date:</p> <p>July 1, 1995</p>	<p>7. Emissions Unit Major Group SIC Code:</p> <p>49</p>	<p>8. Acid Rain Unit?</p> <p><input type="checkbox"/></p>
<p>9. Emissions Unit Comment: (Limit to 500 Characters)</p> 			

Emissions Unit Control Equipment

1. Control Equipment/Method Description (Limit to 200 characters per device or method):

Air preheater, Low NOx burner, overfire air. Combustion control/O2 control, ammonia injection and catalytic reduction SCR system, spray dryer absorber, and fabric filter baghouse.

2. Control Device or Method Code(s): 027

Emissions Unit Details

1. Package Unit:		
Manufacturer:	NA	Model Number:
2. Generator Nameplate Rating: 390		MW
3. Incinerator Information:		
	Dwell Temperature:	°F
	Dwell Time:	seconds
	Incinerator Afterburner Temperature:	°F

**B. EMISSIONS UNIT CAPACITY INFORMATION
(Regulated Emissions Units Only)**

Emissions Unit Operating Capacity and Schedule

1. Maximum Heat Input Rate:	4100	mmBtu/hr
2. Maximum Incineration Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:		
4. Maximum Production Rate:		
5. Requested Maximum Operating Schedule:		
	24 hours/day	7 days/week
	52 weeks/year	8760 hours/year
6. Operating Capacity/Schedule Comment (limit to 200 characters):		

**C. EMISSIONS UNIT REGULATIONS
(Regulated Emissions Units Only)**

List of Applicable Regulations

40 CFR 60.1 – 60.15	
40 CFR 60.17	
40 CFR 60.19	
40 CFR 60.40a	
40 CFR 60.41a	
40 CFR 60.42a (a), (b)	
40 CFR 60.43a (a)(2), (b)(2), (g), (h)(2)	
40 CFR 60.44a (a), (c)	
40 CFR 60.46a (a-c, e-h)	
40 CFR 60.46a (a), (b)(3), (c-j)	
40 CFR 60.48a (a-e)	
40 CFR 60.49a (a-c, f-I)	

D. EMISSION POINT (STACK/VENT) INFORMATION
(Regulated Emissions Units Only)

Emission Point Description and Type

1. Identification of Point on Plot Plan or Flow Diagram? Main Stack		2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking (limit to 100 characters per point): Main Stack			
4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common: PC boiler (001), Proposed CO2 Plant (007)			
5. Discharge Type Code: V	6. Stack Height: 495 feet	7. Exit Diameter: 16 feet	
8. Exit Temperature: 140 180 °F	9. Actual Volumetric Flow Rate: 1123700 1181774 acfm	10. Water Vapor: 15.00 %	
11. Maximum Dry Standard Flow Rate: dscfm		12. Nonstack Emission Point Height: feet	
13. Emission Point UTM Coordinates: Zone: East (km): North (km):			
14. Emission Point Comment (limit to 200 characters): Airflow in dscfm not listed because the PC boiler has no emission limits in grains/dscfm. Acfm listed are approximate.			

E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 1 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Coal firing		
2. Source Classification Code (SCC): 1-01-001-01		3. SCC Units: Tons burned (all solid fuels)
4. Maximum Hourly Rate: 145.00	5. Maximum Annual Rate: 1,270,200.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur: 2.00	8. Maximum % Ash: 12.00	9. Million Btu per SCC Unit: 24
10. Segment Comment (limit to 200 characters):		

Segment Description and Rate: Segment 2 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): No.2 Oil firing		
2. Source Classification Code (SCC): 1-01-005-01		3. SCC Units: Thousands Gallons Burned (all liquid fuels)
4. Maximum Hourly Rate: 12.70	5. Maximum Annual Rate: 111,135.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur: 0.05	8. Maximum % Ash:	9. Million Btu per SCC Unit: 135
10. Segment Comment (limit to 200 characters): PC Boiler does not currently fire No. 2 oil. No.2 oil would be fired during startup, shutdown and load changes. Firing capacity no more than 50% rated boiler heat input.		

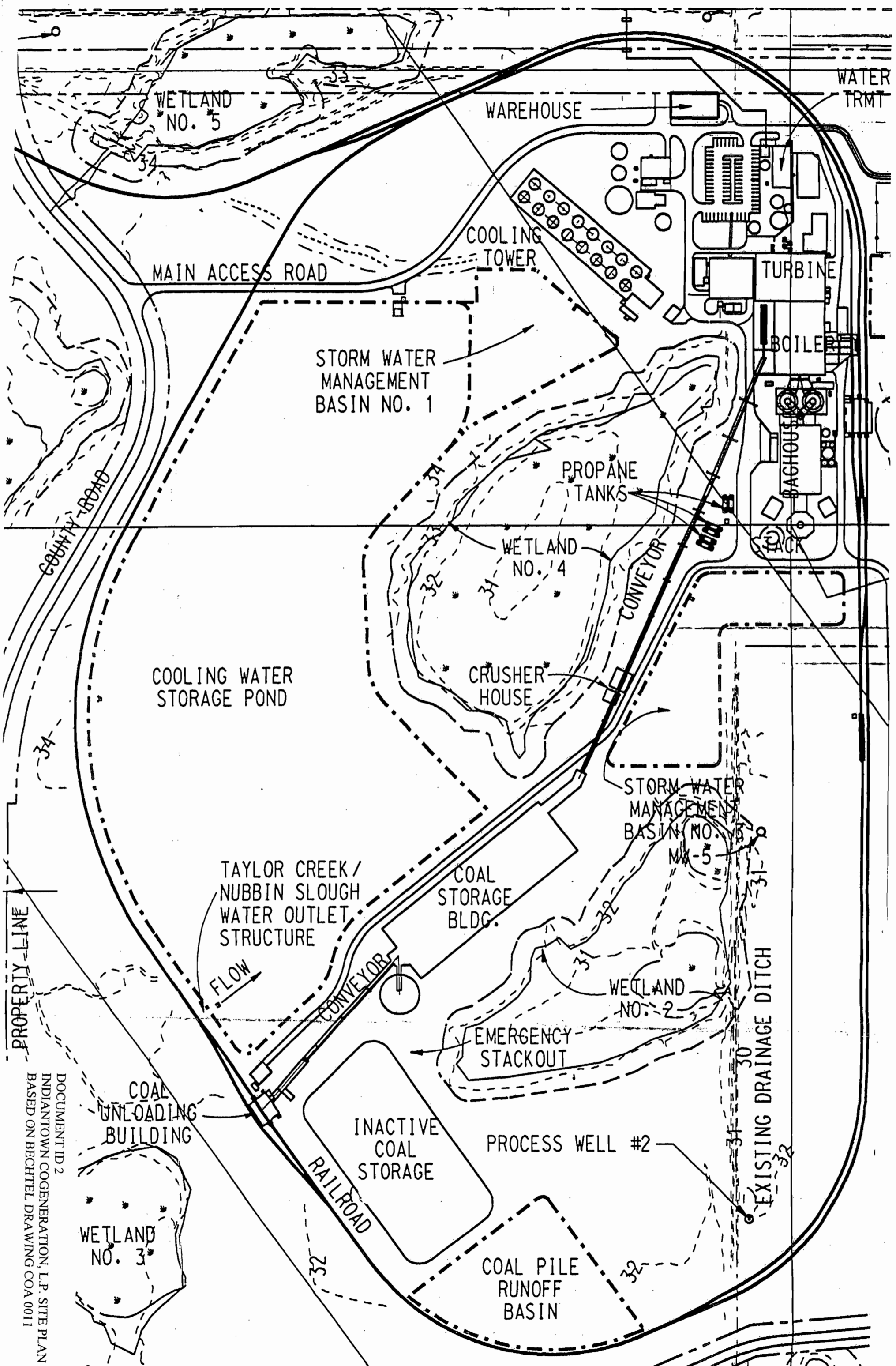
E. SEGMENT (PROCESS/FUEL) INFORMATION
(All Emissions Units)

Segment Description and Rate: Segment 3 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Natural Gas firing		
2. Source Classification Code (SCC): 1-01-006-01		3. SCC Units: Million cubic feet burned (all gaseous fuels)
4. Maximum Hourly Rate: 1.80	5. Maximum Annual Rate: 15,777.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 950
10. Segment Comment (limit to 200 characters): Fired during stratup, shutdown and load changes. No more than 50% rated boiler heat input.		

Segment Description and Rate: Segment 4 of 4

1. Segment Description (Process/Fuel Type) (limit to 500 characters): Propane (LPG) Firing		
2. Source Classification Code (SCC): 1-01-010-02		3. SCC Units: Thousands Gallons Burned (all liquid fuels)
4. Maximum Hourly Rate: 18.90	5. Maximum Annual Rate: 165,617.00	6. Estimated Annual Activity Factor: 0.00
7. Maximum % Sulfur:	8. Maximum % Ash:	9. Million Btu per SCC Unit: 90
10. Segment Comment (limit to 200 characters): Burned during startup, shutdown and load changes. No more than 50% rated boiler heat input.		



DOCUMENT ID 2
 INDIANTOWN COGENERATION, L.P. SITE PLAN
 BASED ON BECHTEL DRAWING COA 0011

Appendix III

Supporting Calculations and Emission Data

Indiantown Cogeneration Facility
 Review of PSD Applicability

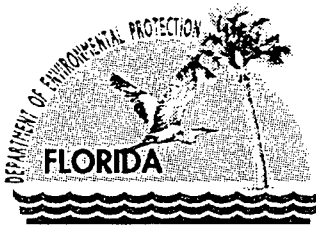
future potential versus current actual (1997 and 1998 annual emissions)

Pollutant	Permit Limits			Emissions			Comparison		Significant Emission Rates	
	Max. Emissions lb/MMBtu	Emission Limitation lb/hr	tpy	1998 tpy	1997 tpy	future PTE to 1998 tpy	future PTE to 1997 tpy	future PTE to ave actual tpy	PSD tpy	PSD needed?
Sulfur Dioxide	0.142 *	582	2549	1436.4	1385.94	1112.6	1163.06	1137.83	40	YES
Nitrogen Oxide	0.125 *	512.5	2245	1992	1959.01	252.75	285.74	269.245	40	YES
Particulate Matter	0.015	61.6	270	81.77	89.07	188.23	180.93	184.58	25	YES
PM10	0.015	61.6	270	81.77	89.07	188.23	180.93	184.58	15	YES
Carbon Monoxide	0.092	376	1649	89.94	97.98	1559.06	1551.02	1555.04	100	YES
Volatile Organic Compounds	0.0030	12.32	54	0	0	54	54	54	40	YES
Sulfuric Acid Mist	0.00035	1.45	6.51	0.5711	0.6235	5.9389	5.8865	5.9127	7	no
Beryllium	0.0000023	0.0094	0.041	0.0007132	0.000787	0.0402868	0.040213	0.0402499	0	YES
Mercury	0.000010	0.039	0.17	0.010203	0.01122	0.159797	0.15878	0.1592885	0.1	YES
Lead	0.000016	0.064	0.28	0.020406	0.02405	0.259594	0.25595	0.257772	0.6	no
Fluorides	0.000744		13.4	1.06027	1.16	12.300482	12.200752	12.250617	3	YES
Arsenic	0.000044	0.18	0.77	0.010203	0.01139	0.759797	0.75861	0.7592035	0	YES

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Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

May 16, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen Sorrentino, General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, FL 34956

Re: Request for Additional Information dated January 31, 2000
DEP File No. PA 90-31 (PSD-FL-168)

Dear Mr. Sorrentino:

On January 31, 2000 the Department requested additional information concerning your application to amend portions of the PSD permit for the subject facility. Subsequent to that request, the Department received a request from Earth Tech dated March 13, 2000 to process a portion of the application. In accordance with the latter request, the PSD permit modification was processed to allow for the installation of a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers. A final PSD permit modification for this portion of the original application was issued on April 20, 2000. However, the remaining portion of the original application, which was not processed, remains incomplete. Please note that per Rule 62-4.055(1): *"The applicant shall have ninety days after the Department mails a timely request for additional information to submit that information to the Department..... Failure of an applicant to provide the timely requested information by the applicable date shall result in denial of the application."* Furthermore, Rule 62-4.050(3), F.A.C. requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Should you wish to pursue this portion of your original application, the Department requires that you respond to the sufficiency request as soon as possible or that portion of the application will be denied.

If you have any questions, please contact Michael P. Halpin at 850/921-9530. Matters regarding review of the modeling should be directed to Cleve Holladay (meteorologist) at 850/921-8986.

Sincerely,

A.A. Linero, P.E. Administrator
New Source Review Section

AAL/mph

cc: Gregg Worley, EPA
Mr. John Bunyak, NPS
Isidore Goldman, DEP-SED
A. J. Jablonski, Earth Tech
Hamilton S. Oven, DEP-Siting
David S. Dee, Landers & Parsons

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Special Delivery Fee		
Restricted Delivery Fee		
Return Receipt Showing to Whom & Date Delivered		
Return Receipt Showing to Whom, Date, & Addressee's Address		
TOTAL Postage & Fees		\$
Postmark or Date		5-17-00

PS Form 3800, April 1995

SENDER: COMPLETE THIS SECTION

- Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.
- Print your name and address on the reverse so that we can return the card to you.
- Attach this card to the back of the mailpiece, or on the front if space permits.

1 Article Addressed to:
 Mr. Stephen Sorrentino
 Indiantown Cogen
 PO Box 1799
 Indiantown, FL
 34956

COMPLETE THIS SECTION ON DELIVERY

A. Received by (Please Print Clearly)	B. Date of Delivery
K DANES	5/22/00
C. Signature	<input type="checkbox"/> Agent
x K Danes	<input type="checkbox"/> Addressee
D. Is delivery address different from item 1?	<input type="checkbox"/> Yes
If YES, enter delivery address below:	<input type="checkbox"/> No

3. Service Type

Certified Mail Express Mail

Registered Return Receipt for Merchandise

Insured Mail C.O.D.

4. Restricted Delivery? (Extra Fee) Yes

2 Article Number (Copy from service label)

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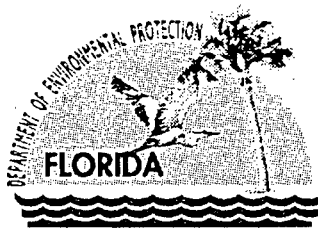
• Sender: Please print your name, address, and ZIP+4 in this box •

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

BUREAU OF AIR REGULATION

MAY 24 2000

RECEIVED



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

May 16, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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Indiantown Cogeneration, L.P.
P.O. Box 1799
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Sincerely,

A.A. Linero, P.E. Administrator
New Source Review Section

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A. J. Jablonski, Earth Tech
Hamilton S. Oven, DEP-Siting
David S. Deé, Landers & Parsons

"More Protection, Less Process"

26109/l-halpin.doc

March 13, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED
MAR 15 2000
BUREAU OF AIR REGULATION

Subject: Indiantown Cogeneration, L.P. Air Permit Modifications
Permit No.: PSD-FL-168, 0850102-001-AV

Dear Mr. Halpin:

On behalf of Indiantown Cogeneration, L.P., I am writing to request that you to proceed with review and permitting of the proposed CO₂ recovery plant and that you hold review of the proposed MW increase in abeyance.

We understand through your conversations with us and with David Dee of Landers and Parsons that the submittal regarding the CO₂ plant is sufficient, so FDEP can proceed with it, but the submittal regarding the MW increase is not sufficient and will delay everything else, unless the MW issues are set aside for now. Please do set aside the MW increase issues for now; we do not wish to delay other portions of the submittals.

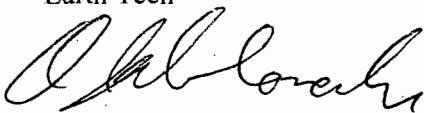
ICLP is conducting an internal review of the feasibility of the proposed MW increase. Depending on the results of that review, we will supply you with further information to continue your review of that portion of the project.

We also ask that the review and approval process continue for the other air quality portions of the proposed Modification and the proposed Amendments.

Thank you for your time and consideration. If you have any questions or comments, please feel free to contact me at 978-371-4339, David Burrage of ICLP at 561-597-6500 extension 19, or David Dee of Landers and Parsons at 850-681-0311.

Very truly yours,

Earth Tech



Andrew Jablonowski, P.E.
Senior Engineer

cc: D. Burrage, S. Sorrentino, D. Bullock, Indiantown Cogeneration LP
Michelle Golden, PG&E Generating
David Dee, Landers & Parsons

Telephone:

978.371.4000

Facsimile:

978.371.2468

EARTH TECH



26109/1-halpin.doc

June 7, 2000

Mr. Michael Halpin
Florida Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

RECEIVED

JUN 08 2000

BUREAU OF AIR REGULATION

**Subject: Indiantown Cogeneration, L.P. Air Permit Modifications
Permit No.: PSD-FL-168, 0850102-001-AV**

Dear Mr. Halpin:

This letter follows up on my March 13 letter regarding the Indiantown Cogeneration, L.P. proposed MW increase. In that correspondence, we requested that you set aside review of the MW increase, and stated that ICLP is conducting an internal review of the feasibility of the proposed MW increase.

Telephone

978.371.4000

Facsimile

978.371.2468

Through that internal feasibility review, ICLP has concluded that the feasibility of the MW increase project hinges largely on the permit conditions that would result from the BACT analysis. Permit limits and averaging times that are too stringent could easily eliminate all incentive to move forward with the project.

To avoid unnecessary effort by both the applicant and the Department, we are requesting your input regarding what emission rates are likely to be considered BACT. We have provided preliminary proposed emission rates and averaging times, and documentation to assert that these levels represent BACT. We ask that you review this information and provide an informal opinion regarding the acceptability of the proposed permit conditions. This will help us determine if it is worthwhile to continue with the formal permitting process.

Benefits of Proposed Project

ICLP proposes to increase the megawatt output from the PC boiler without increasing the emission rates allowed. The result is an additional 50 megawatts of much-needed power essentially free of new environmental impact.

ICLP is proposing no net increase in potential emissions. Since the firing rate is being increased to allow greater megawatt output, the equivalent lb/MMBtu emission rates will be reduced for each air pollutant. There are some specific pollutants where current BACT rates would dictate additional rate-based limits; these pollutants are discussed specifically below.



A tyco INTERNATIONAL LTD. COMPANY

Averaging Times

ICLP is a very clean facility that operates in compliance with its permitted emission limits with only extremely rare cases of deviation. Facility operators are comfortable with meeting the emission limits even when firing at increased megawatts.

Due to the complexity of the PC boiler and its associated control equipment, the unit experiences brief fluctuations in control efficiency. These can be due to transient conditions in the boiler or to minor malfunctions that are quickly addressed.

Per your letter of January 27, 2000, we understand that it is appropriate for new emission limits to be expressed as both a mass limit (lb/hr) and a rate limit (lb/MMBtu). We also understand that the goal of the emission limits is two-fold: emission limits exist to prevent short term, acute environmental hazards, and to minimize the long term effect on the environment. We respectfully request that any new permit contain language that allows the flexibility to handle short-term fluctuations (without violating any short-term air quality standard), and keep emissions to a minimum over the long term.

Compliance Methods

ICLP proposes to use the same compliance methods currently listed in its permits for compliance with the new emission limits (CEMS for NO_x and SO₂, annual testing for NO_x, SO₂, and PM₁₀, testing every 5 years for the above plus VOC, Be, Hg, Pb, F, As). In addition, ICLP would accept an annual stack testing requirement for CO and ammonia.

NO_x

We propose a NO_x mass emission limit of 582 lb/hr, 24-hour block average, and a rate limit of 0.17 lb/MMBtu on a 30-day rolling average basis. A 30-day rolling average basis is appropriate for two reasons: there is no short-term ambient air quality standard which would necessitate a shorter averaging time, and the 30-day rolling average would correspond with the NSPS averaging time for compliance with the 0.6 lb/MMBtu standard under 40 CFR 60.44a. Tracking with a single averaging time for both the NSPS and the PSD rate limits would greatly simplify CEMS data handling and administrative requirements.

The equivalent rate limit to the proposed mass limit is 0.142 lb/MMBtu. Achieving this level will require additional ammonia use, and more frequent catalyst change-out. Currently, ICLP expects to meet the proposed limit with the existing equipment.

Recent Florida approvals include the revised permit for Cedar Bay and Stanton II. The Cedar Bay approval is for 0.17 lb/MMBtu on a 30-day rolling average basis. The Stanton II approval is for 0.17 lb/MMBtu on a 30-day rolling average basis. The proposed ICLP mass emission limit corresponds to a rate limit lower than the limit for Cedar Bay or Stanton II.

A review of the EPA RACT/BACT/LAER database (April 2000) shows that:

- All facilities with lb/MMBtu emission limits lower than proposed for this project are fluidized bed boilers, or very small units (<20 MMBtu/hr). They are therefore not directly applicable to this project.
- The following are the five most recent determinations for similarly sized boilers that are not fluidized-bed boilers:

DESERET GENERATION AND TRANSMISSION CO, UTAH, 3/98, 500 MW COAL FIRED BOILER	0.55 lb/MMBtu (Boiler Design) – BACT
TWO ELK GENERATION PARTNERS, LP, WYOMING, 2/98, 250 MW BOILER	0.15 LB/MMBtu (SCR) – BACT
ENCOAL CORP NORTH ROCHELLE, WYOMING, 10/97, 240 MW PC COAL BOILER	0.15 LB/MMBtu (SCR) – BACT
ENCOAL CORP NORTH ROCHELLE, WYOMING, 10/97, 3960 MMBTU/HR COAL BOILER	0.16 LB/MMBtu (Flue Gas Recirc.) – BACT
WYGEN, INC., WYOMING, 9/96, 80 MW PC COAL BOILER	0.22 LB/MMBtu (Overfire Air) – BACT

Recent data entries for similar projects show that the ICLP proposed emission levels are equivalent to or better than the emission rates recently approved for similar projects. A spreadsheet showing the recent coal-fired boiler Clearinghouse entries is attached. The entries that are not for fluidized bed boilers or boilers smaller than 100 MMBtu/hr are shown in bold.

The new 40 CFR 60 Subpart Da requirements do not apply to Indiantown, because this proposed modification does not meet the definition of “modification or reconstruction commenced after July 9, 1997.” A modification is defined as “any physical change in, or change in the method of operation of, an existing facility which increases the amount of any air pollutant (to which a standard applies) emitted into the atmosphere by that facility...” We are not proposing to increase emissions of any air pollutant, so we are not proposing a modification under the New Source Performance Standard definition.

SO₂

We propose an SO₂ mass emission limit of 582 lb/hr, 24-hour block average. We further propose a 30-day rolling average limit of 0.25 lb/MMBtu, to ensure consistent good operation over the long term.

We are not proposing a short term (3-hour) SO₂ rate limit. Instead, we will document that the existing 24-hour mass limit will prevent the 3-hour ambient air quality standard from being exceeded. We will do this by modeling a condition where all 24 hours' worth of allowable SO₂ emissions are exhausted in a single 3-hour period. This would be equivalent to an emission rate of about 1.15 lb/MMBtu for the 3-hour period. Through this modeling documentation, we can show that air quality is protected without complicating our permit conditions unnecessarily.

The facility's most stringent emission limit will continue to be the mass emission limit. This is appropriate because it provides for minimized overall emissions while allowing for the logistics of operating a spray dryer absorber SO₂ control system. The spray dryer absorber works admirably at removing SO₂ at steady state operation. However, control of the spray dryer absorber operation is "sluggish." It is slow to respond to changes in load, coal quality, or limestone quality. Also, the spray dryer absorber system is complicated enough such that minor problems such as plugged lines are unavoidable. Through careful operation, ICLP operators can compensate for short-term fluctuations and provide excellent sulfur control over the long term. If the facility needed to meet a tight short-term limit, operation would be plagued by unnecessary unit trips or by frequent permit exceedances that are not indicative of a real risk to health or the environment.

The equivalent rate limit to the proposed mass limit is 0.142 lb/MMBtu. Achieving this level will require additional lime use, and more frequent spray dryer absorber system maintenance and parts replacement. We do not expect any system modifications to be required.

Comparing this equivalent rate emission limit to recent BACT determinations, the proposed ICLP emission rate can be considered BACT. The recent Cedar Bay approval is for 0.3 lb/MMBtu on a 3-hour rolling average basis, and 0.2 lb/MMBtu on a 30-day rolling average basis. The recent Stanton II approval is for 0.85 lb/MMBtu on a 3-hour basis, 0.67 lb/MMBtu on a 24-hour basis, and 0.25 lb/MMBtu on a 30-day rolling average basis. The proposed ICLP mass emission limit is much lower than the most restrictive limit for Cedar Bay or Stanton II.

A review of the EPA RACT/BACT/LAER database (April 2000) shows that:

- Emission rates for SO₂ vary widely, between 0.0976 lb/MMBtu (Deseret Generation, UT) and 1.2 lb/MMBtu (several facilities). Emission limits lower than 0.142 lb/MMBtu are all for facilities that have much higher NO_x emission rates, are markedly smaller than ICLP, or are fluidized-bed systems. These projects are shown below:

DESERET GENERATION AND TRANSMISSION CO, UTAH, 3/98, 500 MW COAL FIRED BOILER	0.0976 lb/MMBtu (Wet Scrubber) – BACT	Facility has a NO _x limit almost four times that proposed for ICLP
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OLD DOMINION ELECTRIC COOPERATIVE, VIRGINIA, 4/91, 4085 MMBTU/HR BOILER	0.1 LB/MMBtu (FGD, 1-1.3% S COAL) – BACT	Facility has a NOx limit over twice that proposed for ICLP
NORTHAMPTON GENERATING COMPANY, PA, 4/95, 1146 MMBTU/HR CFB	0.129 LB/MMBtu (Lime Injection) – BACT	Fluidized Bed Boiler
COGENTRIX OF DINWIDDIE, VA, 4/92, 375 MMBTU/HR STOKER-FIRED BOILER	0.13 LB/MMBtu (SDA) – BACT	Boilers about 1/10 the size of ICLP
COGENTRIX OF RICHMOND, VA, 1/91, 375 MMBTU/HR STOKER-FIRED BOILER	0.13 LB/MMBtu (SDA) – BACT	Boilers about 1/10 the size of ICLP

A spreadsheet showing the recent coal-fired boiler Clearinghouse entries is attached.

CO

We propose a CO mass emission limit of 376 lb/hr, 24-hour block average, and a rate limit of 0.2 lb/MMBtu on an 8-hour rolling average basis. A 8-hour rolling average basis is appropriate because there is an 8-hour ambient air quality standard. Through the formal application process, we would document that compliance with the proposed rate limit would ensure maintenance of the 8-hour and the 1-hour air quality standards. In practice, ICLP would comply with the lb/MMBtu standard based on 1-hour average stack testing.

Again, the more stringent emission limit will continue to be the mass emission limit. This is appropriate because it provides for minimized overall emissions while allowing for the fact that it is very difficult to meet a rate emission limit at low loads, and during load shifts.

The equivalent rate limit to the proposed mass limit is 0.092 lb/MMBtu. This is lower than every listed lb/MMBtu emission rate in the EPA RACT/BACT/LAER database, with the exception of the Energy New Bedford Cogeneration Facility in Massachusetts. This facility was never built. A spreadsheet showing the recent coal-fired boiler Clearinghouse entries is attached.

Recent Florida approvals include the revised permit for Cedar Bay and Stanton II. The recent Cedar Bay approval is for 0.175 lb/MMBtu on an eight-hour rolling average basis, and 186 lb/hr/boiler (0.17 lb/MMBtu equivalent) on an eight-hour rolling average basis. The

Mr. Michael Halpin
FDEP
June 7, 2000

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recent Stanton II approval is for 0.15 lb/MMBtu. The proposed ICLP mass emission limit is much lower than the most restrictive limit for Cedar Bay or Stanton II.

Other Pollutants

In the event that the project moves forward, we will provide a complete BACT analysis addressing other criteria and non-criteria pollutants in more detail. Based on our prior discussions, we do not expect the results of the BACT review for these pollutants to prevent the project from moving forward.

Use of Synfuel

On March 8, 2000, we spoke briefly about the possibility of combustion of "Synfuel" at ICLP. ICLP is interested in pursuing the combustion of Synfuel as part of this PSD modification. The combustion of Synfuel would not involve any changes to the boiler or to its operation, but it would involve the installation of some new material handling and processing equipment onsite. To permit Synfuel use, we would expect to provide you with:

- Thorough description of the process, especially changes to physical equipment
- Complete chemical analysis
- Professional Engineer-certified stoichiometric calculation of emissions and comparison to current permitted emissions

We expect that emissions of all pollutants will be maintained within the current permitted emission rates while combusting Synfuel. Nevertheless, we expect to request a test burn to ensure that the boiler does not experience any unforeseen operational problems combusting Synfuel.

Thank you for your time and consideration. We look forward to discussing the merits of this proposed project with you further. If you have any questions or comments, please feel free to contact me at 978-371-4339, or David Burrage of ICLP at 561-597-6500.

Very truly yours,

Earth Tech



Andrew Jablonowski, P.E.
Senior Engineer

cc: D. Burrage, S. Sorrentino, D. Bullock, Indiantown Cogeneration LP
David Dee, Landers & Parsons

cc: EPA
NPS
SED
B. O'Brien, PPS



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RACT/BACT/LAER CLEARINGHOUSE SUMMARY - NOx

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUNT	PRIMEI	PRIMEUNIT	CTRLDESC	BASIS
IL-0060	ARCHER DANIELS MIDLAND COMPANY	DECATUR	12/24/1998	BOILER (9&10), FLUIDIZED BED	1500	MMBTU/H	0.12	LB/MMBTU	SNCR APPLIED TO CIRCULATING FLUIDIZED BED BOILER	BACT-PSD
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, COAL FIRED, CIRCUL. FLUIDIZED BED, #5	1500	MMBTU/H	0.07	LB/MMBTU 30 D ROLLIN	SNCR	BACT-PSD
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, COAL FIRED, CFB, ATMOSPHERIC, #6	1500	MMBTU/H	0.07	LB/MMBTU (30 D ROLL)	SNCR	BACT-PSD
IA-0051	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, CIRCULATING FLUIDIZED BED, COAL FIRED	1500	MMBTU/H	0.07	LB/MMBTU (30 D ROLL)	SNCR	BACT-PSD
UT-0053	DESERET GENERATION AND TRANSMISSION COMPANY		03/16/1998	COAL FIRED BOILER	500	MW	0.55	LB/MMBTU 30-DAY AVG	BOILER DESIGN	BACT-PSD
WY-0039	TWO ELK GENERATION PARTNERS, LIMITED PARTNERSHIP	15 MILES SE OF WRIGHT	02/27/1998	BOILER, STEAM ELECTRIC POWER GENERATING	250	MW	0.15	LB/MMBTU (30D ROLL)	LOW NOX BURNERS WITH OVER FIRE AIR AND SELECTIVE CATALYTIC REDUCTION	BACT-PSD
WY-0047	ENCOAL CORPORATION-ENCOAL NORTH ROCHELLE FACILITY	15 MILES SOUTHEAST OF WRIGHT	10/10/1997	BOILER, PULVERIZED COAL FIRED POWER GENERATION UNI	240	MW	0.15	LB/MMBTU	LOW NOX BURNERS ITH OVERFIRE AIR AND SELECTIVE CATALYTIC REDUCTION	BACT-PSD
WY-0047	ENCOAL CORPORATION-ENCOAL NORTH ROCHELLE FACILITY	15 MILES SOUTHEAST OF WRIGHT	10/10/1997	BOILER, COAL FIRED, MAIN STACK	3960	MMBTU/H	0.16	LB/MMBTU	LOW NOX BURNERS WITH FLUE GAS RECIRCULATION.	BACT-PSD
OH-0231	TOLEDO EDISON CO. - BAYSHORE PLANT	OREGON	06/20/1997	BOILER, CFB, COKE/COAL-FIRED	1764	MMBTU/HR	0.2	LB/MMBTU	LIMESTONE FLUIDIZED BED	NSPS
WY-0048	WYGEN, INC. - WYGEN UNIT ONE	5 MILES EAST OF GILLETTE	09/06/1996	BOILER, PULVERIZED COAL FIRED, STEAM ELECTRIC POWE	80	MW	0.22	LB/MMBTU(3 0DAY ROLLN	LOW NOX BURNERS AND OVERFIRE AIR	BACT-PSD
PA-0133	MON VALLEY ENERGY LIMITED PARTNERSHIP	POLAND MINES	08/08/1995	PULVERIZED COAL FIRED BOILER	966	MMBTU/HR	0.15	LB/MMBTU	SCR WITH LNB	BACT-PSD
PA-0132	YORK COUNTY ENERGY PARTNERS	SPRING GROVE	07/25/1995	BITUMINOUS COAL FIRED CFB BOILER	2500	MMBTU/HR	0.125	LB/MMBTU	SNCR	LAER
PA-0123	WEST PENN POWER COMPANY	MONOGAHELA	06/12/1995	BOILER, PULVERIZED COAL, DRY BOTTOM	2460	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0112	PENNSYLVANIA POWER AND LIGHT COMPANY	HOLTWOOD	05/25/1995	BOILER, COAL/COKE, DRY BOTTOM	923	MMBTU/HR	1.4	LB/MMBTU	O/M ACCORDING TO MFG. SPEC.	RACT
PA-0134	NORTHAMPTON GENERATING CO.	NORTHAMPTON	04/14/1995	CFB BOILER	1146	MMBTU/HR	0.1	LB/MMBTU	THERMO DENOX	BACT-PSD
PA-0129	METROPOLITAN EDISON COMPANY	READING	03/09/1995	BOILERS, PULVERIZED COAL, DRY BOTTOM (3)	801.4	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH CCOFA AND SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0115	PENNSYLVANIA ELECTRIC COMPANY	SHELOCTA	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	8010	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0115	PENNSYLVANIA ELECTRIC COMPANY	SHELOCTA	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	8010	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0126	PENNSYLVANIA ELECTRIC COMPANY	NEW FLORENCE	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	7876	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0126	PENNSYLVANIA ELECTRIC COMPANY	NEW FLORENCE	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	7876	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0125	WEST PENN POWER COMPANY	KITTENNING	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	1600	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS IFS MANUFACTURER: FOSTER WHEELER	RACT
PA-0125	WEST PENN POWER COMPANY	KITTENNING	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	1600	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS IFS MANUFACTURER: FW	RACT
PA-0109	ZINC CORPORATION OF AMERICA	MONACA	12/29/1994	BOILERS, PULVERIZED COAL (2)	600	MMBTU/HR	0.45	LB/MMBTU	MODIFICATIONS TO INCORPORATE BIAS-FIRING TECHNOLOGY - AUTOMATED AIR CONTROLLERS	RACT
PA-0117	DUQUESNE LIGHT COMPANY	ELRAMA	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	1100	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA (PROPRIETARY) MANUFACTURER: ENERGY SYSTEMS ASSOC./DUQUESNE LIGHTCO.	RACT
PA-0117	DUQUESNE LIGHT COMPANY	ELRAMA	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	1100	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA (PROPRIETARY) MANUFACTURER: ESA/DUQUESNE LIGHT CO.	RACT
PA-0117	DUQUESNE LIGHT COMPANY	ELRAMA	12/29/1994	BOILER #3, PULVERIZED COAL, DRY BOTTOM	1200	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA (PROPRIETARY) MANUFACTURER: ESA/DUQUESNE LIGHT CO.	RACT
PA-0117	DUQUESNE LIGHT COMPANY	ELRAMA	12/29/1994	BOILER #4, PULVERIZED COAL, DRY BOTTOM	1790	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA (PROPRIETARY) MANUFACTURER: ESA/DUQUESNE LIGHT CO.	RACT
PA-0119	PENNSYLVANIA ELECTRIC COMPANY	HOMER CITY	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	6792	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA IFS (INTERNALLY FUEL STAGED) MANUFACTURER: FOSTER WHEELER	RACT
PA-0119	PENNSYLVANIA ELECTRIC COMPANY	HOMER CITY	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	6792	MMBTU/HR	-0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA IFS MANUFACTURER: FOSTER WHEELER	RACT
PA-0119	PENNSYLVANIA ELECTRIC COMPANY	HOMER CITY	12/29/1994	BOILER #3, PULVERIZED COAL, DRY BOTTOM	6600	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA	RACT

RACT/BACT/LAER CLEARINGHOUSE SUMMARY - NOx

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUNT	PRIMEI	PRIMEUNIT	CTRLDESC	BASIS
PA-0105	PENNSYLVANIA POWER COMPANY	SHIPPINGPORT	12/29/1994	BOILER #1&2, FW PULV. BIT COAL DRY BOT. WALL-FIRED	7914	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SEPARATE OVERFIRED AIR BABCOCK & WILCOX DRB-XCL (UNITS 1 AND 2) \$37.4 MILLION CAP COST FOR BOTH UNITS COMBINED	RACT
PA-0105	PENNSYLVANIA POWER COMPANY	SHIPPINGPORT	12/29/1994	BOILER #3, FW PULV. BIT COAL DRY BOT. WALL-FIRED	7914	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SEPARATE OVERFIRED AIR ENERGY AND ENVIRONMENTAL RESEARCH CORP. (UNIT 3) PREVIOUSLY HAD LNB, INSTALLING SOFA	RACT
PA-0116	WEST PENN POWER COMPANY	MASONTOWN	12/29/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	5036	MMBTU/HR	0.58	LB/MMBTU	LOW NOX CELL BURNERS WITH SOFA, S-TYPE BURNERS MANUFACTURER: BABCOCK & WILCOX	RACT
PA-0116	WEST PENN POWER COMPANY	MASONTOWN	12/29/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	5036	MMBTU/HR	0.58	LB/MMBTU	LOW NOX CELL BURNERS WITH SOFA, S-TYPE BURNER MANUFACTURER: B&W	RACT
PA-0116	WEST PENN POWER COMPANY	MASONTOWN	12/29/1994	BOILER #3, PULVERIZED COAL, DRY BOTTOM	5036	MMBTU/HR	0.58	LB/MMBTU	LOW NOX CELL BURNERS WITH SOFA, S-TYPE BURNER MANUFACTURER: B&W	RACT
PA-0108	PECO ENERGY CO.	EDDYSTONE	12/28/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	2704	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH CCOFA AND SOFA LNCFS LEVEL III - INTERNATIONAL COMBUSTION LIMITED (ICL)	RACT
PA-0108	PECO ENERGY CO.	EDDYSTONE	12/28/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	2808	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH CCOFA AND SOFA LNCFS III	RACT
PA-0142	P.H. GLATFELTER	SPRING GROVE	12/28/1994	BITUMINOUS COAL-FIRED-DRY BOTTOM BOILER	357	MMBTU/HR	0.51	LB/MMBTU	RETROFITTED WITH FISHER COMPANY LOW NOX BURNER WITH SEPARATED OVERFIRE AIR	RACT
PA-0142	P.H. GLATFELTER	SPRING GROVE	12/28/1994	BITUMINOUS COAL-FIRED-DRY BOTTOM BOILER	257	MMBTU/HR	0.74	LB/MMBTU	RETROFITTED WITH FISHER COMPANY LOW NOX BURNERS WITH SEPARATED OVERFIRE AIR	RACT
PA-0124	WESTWOOD ENERGY PROPERTIES, INC.	TREMONT	12/27/1994	BOILER, COAL, CIRCULATING FLUIDIZED BED	423	MMBTU/HR	0.3	LB/MMBTU	REDUCTION IN PERMITTED BASELINE	RACT
PA-0111	PENNSYLVANIA ELECTRIC COMPANY	SHAWVILLE	12/27/1994	BOILERS 3 & 4, PULVERIZED COAL, DRY BOT.	1790	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0111	PENNSYLVANIA ELECTRIC COMPANY	SHAWVILLE	12/27/1994	BOILERS 1 & 2, PULVERIZED COAL, DRY BOT.	1345	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS MODEL DRB-XCL BABCOCK AND WILCOX	RACT
PA-0113	PENNSYLVANIA POWER AND LIGHT COMPANY	SHAMOKIN DAM	12/27/1994	BOILER, COAL/COKE, DRY BOTTOM	1277	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA MODEL #4A CCV/FLARE BURNER MODEL 90 MANUFACTURER: RILEY STOKER CORP.	RACT
PA-0113	PENNSYLVANIA POWER AND LIGHT COMPANY	SHAMOKIN DAM	12/27/1994	BOILER, COAL/COKE, DRY BOTTOM	1415	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA MODEL #5 CCV/FLARE BURNER MODEL 90 MANUFACTURER: RILEY STOKER CORP.	RACT
PA-0101	INTERNATIONAL PAPER CO. HAMMERMILL PAPERS DIV	LOCK HAVEN	12/27/1994	BOILER, RILEY BIT. COAL-FIRED STOKER UNITS 1 & 2	350	MMBTU/H EACH	0.7	LB/MMBTU	ANNUAL TUNE-UP	RACT
PA-0128	PENNSYLVANIA POWER AND LIGHT COMPANY	YORK HAVEN	12/22/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	3345	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0128	PENNSYLVANIA POWER AND LIGHT COMPANY	YORK HAVEN	12/22/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	3790	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0128	PENNSYLVANIA POWER AND LIGHT COMPANY	YORK HAVEN	12/22/1994	BOILER #3, PULVERIZED COAL, DRY BOTTOM	7329	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS WITH SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0143	GENERAL ELECTRIC TRANSPORTATION SYSTEM	ERIE	12/21/1994	STOKER COAL-FIRED BOILER	226	MMBTU/HR	0.59	LB/MMBTU	NONE	RACT
PA-0143	GENERAL ELECTRIC TRANSPORTATION SYSTEM	ERIE	12/21/1994	STOKER COAL-FIRED BOILER	152	MMBTU/HR	0.59	LB/MMBTU	NONE	RACT
PA-0143	GENERAL ELECTRIC TRANSPORTATION SYSTEM	ERIE	12/21/1994	STOKER COAL-FIRED BOILER	249	MMBTU/HR	0.59	LB/MMBTU	NONE	RACT
PA-0127	PENNSYLVANIA POWER COMPANY	NEW CASTLE	12/21/1994	BOILER #4, PULVERIZED COAL, DRY BOTTOM	1029	MMBTU/HR	0.72	LB/MMBTU	EMISSION CAP TAKEN; LIMIT HOURS OF OPERATION	RACT
PA-0127	PENNSYLVANIA POWER COMPANY	NEW CASTLE	12/21/1994	BOILER #3, PULVERIZED COAL, DRY BOTTOM	1029	MMBTU/HR	0.79	LB/MMBTU	EMISSION CAP TAKEN; LIMIT HOURS OF OPERATION	RACT
PA-0127	PENNSYLVANIA POWER COMPANY	NEW CASTLE	12/21/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	640	MMBTU/HR	0.9	LB/MMBTU	SHUT-DOWN IN 1993	RACT
PA-0127	PENNSYLVANIA POWER COMPANY	NEW CASTLE	12/21/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	495	MMBTU/HR	0.93	LB/MMBTU	SHUT-DOWN IN 1993	RACT
PA-0143	GENERAL ELECTRIC TRANSPORTATION SYSTEM	ERIE	12/21/1994	CYCLONE COAL-FIRED BOILER	420	MMBTU/HR	1.01	LB/MMBTU	THIS BOILER WON'T OPERATE DURING THE OZONE SEASON MONTHS OF JUNE THROUGH OCTOBER EACH YEAR	RACT
PA-0127	PENNSYLVANIA POWER COMPANY	NEW CASTLE	12/21/1994	BOILER #5, PULVERIZED COAL, DRY BOTTOM	1325	MMBTU/HR	1.01	LB/MMBTU	EMISSION CAP TAKEN; LIMIT HOURS OF OPERATION	RACT
PA-0110	GILBERTON POWER COMPANY	FRACKVILLE	12/20/1994	BOILER, COAL, CIRCULATING FLUIDIZED BED	520	MMBTU/HR	0.3	LB/MMBTU	REDUCTION IN PERMITTED BASELINE TAKEN	RACT
PA-0121	METROPOLITAN EDISON COMPANY	PORTLAND	12/14/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	1464	MMBTU/HR	0.37	LB/MMBTU	LOW NOX BURNERS WITH CCOFA AND SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT

RACT/BACT/LAER CLEARINGHOUSE SUMMARY - NOx

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUNT	PRIMEI	PRIMEUNIT	CTRLDESC	BASIS
PA-0121	METROPOLITAN EDISON COMPANY	PORTLAND	12/14/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	2342	MMBTU/HR	0.43	LB/MMBTU	LOW NOX BURNERS WITH CCOFA AND SOFA LNCFS LEVEL III MANUFACTURER: ABB-CE	RACT
PA-0114	PENNSYLVANIA POWER AND LIGHT COMPANY	MARTINS CREEK	12/14/1994	BOILER #1, PULVERIZED COAL, DRY BOTTOM	1727	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA MODEL #6 CCV/FLARE BURNERS MODEL 90 MANUFACTURER: RILEY STOKER CORP.	RACT
PA-0114	PENNSYLVANIA POWER AND LIGHT COMPANY	MARTINS CREEK	12/14/1994	BOILER #2, PULVERIZED COAL, DRY BOTTOM	1727	MMBTU/HR	0.5	LB/MMBTU	LOW NOX BURNERS WITH SOFA MODEL #6 CCV/FLARE BURNER MODEL 90 MANUFACTURER: RILEY STOKER CORP.	RACT
VA-0225	VPI & STATE UNIVERSITY	BLACKSBURG	12/12/1994	BOILER, COAL	5.54	TONS COAL/HR	75.7	TPY	LOW EXCESS AIR/STAGED COMBUSTION	BACT-OTHER
PA-0100	PENNSYLVANIA POWER AND LIGHT CO.	WASHINGTONVILL	11/27/1994	BOILER, PULVERIZED BIT. COAL FIRED TANG. UNITS 1&2	7100	MMBTU/H EACH	0.5	LB/MMBTU	LOW NOX BURNER WITH SEPARATED OVERFIRED AIR	RACT
IL-0058	ARCHER DANIELS MIDLAND COMPANY	DECATUR	08/11/1994	BOILER (7&8), FLUIDIZED BED	1500	MMBTU/H	0.12	LB/MMBTU	SNCR APPLIED TO CIRCULATING FLUIDIZED BED BOILER	BACT-PSD
MD-0022	AES WARRIOR RUN, INC.	CUMBERLAND	06/03/1994	ATMOSPHERIC CIRCULATING FLUIDIZED BED BOILER	2070	MMBTU/HR	0.1	LB/MMBTU	THERMAL DENOX	BACT-PSD
NY-0070	FORT DRUM HTW COGEN FACILITY CROWN/VISTA ENERGY PROJECT	FORT DRUM	03/01/1994	(3) BUILT UP BOILER	651	MMBTU/HR	0.6	391 LB/HR	NO CONTROLS	BACT-OTHER
NJ-0019	(CVEP)	WEST DEPTFORD	10/01/1993	BOILER, PULVERIZED COAL	0		0.17	LB/MMBTU	LOW NOX BURNERS, SELECTIVE CATALYTIC REDUCTION (SCR)	BACT-PSD
VA-0213	SEI BIRCHWOOD, INC.		08/23/1993	BOILER, PULVERIZED COAL	2200	MMBTU/HR	0.33	LB/HR	SELECTIVE CATALYTIC REDUCTION (SCR)	NSPS
IA-0025	ARCHER DANIELS MIDLAND	CEDAR RAPIDS	08/03/1993	BOILER, FLUIDIZED BED STEAM GENERATOR / CO-G	551.5	MMBTU/HR	0.07	LB/MMBTU 30 DAY AVG.	SELECTIVE NON-CATALYTIC REDUCTION (SNCR)	BACT-PSD
FL-0077	SEMINOLE KRAFT	JACKSONVILLE	07/07/1993	BOILER, COAL	174.7	MMBTU/H	0.2	LB/MMBTU	GOOD COMBUSTION	BACT-PSD
WY-0046	BLACK HILLS POWER AND LIGHT COMPANY-NEIL SIMPSON U	5 MILES EAST OF GILLETTE	04/14/1993	BOILER, PULVERIZED COAL FIRED STEAM ELECTRIC POWER	80	MW	0.23	LB/MMBTU(3) ODAY ROLLI	COMBUSTION CONTROL	BACT-PSD
MI-0228	INDELK ENERGY SERVICES OF OTSEGO		03/16/1993	BOILER (COAL)	778	MMBTU/HR	0.25	LB/MMBTU	SNCR/DRY CONTROL	BACT-OTHER
AK-0024	GOLDEN VALLEY ELECTRIC ASSOCIATION - HEALY	FAIRBANKS	03/10/1993	COMBUSTION, ENTRAINED SYSTEM	50	MW	0.35	LB/MMBTU	ENTRAINED COMBUSTOR	BACT-PSD
NC-0057	ROANOKE VALLEY PROJECT II	WELDON TOWNSHI	11/20/1992	BOILER, PULVERIZED COAL-FIRED	517	MMBTU/HR	0.17	LB/MMBTU	LOW NOX, AOF, SNCR	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 1	385	MEGAWATTS	0.32	LB/MMBTU	LOW NOX BURNERS WITH OVERFIRE AIR	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 2	385	MEGA WATTS	0.32	LB/MMBTU	LOW NOX BURNERS WITH OVERFIRE AIR	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 3	385	MEGAWATTS	0.32	LB/MMBTU	LOW NOX BURNERS WITH OVERFIRE AIR	BACT-PSD
VA-0185	COGENTRIX OF DINWIDDIE		04/16/1992	BOILERS, STOKER-FIRED COAL, 8	375	MMBTU/ H EACH	0.25	LB/MMBTU	SCR	BACT-PSD
FL-0044	ORLANDO UTILITIES COMMISSION	ORLANDO	12/23/1991	BOILER, PC	4286	MMBTU/H	0.17	LB/MMBTU	SCR, LOW NOX BURNER	BACT-PSD
MA-0012	MAPLE STREET POWERHOUSE UNIT 2	WARE	12/02/1991	BOILER, 30 MW RILEY STOKER (PULVERIZED)	280000	LB STEAM/HR	0.2	LB/MMBTU	NOX OUT PROCESS AND LOW NOX BURNERS	BACT-PSD
NJ-0015	KEYSTONE COGENERATION SYSTEMS, INC.		09/06/1991	BOILER (PULVERIZED COAL)	2116	MMBTU/HR	0.17	LB/MMBTU	SNCR OR SCR	BACT-OTHER
VA-0181	OLD DOMINION ELECTRIC COOPERATIVE	CLOVER	04/29/1991	BOILER, COAL, 2	4085	MMBTU/H	0.3	LB/MMBTU	POLL. MIN. BURNERS, ADV. OVERFIRE AIR	BACT-PSD
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/1991	BOILER, STARTUP NO. 2	19	MMBTU/H	0.1	LB/MMBTU	LOW NOX BURNER	BACT-PSD
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/1991	BOILER, PC	1700	MMBTU/H	0.33	LB/MMBTU	LOW NOX BURNER W/ ADVANCED EXERFIRE AIR	BACT-PSD
VA-0178	COGENTRIX OF RICHMOND	RICHMOND	01/02/1991	BOILER, STOKER, 8	375	MMBTU/H EACH	0.3	LB/MMBTU	SNCR	OTHER
NJ-0014	CHAMBERS COGENERATION LIMITED PARTNERSHIP	CARNEYS POINT	12/26/1990	BOILERS (PULVERIZED-COAL) (2)	1389	MM BTU/HR (EA	0.17	LB/MMBTU	SCR	BACT-OTHER
SC-0028	SANTEE COOPER (S.C. PUBLIC SERVICE AUTHORITY)	MONCK'S CORNER	11/28/1990	BOILER, PULVERIZED COAL FIRED, CROSS UNIT NO. 1	500	MEGAWATTS	0.39	LB/MMBTU	LOW NOX COMBUSTION WITH LOW NOX BURNERS	BACT-PSD
PA-0089	INTER-POWER OF PENNSYLVANIA	PITTSBURGH	11/28/1990	BOILER, POWER, CIRCULATING COAL FIRED FLUIDI	1120	MMBTU/HR	224	LB/ 24 HR ROL. AVG.	UREA/AMMONIA INJECTION SYSTEM	BACT-PSD
VA-0176	HADSON POWER 13	HOPEWELL	08/17/1990	BOILER	30228	LB/H COAL	0.3	LB/MMBTU	CONT. FEED, LOW EXCESS AIR, SNCR, CONTINUOUS EMISSION MONITOR (CEM)	OTHER
PA-0073	MIDATLANTIC ENERGY OF PA, INC.	CLARION	07/23/1990	BOILER, BED, CIRC FLUID	392	MMBTU/H	0.4	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
PA-0072	PANTHER CREEK PARTNERS	NESQUEHONING B	06/08/1990	BOILERS, FLUIDIZED BED, 2	614	MMBTU/H EACH	0.15	LB/MMBTU	SNCR	BACT-PSD
VA-0171	MECKLENBURG COGENERATION LIMITED PARTNERSHIP		05/09/1990	BOILER, PULVERIZED BIT COAL, 4 EA	834.5	MMBTU/H	0.33	LB/MMBTU	LOW NOX BURNERS, ADVANCED OVERFIRE AIR	BACT-PSD
HI-0009	APPLIED ENERGY SERVICES - BARBERS POINT, INC.	EWA BEACH	01/25/1990	BOILER, CFB, 2 EA	2150	MMBTU/H TOTAL	236.5	LB/H	SNCR	BACT-PSD
NY-0078	UDG/GOODYEAR	NIAGARA FALLS	08/10/1989	FLUIDIZED BED COAL BOILER	576.7	MMBTU/HR	0.5	LB/MMBTU	STEAM INJECTION	BACT
CT-0056	A E S THAMES, INC.	MONTVILLE	08/09/1989	BOILER	923	MMBTU/H	0.36	LB/MMBTU	FLUIDIZED BED COMBUSTION	BACT-PSD
CT-0067	A E S THAMES, INC.	MONTVILLE	08/09/1989	BOILER	923	MMBTU/H	0.36	LB/MMBTU	FLUIDIZED BED COMBUSTION	BACT-PSD
MO-0029	UNIVERSITY OF MISSOURI-COLUMBIA	COLUMBIA	08/18/1986	ADDITIONAL BOILER, FOR GENERATING ELECTRICAL POWER	259.5	MMBTU/HR.	0.6	30-DAY AVG	GOOD COMBUSTION	BACT-PSD
MO-0028	SOUTHEAST MISSOURI STATE UNIVERSITY	CAPE GIRARDEAU	08/16/1986	OPERATE AN ADDITIONAL BOILER FOR ELECTRICAL POWER	69.9	MMBTU/HR	0.6	LB/MMBTU		BACT-PSD

RACT/BACT/LAER CLEARINGHOUSE SUMMARY - NOx

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUNT	PRIMEI	PRIMEUNIT	CTRLDESC	BASIS
CA-0372	COGENERATION NATIONAL CORP.		12/13/1985	BOILER, CFB, COAL FIRED, 2 EA	280	MMBTU/H	30	PPM AT 3% O2	SNCR, NH3 INJECTION	LAER
IL-0041	FIRESTONE TIRE & RUBBER	DECATOR	07/01/1985	BOILER	178	MMBTU/H	0.56	LB/MMBTU	DESIGN & OPERATION	BACT-PSD
MA-0009	ENERGY NEW BEDFORD COGENERATION FACILITY	NEW BEDFORD		BOILERS, 300 MW COAL FIRED FLUIDIZED BED	3342	MMBTU/HR	0.15	LB/MMBTU	SELECTIVE NON-CATALYTIC REDUCTION (SNCR)	BACT-PSD
MA-0011	TAUNTON ENERGY CENTER	TAUNTON		BOILER, COAL FIRED CIRCULATING FLUIDIZED BED	1604.4	MMBTU/HR	0.15	LB/MMBTU	AMMONIA OR UREA INJECTION, STAGED COMBUSTION W/SNCR	BACT-PSD
TN-0048	TVA GALLATIN FOSSIL STEAM PLANT	GALLATIN		TANGENTIALLY-FIRED COAL BURNING BOILERS (3)	600	MMBTU/HR	0.45	LB/MMBTU	LOW NOX BURNERS	RACT

RACT BACT LAER CLEARINGHOUSE SUMMARY - SO2

RBLCID	FACILITY	CITY	PERMITDAT	PROCESS	THRUP	THRUPUTUNT	PRIME%	PRIMEUNIT	CTRLDESC
IL-0060	ARCHER DANIELS MIDLAND COMPANY	DECATUR	12/24/98	BOILER (9&10), FLUIDIZED BED	1500	MMBTU/H	0.7	LB/MMBTU	LIMESTONE INJECTION INTO FLUIDIZED BED, FOLLOWED BY FABRIC FILTER PM CONTROL.
AL-0124	SIMCALA INC	MT. MEIGS	08/18/98	FURNACE, ELECTRIC ARC SILICON	20	MW	0.8	% S	LIMIT COAL SULFUR CONTENT
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/98	BOILER, COAL FIRED, CIRCUL. FLUIDIZED BED, #5	1500	MMBTU/H	0.36	LB/MMBTU 30 D ROLLIN	LIMESTONE INJECTION IN CIRCULATING FLUIDIZED BED.
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/98	BOILER, COAL FIRED, CFB, ATMOSPHERIC, #6	1500	MMBTU/H	0.36	LB/MMBTU (30 D ROLL)	LIMESTONE INJECTION IN CIRCULATING FLUIDIZED BED (CFB).
IA-0051	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/98	BOILER, CIRCULATING FLUIDIZED BED, COAL FIRED	1500	MMBTU/H	0.36	LB/MMBTU (30 D ROLL)	LIMESTONE INJECTION IN CFB.
UT-0053	DESERET GENERATION AND TRANSMISSION COMPANY		03/16/98	COAL FIRED BOILER	500	MW	0.0976	LB/MMBTU 12 MO. AVG.	WET SCRUBBER
WY-0039	TWO ELK GENERATION PARTNERS, LIMITED PARTNERSHIP	15 MILES SE OF WRIGHT	02/27/98	BOILER, STEAM ELECTRIC POWER GENERATING	250	MW	0.2	LB/MMBTU (2HR FIXED)	LIME SPRAY DRY SCRUBBER
WY-0047	ENCOAL CORPORATION-ENCOAL NORTH ROCHELLE FACILITY	15 MILES SOUTHEAST OF WRIGHT	10/10/97	BOILER, COAL FIRED, MAIN STACK	3960	MMBTU/H	0.2	LB/MMBTU (2 H FIXED)	LIME SPRAY DRYER
OH-0231	TOLEDO EDISON CO. - BAYSHORE PLANT	OREGON	06/20/97	BOILER, CFB, COKE/COAL-FIRED	1764	MMBTU/HR	0.73	LB/MMBTU	LIMESTONE FLUIDIZED BED
OH-0231	TOLEDO EDISON CO. - BAYSHORE PLANT	OREGON	06/20/97	BOILER, CFB, COKE/COAL-FIRED	1764	MMBTU/HR	0.6	LB/MMBTU	LIMESTONE FLUIDIZED BED
ND-0016	AMERICAN CRYSTAL SUGAR COMPANY	HILLSBORO	06/11/97	PULP DRYER	230.3	MMBTU/H	63.3	LB/H	WET SCRUBBER WITH CAUSTIC
WY-0048	WYGEN, INC. - WYGEN UNIT ONE	5 MILES EAST OF GILLETTE	09/06/96	BOILER, PULVERIZED COAL FIRED, STEAM ELECTRIC POWE	80	MW	0.2	LB/MMBTU(2 HR ROLLING	CIRCULATING DRY SCRUBBER
PA-0133	MON VALLEY ENERGY LIMITED PARTNERSHIP	POLAND MINES	08/08/95	PULVERIZED COAL FIRED BOILER	966	MMBTU/HR	0.25	LB/MMBTU	SPRAY DRY ABSORPTION LIME INJECTION, FUEL SPEC: <=2% SULFUR IN COAL
PA-0132	YORK COUNTY ENERGY PARTNERS	SPRING GROVE	07/25/95	BITUMINOUS COAL FIRED CFB BOILER	2500	MMBTU/HR	0.25	LB/MMBTU	LIME INJECTION
PA-0134	NORTHAMPTON GENERATING CO.	NORTHAMPTON	04/14/95	CFB BOILER	1146	MMBTU/HR	0.129	LB/MMBTU	LIME INJECTION
MA-0009	ENERGY NEW BEDFORD COGENERATION FACILITY	NEW BEDFORD	03/24/95	BOILERS, 300 MW COAL FIRED FLUIDIZED BED	3342	MMBTU/HR TONS	0.23	LB/MMBTU	LIMESTONE INJECTION
VA-0225	VPI & STATE UNIVERSITY	BLACKSBURG	12/12/94	BOILER, COAL	5.54	COAL/HR	38	TPY	SPRAY DRYER (FGD)
IL-0058	ARCHER DANIELS MIDLAND COMPANY	DECATUR	08/11/94	BOILER, FLUIDIZED BED, COAL FIRED, MODIFIED, #6	700	MMBTU/H	0.7	LB/MMBTU	LIMESTONE INJECTION INTO FLUIDIZED BED FOLLOWED BY FABRIC FILTER FOR PM CONTROL
IL-0058	ARCHER DANIELS MIDLAND COMPANY	DECATUR	08/11/94	BOILER (7&8), FLUIDIZED BED	1500	MMBTU/H	0.7	LB/MMBTU	LIMESTONE INJECTION INTO FLUIDIZED BED FOLLOWED BY FABRIC FILTER FOR PM CONTROL
MA-0011	TAUNTON ENERGY CENTER	TAUTON	08/08/94	BOILER, COAL FIRED CIRCULATING FLUIDIZED BED	1604.4	MMBTU/HR	0.23	LB/MMBTU	LIMESTONE INJECTION
MD-0022	AES WARRIOR RUN, INC.	CUMBERLAND	06/03/94	ATMOSPHERIC CIRCULATING FLUIDIZED BED BOILER	2070	MMBTU/HR	0.21	LB/MMBTU (3-HOUR)	LIMESTONE INJECTION FUEL SPEC: 90% REMOVAL WHEN FIRING BITUMINOUS COAL
NY-0070	FORT DRUM HTW COGEN FACILITY	FORT DRUM	03/01/94	(3) BUILT UP BOILER	651	MMBTU/HR	1.2	LB/MMBTU	LIMESTONE INJECTION
NJ-0019	CROWN/VISTA ENERGY PROJECT (CVEP)	WEST DEPTFORD	10/01/93	BOILER, PULVERIZED COAL	0		0.18	LB/MMBTU	SPRAY DRYER ABSORBER FUEL SPEC: LOW SULFUR COAL. LIMITED FIRING. APCE INCLUDES ESP, SNCR, AND CARBON INJECTION
FL-0069	OKEELANTA POWER LIMITED PARTNERSHIP	SOUTH BAY	09/27/93	BOILER, SPREADER STOKER, COAL, 3	490	MMBTU/H	1.2	LB/MMBTU	

RACT BACT LAER CLEARINGHOUSE SUMMARY - SO2

RBLCID	FACILITY	CITY	PERMITDAT	PROCESS	THRUP	THRUPUTUNT	PRIMEPI	PRIMEUNIT	CTRLDESC
FL-0070	OSCEOLA POWER LIMITED PARTNERSHIP	PAHOKEE	09/27/93	BOILER, SPREADER STOKER, COAL, 2	460	MMBTU/H	1.2	LB/MMBTU	FUEL SPEC: LOW SULFUR COAL. LIMITED FIRING
VA-0213	SEI BIRCHWOOD, INC.		08/23/93	BOILER, PULVERIZED COAL	2200	MMBTU/HR	220	LB/HR	LIME SPRAY DRYING SYSTEM (FGD SYSTEM)
WY-0046	BLACK HILLS POWER AND LIGHT COMPANY-NEIL SIMPSON U	5 MILES EAST OF GILLETTE	04/14/93	BOILER, PULVERIZED COAL FIRED STEAM ELECTRIC POWER	80	MW	0.2	LB/MMBTU(2 HR ROLLING	CIRCULATING DRY SCRUBBER
WY-0046	BLACK HILLS POWER AND LIGHT COMPANY-NEIL SIMPSON U	5 MILES EAST OF GILLETTE	04/14/93	BOILER, PULVERIZED COAL FIRED STEAM ELECTRIC POWER	80	MW	0.17	LB/MMBTU(30 DAY ROLLI	CIRCULATING DRY SCRUBBER
MI-0228	INDELK ENERGY SERVICES OF OTSEGO GOLDEN VALLEY ELECTRIC ASSOCIATION - HEALY		03/16/93	BOILER (COAL)	778	MMBTU/HR	0.32	LB/MMBTU	DRY SCRUBBER
AK-0024	FAIRBANKS	FAIRBANKS	03/10/93	COMBUSTION, ENTRAINED SYSTEM	50	MW	0.086	LB/MMBTU	ENTRAINED COMBUSTOR
NC-0057	ROANOKE VALLEY PROJECT II	WELDON TOWNSHIP	11/20/92	BOILER, PULVERIZED COAL-FIRED	517	MMBTU/HR	0.187	LB/MMBTU	DRY LIME SCRUBBING
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/92	BOILER, PULVERIZED COAL FIRED, UNIT NO. 1	385	MEGAWATTS	0.25	LB/MMBTU	SPRAY DRYER ABSORBER
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/92	BOILER, PULVERIZED COAL FIRED, UNIT NO. 2	385	MEGA WATTS	0.17	LB/MMBTU	SPRAY DRYER ABSORBER
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS COMPANY	COPE	07/15/92	BOILER, PULVERIZED COAL FIRED, UNIT NO. 3	385	MEGAWATTS	0.17	LB/MMBTU	SPRAY DRYER ABSORBER
VA-0185	COGENTRIX OF DINWIDDIE		04/16/92	BOILERS, STOKER-FIRED COAL, 8	375	MMBTU/ H EACH	0.13	LB/MMBTU	LIME SPRAY DRYER/FABRIC FILTER
FL-0044	ORLANDO UTILITIES COMMISSION	ORLANDO	12/23/91	BOILER, PC	4286	MMBTU/H	0.25	LB/MMBTU	WET LIMESTONE FGD
MA-0012	MAPLE STREET POWERHOUSE UNIT 2 KEYSTONE COGENERATION SYSTEMS, INC.	WARE	12/02/91	BOILER, 30 MW RILEY STOKER (PULVERIZED TYPE)	280000	LB STEAM/HR	0.12	LB/MMBTU	SPRAY DRYER/ABSORBER (DRY SCRUBBER)
NJ-0015			09/06/91	BOILER (PULVERIZED COAL)	2116	MMBTU/HR	0.16	LB/MMBTU	SPRAY DRYER ADSORBER SCRUBBER FGD; FUEL SPEC: 1-1.3% BITUMINOUS SULFUR COAL
VA-0181	OLD DOMINION ELECTRIC COOPERATIVE	CLOVER	04/29/91	BOILER, COAL, 2	4085	MMBTU/H	0.1	LB/MMBTU	DRY LIME FGD
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/91	BOILER, PC	1700	MMBTU/H	0.213	LB/MMBTU	FUEL SPEC: LOW SULFUR FUEL, 13%
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/91	BOILER, STARTUP NO. 2	19	MMBTU/H	0.31	LB/MMBTU	
VA-0178	COGENTRIX OF RICHMOND CHAMBERS COGENERATION LIMITED PARTNERSHIP	RICHMOND	01/02/91	BOILER, STOKER, 8	375	MMBTU/H EACH	0.13	LB/MMBTU	DRY SCRUBBER, BAGHOUSE
NJ-0014		CARNEYS POINT	12/26/90	BOILERS (PULVERIZED-COAL) (2)	1389	MM BTU/HR (EACH)	0.22	LB/MMBTU	SPRAY DRYER ADSORBER SCRUBBER
PA-0089	INTER-POWER OF PENNSYLVANIA	PITTSBURGH	11/28/90	BOILER, POWER, CIRCULATING COAL FIRED FLUIDIZED	1120	MMBTU/HR	700	LB/HR, 24 HR ROL AVG	LIMESTONE INJECTION AND FUEL BENEF
SC-0028	SANTEE COOPER (S.C. PUBLIC SERVICE AUTHORITY)	MONCKS CORNER	11/28/90	BOILER, PULVERIZED COAL FIRED, CROSS UNIT NO. 1	500	MEGAWATTS	0.34	LB/MMBTU	PROMOTED LIMESTONE FGD
VA-0176	HADSON POWER 13	HOPEWELL	08/17/90	BOILER	30228	LB/H COAL	0.162	LB/MMBTU	LIME SPRAY DRYER, CONTINUOUS EMISSION MONITOR
PA-0073	MIDATLANTIC ENERGY OF PA, INC.	CLARION	07/23/90	BOILER, BED, CIRC FLUID	392	MMBTU/H	1	LB/MMBTU	LIMESTONE INJECTION
PA-0072	PANTHER CREEK PARTNERS	NESQUEHONING BOROUGH	06/08/90	BOILERS, FLUIDIZED BED, 2	614	MMBTU/H EACH	0.156	LB/MMBTU	LIMESTONE INJECTION
VA-0171	MECKLENBURG COGENERATION LIMITED PARTNERSHIP		05/09/90	BOILER, PULVERIZED BIT COAL, 4 EA	834.5	MMBTU/H	0.172	LB/MMBTU	SPRAY DRYER, FABRIC FILTER
HI-0009	APPLIED ENERGY SERVICES - BARBERS POINT, INC.	EWA BEACH	01/25/90	BOILER, CFB, 2 EA	2150	MMBTU/H TOTAL	645	LB/H	LIMESTONE IN BED
NY-0078	UDG/GOODYEAR	NIAGARA FALLS	08/10/89	FLUIDIZED BED COAL BOILER	576.7	MMBTU/HR	0.5	LB/MMBTU	PULSE JET
CT-0056	A E S THAMES, INC.	MONTVILLE	08/09/89	BOILER	923	MMBTU/H	0.32	LB/MMBTU	LIMESTONE INJECTION
CT-0067	A E S THAMES, INC.	MONTVILLE	08/09/89	BOILER	923	MMBTU/H	0.32	LB/MMBTU	LIMESTONE INJECTION
MO-0029	UNIVERSITY OF MISSOURI-COLUMBIA	COLUMBIA	08/18/86	ADDITIONAL BOILER, FOR GENERATING ELECTRICAL POWER	259.5	MMBTU/HR.	1.2	LB/MMBTU	INJECTION OF A LIMESTONE TYPE MATERIAL INTO THE BED ITSELF

RACT BACT LAER CLEARINGHOUSE SUMMARY - SO2

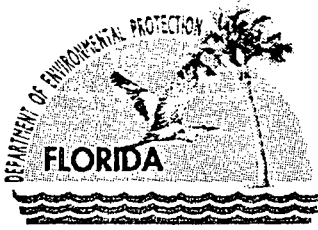
RBLCID	FACILITY	CITY	PERMITDAT	PROCESS	THRUP	THRUPUTUNT	PRIMEI	PRIMEUNIT	CTRLDESC
MO-0028	SOUTHEAST MISSOURI STATE UNIVERSITY	CAPE GIRARDEAU	08/16/86	OPERATE AN ADDITIONAL BOILER FOR ELECTRICAL POWER	69.9	MMBTU/HR	1.2	LB/MMBTU	INJECTION OF A LIMESTONE TYPE MATERIAL INTO THE BED ITSELF.
CA-0372	COGENERATION NATIONAL CORP.		12/13/85	BOILER, CFB, COAL FIRED, 2 EA	280	MMBTU/H	625	LB/D	DRY LIMESTONE INJECTION, MINIMUM CA/S RATIO = 1.6 TO 1
IL-0041	FIRESTONE TIRE & RUBBER	DECATOR	07/01/85	BOILER	178	MMBTU/H	1.2	LB/MMBTU	FUEL SPEC: LOW S COAL
MO-0034	GENERAL MOTORS	WENTZVILLE	05/01/80	4 BOILERS, STEAM GENERATING (SPACE HEATING)	670000	#/HR, OF STEAM	1.2	LB/MMBTU	FUEL SPEC: LOW SULFUR COAL (0.7% SULFUR)

RACT/BACT/LAER CLEARINGHOUSE SUMMARY - CO

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUN	PRIMEI	PRIMEUNIT	CTRLDESC	BASIS
IL-0060	ARCHER DANIELS MIDLAND COMPANY	DECATUR	12/24/1998	BOILER (9&10), FLUIDIZED BED	1500	MMBTU/H	0.1	LB/MMBTU	GOOD COMBUSTION PRACTICES	BACT-PSD
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, COAL FIRED, CIRCUL. FLUIDIZED BED, #5	1500	MMBTU/H	0.15	LB/MMBTU (3-HOUR)	COMBUSTION CONTROL	BACT-PSD
IA-0046	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, COAL FIRED, CFB, ATMOSPHERIC, #6	1500	MMBTU/H	0.15	LB/MMBTU (3 HOUR)	COMBUSTION CONTROL	BACT-PSD
IA-0051	ARCHER DANIELS MIDLAND COMPANY	CEDAR RAPIDS	06/30/1998	BOILER, CIRCULATING FLUIDIZED BED, COAL FIRED	1500	MMBTU/H	0.15	LB/MMBTU (3 H)	COMBUSTION CONTROL	BACT-PSD
UT-0053	DESERET GENERATION AND TRANSMISSION COMPANY		03/16/1998	COAL FIRED BOILER	500	MW	602.45	T/Y		BACT-PSD
WY-0039	TWO ELK GENERATION PARTNERS, LIMITED PARTNERSHIP	15 MILES SE OF WRIGHT	02/27/1998	BOILER, STEAM ELECTRIC POWER GENERATING	250	MW	0.15	LB/MMBTU		OTHER
WY-0047	ENCOAL CORPORATION-ENCOAL NORTH ROCHELLE FACILITY	15 MILES SOUTHEAST OF WRIGHT	10/10/1997	BOILER, PULVERIZED COAL FIRED POWER GENERATION UNI	240	MW	0.15	LB/MMBTU	DUE TO THE LNB/OFA STRATEGY TO CONTROL NOX IT WOULD BE COUNTER PRODUCTIVE TO LIMIT CO.	OTHER
WY-0047	ENCOAL CORPORATION-ENCOAL NORTH ROCHELLE FACILITY	15 MILES SOUTHEAST OF WRIGHT	10/10/1997	BOILER, COAL FIRED, MAIN STACK	3960	MMBTU/H	0.15	LB/MMBTU		OTHER
OH-0231	TOLEDO EDISON CO. - BAYSHORE PLANT	OREGON	06/20/1997	BOILER, CFB, COKE/COAL-FIRED	1764	MMBTU/HR	0.13	LB/MMBTU	GOOD COMBUSTION	BACT-PSD
ND-0016	AMERICAN CRYSTAL SUGAR COMPANY	HILLSBORO	06/11/1997	PULP DRYER	230.3	MMBTU/H	461	LB/H		BACT-PSD
WY-0048	WYGEN, INC. - WYGEN UNIT ONE	5 MILES EAST OF GILLETTE	09/06/1996	BOILER, PULVERIZED COAL FIRED, STEAM ELECTRIC POWE	80	MW	0.15	LB/MMBTU	DUE TO THE LNB/OFA STRATEGY TO CONTROL NOX IT WOULD BE COUNTER PRODUCTIVE TO LIMIT CO	OTHER
IA-0028	CARGILL, INC.	EDDYVILLE	08/24/1995	STEAM GENERATOR, COAL-FIRED, WITH FGR (3)	282.1	MMBTU/HR	794.4	LBS/HR	FGR, NOX CONTROL/MONITORING"	BACT-PSD
PA-0133	MON VALLEY ENERGY LP	POLAND MINES	08/08/1995	PULVERIZED COAL FIRED BOILER	966	MMBTU/HR	0.2	LB/MMBTU		BACT-PSD
PA-0134	NORTHAMPTON GENERATING CO.	NORTHAMPTON	04/14/1995	CFB BOILER	1146	MMBTU/HR	0.15	LB/MMBTU		BACT-PSD
VA-0225	VPI & STATE UNIVERSITY	BLACKSBURG	12/12/1994	BOILER, COAL	5.54	TONS COAL/	53.6	TPY	GOOD COMBUSTION PRACTICES	BACT-OTHER
IL-0058	ARCHER DANIELS MIDLAND COMPANY	DECATUR	08/11/1994	BOILER (7&8), FLUIDIZED BED	1500	MMBTU/H	0.1	LB/MMBTU	GOOD COMBUSTION PRACTICES	BACT-PSD
MD-0022	AES WARRIOR RUN, INC.	CUMBERLAND	06/03/1994	ATMOSPHERIC CIRCULATING FLUIDIZED BED BOILER	2070	MMBTU/HR	0.15	LB/MMBTU	COMBUSTION CONTROLS	BACT-PSD
NY-0070	FORT DRUM HTW COGEN FACILITY	FORT DRUM	03/01/1994	(3) BUILT UP BOILER	651	MMBTU/HR	0.25	163 LB/HR	NO CONTROLS	BACT-OTHER
NJ-0019	CROWN/VISTA ENERGY PROJECT	WEST DEPTFORD	10/01/1993	BOILER, PULVERIZED COAL	0		0.11	LB/MMBTU	GOOD COMBUSTION PRACTICE	BACT-PSD
VA-0213	SEI BIRCHWOOD, INC.		08/23/1993	BOILER, PULVERIZED COAL	2200	MMBTU/HR	440	LB/HR	COMBUSTION TECHNOLOGY	NSPS
IA-0025	ARCHER DANIELS MIDLAND	CEDAR RAPIDS	08/03/1993	BOILER, FLUIDIZED BED STEAM GENERATOR / CO-GEN.	551.5	MMBTU/HR	0.2	LB/MMBTU 3 HR. AVG.	GOOD COMBUSTION PRACTICES	BACT-PSD
WY-0046	BLACK HILLS POWER AND LIGHT COMPANY-NEIL SIMPSON U	5 MILES EAST OF G	04/14/1993	BOILER, PULVERIZED COAL FIRED STEAM ELECTRIC POWER	80	MW	0.15	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
MI-0228	INDELK ENERGY SERVICES OF OTSEGO		03/16/1993	BOILER (COAL)	778	MMBTU/HR	0.1	LB/MMBTU	COMBUSTION CONTROL	BACT-OTHER
AK-0024	GOLDEN VALLEY ELECTRIC ASSOCIATION - HEALY	FAIRBANKS	03/10/1993	COMBUSTION, ENTRAINED SYSTEM	50	MW	0.2	LB/MMBTU	BOILER DESIGN AND OPERATION	BACT-PSD
NC-0057	ROANOKE VALLEY PROJECT II	WELDON TOWNSHI	11/20/1992	BOILER, PULVERIZED COAL-FIRED	517	MMBTU/HR	0.2	LB/MMBTU	COMBUSTION TECHNOLOGY	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 1	385	MEGAWATTS	0.15	LB/MMBTU	COMBUSTION EFFICIENCY	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 2	385	MEGA WATT	0.15	LB/MMBTU	COMBUSTION EFFICIENCY	BACT-PSD
SC-0027	SOUTH CAROLINA ELECTRIC AND GAS	COPE	07/15/1992	BOILER, PULVERIZED COAL FIRED, UNIT NO. 3	385	MEGAWATTS	0.15	LB/MMBTU	COMBUSTION EFFICIENCY	BACT-PSD
VA-0185	COGENTRIX OF DINWIDDIE		04/16/1992	BOILERS, STOKER-FIRED COAL, 8	375	MMBTU/ H E	0.2	LB/MMBTU	CONTROLLED COMBUSTION	BACT-PSD
FL-0044	ORLANDO UTILITIES COMMISSION	ORLANDO	12/23/1991	BOILER, PC	4286	MMBTU/H	0.15	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
NJ-0015	KEYSTONE COGENERATION SYSTEMS, INC.		09/06/1991	BOILER (PULVERIZED COAL)	2116	MMBTU/HR	0.11	LB/MMBTU	ADVANCED COMBUSTION CONTROL	BACT-OTHER
VA-0181	OLD DOMINION ELECTRIC COOP.	CLOVER	04/29/1991	BOILER, COAL, 2	4085	MMBTU/H	0.1	LB/MMBTU	BOILER DESIGN	BACT-PSD
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/1991	BOILER, STARTUP NO. 2	19	MMBTU/H	0.12	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
NC-0054	ROANOKE VALLEY PROJECT	WELDON	01/24/1991	BOILER, PC	1700	MMBTU/H	0.2	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
VA-0178	COGENTRIX OF RICHMOND	RICHMOND	01/02/1991	BOILER, STOKER, 8	375	MMBTU/H EA	0.3	LB/MMBTU	COMBUSTION CONTROL	OTHER
NJ-0014	CHAMBERS COGENERATION LP	CARNEYS POINT	12/26/1990	BOILERS (PULVERIZED-COAL) (2)	1389	MM BTU/HR (0.11	LB/MMBTU	ADVANCED COMBUSTION CONTROL	BACT-OTHER
SC-0028	SANTEE COOPER (S.C. PUBLIC SERVICE AUTHORITY)	MONCK'S CORNER	11/28/1990	BOILER, PULVERIZED COAL FIRED, CROSS UNIT NO. 1	500	MEGAWATTS	0.1	LB/MMBTU	COMBUSTION EFFICIENCY	BACT-PSD
PA-0089	INTER-POWER OF PENNSYLVANIA	PITTSBURGH	11/28/1990	BOILER, POWER, CIRCULATING COAL FIRED FLUIDIZED	1120	MMBTU/HR	302	LB/HR	SYSTEM DESIGN/OPERATING PRACTICES	BACT-PSD
VA-0176	HADSON POWER 13	HOPEWELL	08/17/1990	BOILER	30228	LB/H COAL	0.2	LB/MMBTU	COMBUSTION; CEM	OTHER

RACT/BACT/LAER CLEARINGHOUSE SUMMARY - CO

RBLCID	FACILITY	CITY	PERMITDATE	PROCESS	THRUPUT	THRUPUTUN	PRIMEPI	PRIMEUNIT	CTRLDESC	BASIS
PA-0073	MIDATLANTIC ENERGY OF PA, INC.	CLARION	07/23/1990	BOILER, BED, CIRC FLUID	392	MMBTU/H	0.23	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
PA-0072	PANTHER CREEK PARTNERS	NESQUEHONING B	06/08/1990	BOILERS, FLUIDIZED BED, 2	614	MMBTU/H EA	0.18	LB/MMBTU	COMBUSTION CONTROL	BACT-PSD
VA-0171	MECKLENBURG COGENERATION LIMITED PARTNERSHIP		05/09/1990	BOILER, PULVERIZED BIT COAL, 4 EA	834.5	MMBTU/H	0.2	LB/MMBTU	GOOD COMBUSTION PRACTICES	BACT-PSD
HI-0009	APPLIED ENERGY SERVICES - BARBERS POINT, INC.	EWA BEACH	01/25/1990	BOILER, CFB, 2 EA	2150	MMBTU/H TO	408.4	LB/H		BACT-PSD
NY-0078	UDG/GOODYEAR	NIAGARA FALLS	08/10/1989	FLUIDIZED BED COAL BOILER	576.7	MMBTU/HR	0.2	LB/MMBTU	NO CONTROLS	BACT-OTHER
CT-0056	A E S THAMES, INC.	MONTVILLE	08/09/1989	BOILER	923	MMBTU/H	0.11	LB/MMBTU		BACT-PSD
CT-0067	A E S THAMES, INC.	MONTVILLE	08/09/1989	BOILER	923	MMBTU/H	0.11	LB/MMBTU		BACT-PSD
MO-0029	UNIVERSITY OF MISSOURI-COLUMBIA	COLUMBIA	08/18/1986	ADDITIONAL BOILER, FOR GENERATING ELECTRICAL POWER	259.5	MMBTU/HR.	32.5	TPY	GOOD COMBUSTION	BACT-PSD
MO-0028	SOUTHEAST MISSOURI STATE UNIV.	CAPE GIRARDEAU	08/16/1986	OPERATE AN ADDITIONAL BOILER FOR ELECTRICAL POWER	69.9	MMBTU/HR	7.3	TPY		BACT-PSD
CA-0372	COGENERATION NATIONAL CORP.		12/13/1985	BOILER, CFB, COAL FIRED, 2 EA	280	MMBTU/H	0		GOOD COMBUSTION PRACTICES	LAER
IL-0041	FIRESTONE TIRE & RUBBER	DECATOR	07/01/1985	BOILER	178	MMBTU/H	0.2	LB/MMBTU	DESIGN & OPERATION	BACT-PSD
MA-0009	ENERGY NEW BEDFORD COGENERATION FACILITY	NEW BEDFORD		BOILERS, 300 MW COAL FIRED FLUIDIZED BED	3342	MMBTU/HR	0.018	LB/MMBTU	ADVANCED COMBUSTION OPTIMIZATION	BACT-PSD
MA-0011	TAUNTON ENERGY CENTER	TAUNTON		BOILER, COAL FIRED CIRCULATING FLUIDIZED BED	1604.4	MMBTU/HR	0.13	LB/MMBTU	ADVANCED COMBUSTION OPTIMIZATION	BACT-PSD



Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

January 6, 2000

Mr. John Bunyak, Chief
Policy, Planning & Permit Review Branch
NPS-Air Quality Division
Post Office Box 25287
Denver, CO 80225

Re: Indiantown Cogeneration Site Certification Modification, PA 90-31

Dear Mr. Bunyak:

Enclosed for your review and comment is an application for the above-mentioned project. It consists of a request to add a carbon dioxide recovery and chilled water plant, an increase to the heat input and additional miscellaneous changes.

We request your review and opinion of the project, particularly related to the revisitation of BACT for each specific pollutant. Your comments can be forwarded to my attention at the letterhead address or faxed to me at (850) 922-6979. If you have any questions, please contact Mike Halpin at (850) 921-9530.

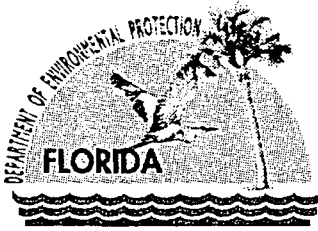
Sincerely,

A. A. Linero, P.E.
Administrator
New Source Review Section

AAL/mph/kt

Enclosures

cc: Mike Halpin, BAR



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400
January 6, 2000

David B. Struhs
Secretary

Mr. Gregg Worley, Chief
Air, Radiation Technology Branch
Preconstruction/HAP Section
U.S. EPA – Region IV
61 Forsyth Street
Atlanta, Georgia 30303

Re: Indiantown Site Certification Modification, PA 90-31

Dear Mr. Worley:

Enclosed for your review and comment is an application for the above-mentioned project. It consists of a request to add a carbon dioxide recovery and chilled water plant, an increase to the heat input and additional miscellaneous changes.

We request your review and opinion of the project, particularly related to the revisitation of BACT for each specific pollutant. Your comments can be forwarded to my attention at the letterhead address or faxed to me at (850) 922-6979. If you have any questions, please contact Mike Halpin at (850) 921-9530.

Sincerely,

A. A. Linero, P.E. Administrator
New Source Review Section

AAL/mph/kt

Enclosures

cc: Mike Halpin, BAR

LETTER OF TRANSMITTAL

DATE: 01/05/2000

TO: Clair Fancy
Bureau Chief
Bureau of Air Regulation
Department of Environmental Protection
2400 Blair Stone Road, MS: 5505
Tallahassee, Florida 32399-2400

SUBJECT: Indiantown Site Certificate Modification Application

FROM: A Jablonowski

JOB NO.: 36927-01

RECEIVED

DEC 30 1999

BUREAU OF
AIR REGULATION

Mr. Fancy,

Enclosed are three additional copies of the following documents:

Application for Modification of the Site Certificate for the Indiantown Cogeneration Facility

Amendments to the Site Certification Application for the Indiantown Cogeneration Facility

These additional copies are being sent to you at the request of Mike Halpin of the FDEP DARM Bureau of Air Regulation / New Source Review. The cover letter for the original submission is attached.

The primary point of contact for this project is David Burrage, Environmental Manager for Indiantown Cogeneration. He can be reached at 567-597-6500, extension 19. I can be reached at 978-371-4339.

Yours truly,

AJ Jablonowski



196 Baker Avenue
Concord, MA 01742
(978)-371-4000
FAX: (978)-371-2468

Indiantown Cogeneration, L.P.

December 22, 1999

Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Indiantown Cogeneration, L.P.
P.O. Box 1799
19140 SW Warfield Blvd.
Indiantown, FL 34956
Tel: 561.597.6500
Fax: 561.597.6210

RECEIVED
DEC 30 1999
BUREAU OF
AIR REGULATION

RE: ICLP's Amendments and Request for Modifications

Dear Mr. Oven:

Indiantown Cogeneration L.P. (ICLP) hereby submits the following two documents for review and approval by the Florida Department of Environmental Protection (DEP):

- Amendments to the Site Certification Application for the Indiantown Cogeneration Facility (Facility); and
- Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility.

The Amendments to the Site Certification Application (the Amendments) are being provided to inform the Department of certain changes to the Facility's design and operation. The Amendments do not require changes to the Conditions of Certification for the Facility. The Amendments also do not involve any significant, additional adverse environmental impacts that would require new environmental permits or approvals.

ICLP's Application for Modifications of the Site Certificate (the Modifications) describes several other proposed changes to the Facility's design and operations. The Modifications will require changes to the Conditions of Certification, in accordance with Section 403.516(1)(b), Florida Statutes.

Copies of the Amendments and Modifications also are being sent to the people identified in the attached Distribution List.

Attached to this letter is ICLP's check in the amount of \$10,000, payable to the Florida Permit Fee Trust Fund. This check is being submitted to pay DEP's fee for a modification, in accordance with DEP Rule 62-17.293(1)(c), F.A.C.

ICLP would like to meet with you at your earliest convenience to discuss the Amendments and Modifications for ICLP's Facility. In the interim, please call me or David Burrage at 561-597-6500 if you have any questions regarding these submissions.

Thank you for your assistance with this issue.

Sincerely,

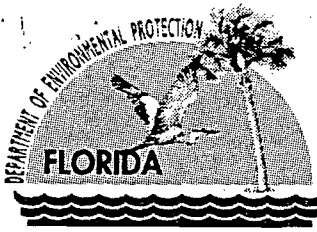


Stephen Sorrentino
General Manager

Distribution List for Amendments to the
Site Certification Application for the Indiantown Cogeneration Facility
and the Application for Modification of the Site Certificate for the
Indiantown Cogeneration Facility

<p>Hamilton S. "Buck" Oven, Jr., P.E. Administrator Office of Siting Coordination Department of Environmental Protection 2600 Blair Stone Road, MS: 48 Tallahassee, Florida 32399-3000 (3 copies)</p>	<p>John Fumero (3 copies) General Counsel South Florida Water Management District P.O. Box 24680 West Palm Beach, Florida 33416-4680</p>
<p>Cathy Carter Agency Clerk Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000</p>	<p>Michael Busha Executive Director Treasure Coast Regional Planning Council 301 E. Ocean Blvd., Suite 300 Stuart, Florida 34994</p>
<p>Scott Goorland Assistant General Counsel Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000</p>	<p>Gary K. Oldehoff County Attorney Martin County 2401 Southeast Monterey Road Stuart, Florida 34996</p>
<p>Clair Fancy Bureau Chief Bureau of Air Regulation Department of Environmental Protection 2400 Blair Stone Road, MS: 5505 Tallahassee, Florida 32399-2400</p>	<p>R. Douglas Leonard Executive Director Central Florida Regional Planning Council P.O. Box 2089 Bartow, Florida 33831</p>
<p>Cari Roth General Counsel Office of General Counsel Department of Community Affairs 2555 Shumard Oak Blvd. Tallahassee, Florida 32399</p>	<p>George Long County Administrator Okeechobee County 304 N.W. 2nd Street Okeechobee, Florida 34972</p>
<p>Pam Leslie General Counsel Department of Transportation 605 Suwannee Street, MS: 58 Tallahassee, Florida 32399-0458</p>	<p>Cathy Beddell Acting General Counsel Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, Florida 32399</p>

<p>Sandra Whitmire Intergovernmental Coordination & Review Coordinator Department of Transportation 605 Suwannee Street, MS: 28 Tallahassee, Florida 32399-0450</p>	<p>Jim Antista General Counsel Florida Fish and Wildlife Conservation Commission 620 S. Meridian Street Tallahassee, Florida 32399-1600</p>
<p>Melissa L. Meeker (3 copies) Director District Management Department of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33401</p>	<p>Michelle Golden (2 copies) PG&E Generating 7500 Old Georgetown Road Bethesda, Maryland 20814</p>
<p>David S. Dee (2 copies) Attorney at Law Landers & Parsons, P.A. P.O. Box 271 Tallahassee, Florida 32302-0271 (Counsel for Applicant)</p>	<p>David Burrage (2 copies) Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, Florida 34956</p>
<p>Andrew Jablonowski, P.E. George Lipka, P.E. Earth Tech 196 Baker Avenue Concord, Massachusetts 01742-2167 (Consultant for Applicant)</p>	



Department of Environmental Protection

Jeb Bush
Governor

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

David B. Struhs
Secretary

January 31, 2000

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

RECEIVED
FEB 01 2000
BUREAU OF AIR REGULATION

Re: Indiantown Cogeneration Project, PA 90-31

Dear Mr. Sorrentino:

The Department and the South Florida Water Management District have reviewed your request for amendments and modifications to the Conditions of Certification for the Indiantown Cogeneration Project. In order to complete the processing of your requests the following information needs to be provided:

The Bureau of Air Regulation requests that you please update the original BACT Determination based upon current technology. This should include an evaluation of ammonia slip.

1. The Department notes that the (currently permitted) pollutant emissions use only lb/hr (on a 24-hour block average) rather than lb/MMBtu for compliance purposes. According to EPA guidance (New Source Review Workshop Manual) "...express the emission limits in two different ways, (e.g., lbs/hr) and...(e.g., lbs/MMBtu)... The source must comply with both values to demonstrate compliance." The proposed BACT should address recommended compliance averaging times as well as measurement units.
2. The Department presumes that limestone, coal and ash-handling related emissions will increase (PTE vs. actual) as a result of the requested heat input increase. Please quantify these increases and include appropriately within the modeling as well as BACT proposal.
3. Please provide information from the boiler, steam turbine and generator manufacturers, indicating the continuous and peak ratings. Additionally provide information on the limiting factors for coal handling capacity. Where ratings are time (or otherwise) limited, please provide those limits as well. The Department is interested in nameplate models and related data, where available.
4. Please submit the required PSD modeling analyses for both the Class I and Class II areas.

Indiantown Cogen
Jan. 31, 2000
page 2

The Department will provide the U.S. Park Service and EPA comments as soon as they are available. You may contact Mike Halpin at 850/921-9530 regarding the above questions. Additionally, Cleve Holladay can be contacted at 921-8986 concerning any modeling questions.

A copy of the South Florida Water Management District request for information is attached

Sincerely,

Hamilton S. Oven

Hamilton S. Oven, P.E.

Attach:

cc: Mike Halpin, BAR

James Golden, SFWMD

Scott Goorland, Esq.

David Dee, Esq.



South Florida Water Management District

LAN 04-06

January 31, 2000

Mr. Hamilton S. Oven, Jr., P.E.
 Administrator, Siting Coordination Office
 Department of Environmental Protection
 2600 Blair Stone Road
 Tallahassee, FL 32399-2400

Paul
 Dear Mr. Oven:

**Subject: Indiantown Cogeneration Project, PA 90-31
 Proposed Modification & Amendments to Site Certification**

South Florida Water Management District (SFWMD) staff has reviewed the applications submitted by Indiantown Cogeneration, L.P. (ICLP), outlining the proposed modifications and amendments to the above-referenced project, as required by Sections 403.501-539, F.S., and Chapter 62-17, F.A.C.

As a result of that review, we have identified a number of outstanding issues and sufficiency questions which must be addressed in order for the SFWMD to complete its review of this project. Please include the following questions/comments in your sufficiency letter on this project.

PROPOSED MODIFICATIONS

Addition of Carbon Dioxide Recovery Plant

Under the existing Site Certification for this project, the Floridan Aquifer is the approved backup water supply source for this project. The Floridan Aquifer must be used when water is unavailable from Taylor Creek/Nubbin Slough/L-63N due to drought conditions. During the 1999 dry season, the water levels in L-63N approached 17.5' NGVD. The 17.5' NGVD elevation was established by the SFWMD as the lowest acceptable stage at which water withdrawals could occur without adversely impacting the SFWMD's ability to maintain minimum flows in the canal and adversely impacting any existing legal users or wetlands in the vicinity of the withdrawal facilities. During the 1999 drought, ICLP had concerns that the poor quality of the Floridan Aquifer wells would prevent their effective use as a backup water supply source. At that time, ICLP advised SFWMD staff that they would evaluate other options for future drought events. Please submit a detailed evaluation of alternative backup water supply sources.

Governing Board:

Michael Collins, Chairman
 Michael D. Minton, Vice Chairman
 Mitchell W. Berger

Vera M. Carter
 Gerardo B. Fernandez
 Patrick J. Gleason

Nicolas J. Gutierrez, Jr.
 Hankley R. Thornton
 Trudi K. Williams

Frank R. Finch, P.E., Executive Director
 Michael Slayton, Deputy Executive Director
 Trevor Campbell, Deputy Executive Director

Mr. Hamilton S. Oven, Jr., P.E.
January 31, 2000
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The applicant indicates that detailed construction plans for the recovery plant are unavailable at this time. Please note that the applicant must submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer prior to the SFWMD issuing a letter authorizing construction of any proposed new facilities, pursuant to the existing applicable Conditions of Certification.

Addition of Chilled Water Plant

The applicant indicates that detailed construction plans for the chilled water plant are unavailable at this time. Please note that the applicant must submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer prior to the SFWMD issuing a letter authorizing construction of any proposed new facilities, pursuant to the existing applicable Conditions of Certification.

Changes in Plant Output Rating

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Changes in Cooling Water Storage Pond Elevation

Section 1.2.2 of Appendix 6 of the District's Basis of Review (BOR) defines a minor impoundment as one where "depths above the surrounding ground level would be generally limited to four feet." If it is the desire of the applicant to have the cooling water storage pond treated as something other than a minor impoundment, additional topographic information in the vicinity of the pond will be required to demonstrate that the water elevations within the pond are generally limited to the elevation of the surrounding topography.

Section 2.2.2.2 of Appendix 6 of the SFWMD's Basis of Review (BOR) requires that minor impoundments provide freeboard "equal to the maximum water depth dimension but not less than 2 feet, nor more than 3 feet." Based on the information provided, it appears that the subject impoundment would require a minimum of 3.0' of freeboard. What new elevation is proposed for the working level of both the north and south sections of the pond? How much freeboard is proposed between this elevation and the emergency overflow elevation where discharge will occur? What will the design storm elevation be and how much will the pond discharge during the design storm? In addition, please explain how the proposed changes will meet the intent of Section 2.2.2.2 of the BOR.

Mr. Hamilton S. Oven, Jr., P.E.
January 31, 2000
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Clarification of Auxiliary Boiler Operating Requirement

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Modifications to Reflect Revised Water Allocation Plan with the SFWMD

The SFWMD has previously reviewed and approved these changes, as outlined in the correspondence in Attachment G.

Modifications of Groundwater Monitoring Requirements

We have no objections to approval of the proposed modifications.

Consistency Among PSD, Title V, NPDES, and COC Conditions

We have no objections to approval of the proposed modifications.

NPDES Discharges

We have no objections to approval of the proposed modifications.

Changes to Air Permit Requirements

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

PROPOSED AMENDMENTS

Additional Steam Use by Steam Host

Please be advised that a Modification to Caulkins Citrus surface water management permit will likely be required prior to construction if the chilled water plant and related equipment is ultimately located on their property.

Water Treatment System Operating Flexibility

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Mr. Hamilton S. Oven, Jr., P.E.
January 31, 2000
Page 4

Site Plan Changes Reflecting As-Built Conditions

Staff is having difficulty locating the additional pavement near the lime storage system, around the power block, and in the area between the baghouse and the existing roadway. Please submit a copy of the as-built drawing in which these areas have been highlighted to identify the new areas of pavement. What is the total area of this pavement?

Section 2.3.4 of the application indicates that the paving near the open shed area is 240 square feet. Is this the total of the areas described in the above question? If not, please highlight this area as well.

Although the submitted calculations appear to address the increase in runoff associated with the site plan revisions, they do not address the loss in-site storage also associated with the site plan revisions. Please submit detailed paving/grading/drainage plans and supporting calculations signed and sealed by a Florida registered engineer for staff's review and approval, pursuant to the existing applicable Conditions of Certification.

Alternative Cover For Emergency Coal Pile

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Completion of Ambient Air Quality Monitoring

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Continuous Emissions Monitor Span Range

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

Hazardous Waste Storage Retention Time

The proposed modifications are non-jurisdictional to the SFWMD. Consequently, we have no objections to approval of the proposed modifications.

In addition to the above, the SFWMD's review of the 1999 Dam Inspection Program Report for this project indicates that there was an increase in elevation for the wastewater

Mr. Hamilton S. Oven, Jr., P.E.
January 31, 2000
Page 5

storage pond. However, it is not clear whether the increase is associated with the water elevation or the elevation of the spillway. The increase in elevation may be an issue that needs to be addressed in this application or a future application.

We appreciate this opportunity to comment. Please give me a call at (561) 682-6862 if any of the above requires additional clarification.

Sincerely,



James J. Golden, AICP
Senior Planner
Environmental Resource Regulation

/jig

c: Steve Sorrentino, ICLP
David Burrage, ICLP

Mr. Hamilton S. Oven, Jr., P.E.
January 31, 2000
Page 6

bc: Terrie Bates (4210)
Tony Waterhouse (4220)
Maria Clemente (4220)
John Shaffer (4220)
Rob Robbins (4250)
Don Medellin (4250)
Brent Nicholas (4250)
Ken Ammon (4310)
Scott Burns (4320)
Jeff Rosenfeld (4320)
Lisa Ullman (4320)
Claudia Kugler (4210)
Bob Brown (4230)
Ken Todd (4230)
Jeff Gronborg (4230)
Terry Clark (4350)
Mark Elsner (4350)
Tommy Strowd (5610)
Doug MacLaughlin (1430)
Luna Ergas (1430)
Paul Millar (2147)

Z 031 391 887

US Postal Service

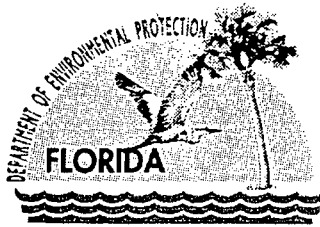
Receipt for Certified Mail

No Insurance Coverage Provided.

Do not use for International Mail (See reverse)

Sent to	
Stephen Saventini	
Street & Number	
Indiantown Fl	
Post Office, State, & ZIP Code	
Postage	\$
Certified Fee	
Special Delivery Fee	
Restricted Delivery Fee	CO2 Rec. Proj
Return Receipt Showing to Whom & Date Delivered	
Return Receipt Showing to Whom, Date, & Addressee's Address	
TOTAL Postage & Fees	\$
Postmark or Date	3-23-00
PA 90-31	
PSD-FI-168	

PS Form 3800, April 1995



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

March 24, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90--31, PSD-FL-168
Indiantown Cogeneration Facility
CO₂ Recovery Project

Dear Mr. Sorrentino:

Enclosed is one copy of the Draft PSD Permit Modification for the Indiantown Cogeneration Plant located at 19140 SW Warfield Blvd, Martin County. The Department's Intent to Issue PSD Permit Modification and the Public Notice of Intent to Issue PSD Permit Modification are also included.

The Public Notice of Intent to Issue PSD Permit Modification must be published one time only, as soon as possible, in the legal advertisement section of a newspaper of general circulation in the area affected, pursuant to the requirements Chapter 50, Florida Statutes. Proof of publication, i.e., newspaper affidavit, must be provided to the Department's Bureau of Air Regulation office within seven days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A. A. Linero, P.E., Administrator, New Source Review Section at the above letterhead address. If you have any other questions, please contact Michael P. Halpin at 850/921-9530.

Sincerely,

A handwritten signature in cursive script, appearing to read "C. H. Fancy".

C. H. Fancy, P.E., Chief,
Bureau of Air Regulation

CHF/mph

Enclosures

In the Matter of an
Application for Permit by:

Stephen Sorrentino, General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

DEP File No. PA-90-31, PSD-FL-168
Indiantown Cogeneration Plant
CO₂ Plant and Permit Modifications
Martin County

INTENT TO ISSUE PSD PERMIT MODIFICATION

The Department of Environmental Protection (Department) gives notice of its intent to issue a PSD Permit Modification (copy of Draft permit attached) for the proposed project, detailed in the application specified above, for the reasons stated below.

The applicant, Stephen Sorrentino, General Manager, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a PSD Permit Modification for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The permit is to install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD Permit Modification is required to install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers.

The Department intends to issue this PSD Permit Modification based on the belief that reasonable assurances have been provided to indicate that operation of these emission units will not adversely impact air quality, and the emission units will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297, F.A.C.

Pursuant to Section 403.815, F.S., and Rule 62-110.106(7)(a)1., F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue PSD Permit Modification. The notice shall be published one time only in the legal advertisement section of a newspaper of general circulation in the area affected. Rule 62-110.106(7)(b), F.A.C., requires that the applicant cause the notice to be published as soon as possible after notification by the Department of its intended action. For the purpose of these rules, "publication in a newspaper of general circulation in the area affected" means publication in a newspaper meeting the requirements of Sections 50.011 and 50.031, F.S., in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Department at the address or telephone number listed below. The applicant shall provide proof of publication to the Department's Bureau of Air Regulation, at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400 (Telephone: 850/488-0114; Fax 850/ 922-6979). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5), F.A.C. No permitting action for which published notice is required shall be granted until proof of publication of notice is made by furnishing a uniform affidavit in substantially the form prescribed in section 50.051, F.S. to the office of the Department issuing the permit. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rules 62-110.106(9) & (11), F.A.C.

The Department will issue the final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

Mediation is not available in this proceeding.

In addition to the above, a person subject to regulation has a right to apply for a variance from or waiver of the requirements of particular rules, on certain conditions, under Section 120.542 F.S. The relief provided by this state statute applies only to state rules, not statutes, and not to any federal regulatory requirements. Applying for a variance or waiver does not substitute or extend the time for filing a petition for an administrative hearing or exercising any other right that a person may have in relation to the action proposed in this notice of intent.

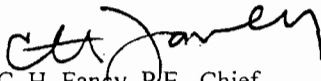
The application for a variance or waiver is made by filing a petition with the Office of General Counsel of the Department, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. The petition must specify the following information: (a) The name, address, and telephone number of the petitioner; (b) The name, address, and telephone number of the attorney or qualified representative of the petitioner, if any; (c) Each

rule or portion of a rule from which a variance or waiver is requested; (d) The citation to the statute underlying (implemented by) the rule identified in (c) above; (e) The type of action requested; (f) The specific facts that would justify a variance or waiver for the petitioner; (g) The reason why the variance or waiver would serve the purposes of the underlying statute (implemented by the rule); and (h) A statement whether the variance or waiver is permanent or temporary and, if temporary, a statement of the dates showing the duration of the variance or waiver requested.

The Department will grant a variance or waiver when the petition demonstrates both that the application of the rule would create a substantial hardship or violate principles of fairness, as each of those terms is defined in Section 120.542(2) F.S., and that the purpose of the underlying statute will be or has been achieved by other means by the petitioner.

Persons subject to regulation pursuant to any federally delegated or approved air program should be aware that Florida is specifically not authorized to issue variances or waivers from any requirements of any such federally delegated or approved program. The requirements of the program remain fully enforceable by the Administrator of the EPA and by any person under the Clean Air Act unless and until the Administrator separately approves any variance or waiver in accordance with the procedures of the federal program.

Executed in Tallahassee, Florida.


C. H. Fancy, P.E., Chief
Bureau of Air Regulation

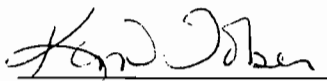
CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue PSD Permit Modification (including the Public Notice of Intent to Issue PSD Permit Modification and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-23-00 to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *
Mr. Isidore Goldman, SED
Mr. Hamilton S. Owen
Mr. David S. Dee
Mr. A.J. Jablonski, Earthtech
Mr. Gregg Worley, EPA
Mr. 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.


(Clerk) 3-23-00
(Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. PA 90-31, PSD-FL-168

Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO₂), a combustion product, and convert it to bottled (liquid) CO₂ for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida, 32301
Telephone: 850/488-0114
Fax: 850/922-6979

Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401
Telephone: 561/681-6600
Fax: 561/681-6755

The complete project file includes the application, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.

NOTICE TO BE PUBLISHED IN THE NEWSPAPER

March xx, 2000

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
P.O. Box 1799
Indiantown, Florida 34956

Re: DEP File No. PA 90-31; Modification of Permit No. PSD-FL-168
Indiantown Cogeneration Facility / Martin County

The applicant, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a modification to PSD permit number PSD-FL-168 for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The modification is to allow install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers. The Department has reviewed the modification request. The referenced permit is hereby modified as follows:

Project Description:

The proposed facility includes one main boiler and one steam generator, and one or two 50% capacity auxiliary boilers operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus processing. A CO₂ recovery plant installed via a flue gas slipstream is also authorized. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boilers firing natural gas, propane or No. 2 fuel oil, the CO₂ absorber column and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emission levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500 62-212.400, Florida Administrative Code).

Specific Condition No. 4.:

The PC boiler shall be allowed to operate continuously (8760 hrs/yr). A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. ~~The auxiliary boiler or boilers shall operate a maximum of 5000 hrs at the combined total heat input rates with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by weight, and the balance on natural gas or propane.~~ Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas, propane or No. 2 fuel oil) for both the PC boiler and auxiliary boilers.

Specific Condition No. 9:

The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No.2 fuel oil), shall be limited to ~~a maximum of 5000 hours/year at the combined total heat input rates with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5000 full load equivalent hours per calendar year, with no more than 1000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No.2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

POLLUTANT	LBS/HR	TONS/YEAR
NOX	68.0	34
SO2	18.0	9
PM	1.4	0.70
PM10	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0 E-5	2.0 E-5
Hg	5.2 E-4	2.6 E-4
Pb	3.6 E-2	1.8 E-2
As	6.8 E-3	3.4 E-3

Specific Condition No. 15.:

A. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.

B. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

1. The CO₂ absorber column shall emit no more than 5 lb/hr VOC in addition to the products of combustion from the PC boiler. If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.
2. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.
3. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂, as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the District Office, detailing best practices for the minimization of secondary pollutant emissions.

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., 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 thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.

 Howard L. Rhodes, Director
 Division of Air Resources
 Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on _____ to the person(s) listed:

- Mr. Stephen Sorrentino, General Manager *
- Mr. Isidore Goldman, SED
- Mr. Hamilton S. Oven
- Mr. David S. Dee
- Mr. A.J. Jablonski, Earthtech
- Mr. Gregg Worley, EPA
- Mr. 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.

(Clerk)

(Date)

001111

Florida Department of
Environmental Protection

Memorandum

TO: Clair Fancy

THRU: Al Linero *aal*

FROM: Michael P. Halpin *MH*

DATE: March 22, 2000

SUBJECT: Indiantown Cogeneration, L.P.
Indiantown Cogeneration Facility PSD Permit modifications
DEP File No. PA 90-31 (PSD-FL-168)

Attached is the public notice package for Indiantown Cogeneration Facility permit modifications, which are being requested through the Power Plant Siting Office. The applicant initially requested several changes to their PSD permit, including increases to heat input and megawatt rating. However, as a result of the sufficiency review, the applicant elected to defer all requests other than the ones for which PSD is not applicable. These remaining (two) requests were to:

- 1) Clarify the wording concerning allowable operation of the auxiliary boilers and
- 2) To allow for a small (<10% of flue gas) CO₂ recovery plant to be installed near the stack.

According to the applicant, commencement of construction of the recovery plant is desired to be ASAP. Based upon there being no potential to increase the annual emissions of regulated pollutants (and in fact a reduction of CO₂ emitted at the facility) we have agreed to provide for this permit revision prior to the completeness of the other PSD relevant requests.

Accordingly, I recommend your approval of the attached Intent to Issue.

AAL/mph

Attachments

Indiantown Cogeneration, L.P.

Indiantown Cogeneration, L.P.
P.O. Box 1799
19140 SW Warfield Blvd.
Indiantown, FL 34956
Tel: 561.597.6500
Fax: 561.597.6210

April 6, 2000

C. H. Fancy, P.E. Chief
Bureau of Air Regulations
Department of Environmental Protection
Marjory Stoneman Douglas Building
3900 Commonwealth Blvd.
Tallahassee, Florida 32399-3000

RECEIVED

APR 10 2000

BUREAU OF AIR REGULATION

VIA FEDERAL EXPRESS

Re: DEP File No. PA 90-31, PSD-FL-168
Indiantown Cogeneration Facility CO2 Recovery Project
Public Notice of Intent to Issue PSD Permit Modification

Dear Mr. Fancy:

Pursuant to your written request of March 24, 2000, and the requirements of Chapter 50 Florida Statutes, please find attached proof of publication of Public Notice of Intent to Issue PSD Permit Modification, State of Florida Department of Environmental Protection DEP File No. PA 90-31, PSD-FL-168, Indiantown Cogeneration, L.P., Indiantown Cogeneration Plant, Martin County, printed April 2, 2000 in the Palm Beach Post and Stuart News. Please contact David Burrage at 561-597-6500, extension 19, if you have any questions.

Sincerely,



Stephen A. Sorrentino
General Manager

Enclosure 

cc: Mike Halpin, DEP
Buck Oven, DEP
A.J. Jablonowski

NO. 653220
 PUBLIC NOTICE OF INTENT
 TO ISSUE PSD PERMIT
 MODIFICATION
 STATE OF FLORIDA
 DEPARTMENT
 OF ENVIRONMENTAL
 PROTECTION
 DEP File No. PA 90-31,
 PSD-FL-168
 Indiantown Cogeneration, L.P.
 Indiantown
 Cogeneration Plant
 Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam cogeneration plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO₂), a combustion product, and convert it to bottled (liquid) CO₂ for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

THE PALM BEACH POST

Published Daily and Sunday
 West Palm Beach, Palm Beach County, Florida

PROOF OF PUBLICATION

STATE OF FLORIDA
 COUNTY OF PALM BEACH

Before the undersigned authority personally appeared Peter W. Ortado who on oath says that he is Classified Advertising Supervisor of The Palm Beach Post, a daily and Sunday newspaper published at West Palm Beach in Palm Beach County, Florida; that the attached copy of advertising, being a Notice in the matter of Intent to Issue PSD Permit Modification in the --- Court, was published in said newspaper in the issues of April 2, 2000.

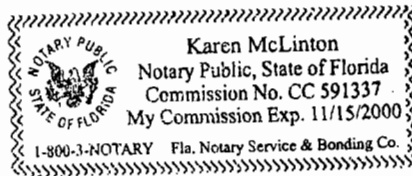
Affiant further says that the said The Post is a newspaper published at West Palm Beach, in said Palm Beach County, Florida, and that the said newspaper has heretofore been continuously published in said Palm Beach County, Florida, daily and Sunday and has been entered as second class mail matter at the post office in West Palm Beach, in said Palm Beach County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she/he has neither paid nor promised any person, firm or corporation any discount rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper.

Peter W. Ortado

Sworn to and subscribed before this 3 day of April A.D. 2000.

[Signature]

Personally known XX or Produced Identification _____
 Type of Identification Produced _____



RECEIVED

APR 10 2000

BUREAU OF AIR REGULATION

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:
 Department of Environmental Protection
 Bureau of Air Regulation
 Suite 4, 111 S. Magnolia Drive
 Tallahassee, Florida, 32301
 Telephone: 850/488-0114
 Fax: 850/922-6979
 Department of Environmental

Protection
 Southeast District
 400 North Congress Avenue
 West Palm Beach, Florida
 33401
 Telephone: 561/681-6600
 Fax: 561/681-6755
 The complete project file includes the application, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114, for additional information.
 PUB: The Palm Beach Post
 April 2, 2000



STUART NEWS PORT ST. LUCIE NEWS

(an edition of the Stuart News)

Martin County and St. Lucie County, Florida

1939 S. Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA

COUNTY OF MARTIN; COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, Mary T. Byrne, who on oath says that she is Classified Legal Advertising Representative of the Stuart News and the Port St. Lucie News, a daily newspaper published at Stuart in Martin County, Florida: that the attached copy of advertisement was published in the Stuart/Port St. Lucie News in the following issues below. Affiant further says that the said Stuart/Port St. Lucie News is a newspaper published in Stuart in said Martin County, Florida, with offices and paid circulation in Martin County and St. Lucie County, Florida, and that said newspapers have heretofore been continuously published in said Martin County, Florida, daily and distributed in Martin and St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid nor promised any person, firm or corporation any discount, rebate, commission or refund for the securing this advertisement for publication in the said newspaper. The Stuart News has been entered as second class matter at the Post Offices in Stuart, Martin County, Florida and Ft. Pierce, St. Lucie County, Florida and has been for a period of one year next preceding the first publication of the attached copy of advertisement.

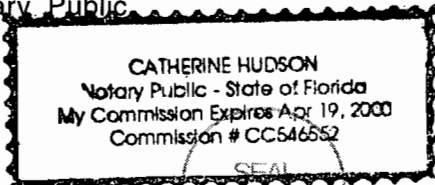
<u>Ad #</u>	<u>Date</u>	<u>Copyline</u>	<u>PO #</u>
1875778	04/02/2000	DEP PERMIT	

Subscribed and sworn to me before this date:

04/03/2000

Mary T. Byrne

Catherine Hudson
Notary Public



RECEIVED

APR 10 2000

BUREAU OF AIR REGULATION

PUBLIC NOTICE OF INTENT TO ISSUE
PSD PERMIT MODIFICATION
STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
DEP File No.: PA 90-31, PSL-FL-168
Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO₂), a combustion product, and convert it to bottled (liquid) CO₂ for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

This project is not subject to review under Section 403.506 F.S. (Power Plant Siting Act), because it provides for no expansion in steam generating capacity.

An air quality impact analysis was not conducted. Emissions from this project are largely beneficial and will not consume PSD increment and will not significantly contribute to or cause a violation of any state or federal ambient air quality standards.

The Department will issue the Final permit with the attached conditions unless a response received in accordance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

The Department will issue the permit with the attached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.569 and 120.57 F.S., before the deadline for filing a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3) of the Florida Statutes must be filed within fourteen days of publication of the public notice or within fourteen days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), however, any person who asked the Department for notice of agency action may file a petition within fourteen days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under sections 120.569 and 120.57 F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205 of the Florida Administrative Code.

RECEIVED

APR 10 2000

BUREAU OF AIR REGULATION

A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner, the name, address, and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of how and when petitioner received notice of the agency action or proposed action; (d) A statement of all disputed issues of material fact. If there are none, the petition must so indicate; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes the petitioner contends require reversal or modification of the agency's proposed action; and (g) A statement of the relief sought by the petitioner, stating precisely the action petitioner wishes the agency to take with respect to the agency's proposed action.

A petition that does not dispute the material facts upon which the Department's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by rule 28-106.301.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Department's final action may be different from the position taken by it in this notice. Persons whose substantial interests will be affected by any such final decision of the Department on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

A complete project file is available for public inspection during normal business hours, 8:00 a.m. to 5:00 p.m., Monday through Friday, except legal holidays, at:

Department of Environmental Protection
Bureau of Air Regulation
Suite 4, 111 S. Magnolia Drive
Tallahassee, Florida 32301
Telephone: 850/488-0114; Fax: 850/922-6979
Department of Environmental Protection
Southeast District
400 North Congress Avenue
West Palm Beach, Florida 33401
Telephone: 561/681-6600; Fax: 561/681-6755

The complete project file includes the application, Draft permit, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Administrator, New Source Review Section, at 111 South Magnolia Drive, Suite 4, Tallahassee, Florida 32301, or call 850/488-0114; for additional information.

Pub.: Apr. 2, 2000

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

RECEIVED

MAY 15 2000

In Re: Indiantown Cogeneration, L. P.)
Indiantown Cogeneration Facility)
Modification of Conditions)
of Certification, PA90-31C)
Martin and Okeechobee Counties,)
Florida)
_____)

BUREAU OF AIR REGULATION
OGC Case No. 00-0048

**NOTICE OF INTENT TO ISSUE PROPOSED
MODIFICATION OF POWER PLANT CERTIFICATION**

The Florida Department of Environmental Protection (Department) hereby provides notice of an intent to modify Power Plant Certification Conditions issued pursuant to the Florida Electrical Power Plant Siting Act, § 403.501, *et seq.*, Florida Statutes (F. S.). A Proposed Final Order has been prepared in accordance with Rule 62-17.211(4), Florida Administrative Code (F.A.C.), concerning the above referenced project. A copy of the proposed Final Order Modifying Conditions of Certification is attached.

The Department proposes to modify the conditions pursuant to § 403.516, F. S., and § 62-17.211(4), F.A.C., to conform the conditions to the revised Industrial Waste (IW) Permit, permit number FL0183750, issued January 19, 2000, and to conform the conditions to a modification of the Prevention of Significant Deterioration (PSD) Permit, permit number PSD-FL-168, issued April 20, 2000. The proposed modifications allow emergency discharge of cooling water and process water, clarify allowable operation rates of auxiliary boilers, allow the addition of a carbon dioxide recovery facility and a chilled water plant, allow an increase in the cooling water storage pond elevation, and allow automatic modifications for conforming conditions of certification to subsequently issued or modified federally delegated or approved permits. Additionally, the Department proposes to update the conditions to reflect the Department's current name and rule citations.

POINT OF ENTRY

Pursuant to § 403.516, F.S., and Rule 62-17.211(5), F.A.C., all parties to the certification proceeding have 45 days from the issuance of this notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response will constitute a waiver of objection to the requested modification.

Any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. The written objection must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, MS 35, Tallahassee, Florida 32399-3000.

If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to § 403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed.

Mediation is not available in this proceeding.

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Intent to Issue Proposed

Modification of Power Plant Certification was mailed to:

John Fumero
General Counsel
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

Roger G. Saberson, Esquire
70 Southeast 4th Avenue
Delray Beach, Florida 33483-4514

Norman White, Esquire
Post Office Box 1260
Lake Wales, Florida 33859-1260

Gary K. Oldehoff
County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, Florida 34996

R. Douglas Leonard
Executive Director
Central Florida Regional Planning Council
Post Office Box 2089
Bartow, Florida 33831

Michael Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard
Suite 300
Stuart, Florida 34994

Via Interagency Mail
Cari Roth, General Counsel
Department of Community Affairs
2555 Shumard Oak Boulevard
Tallahassee, Florida 32399-2100

George Long
County Administrator
Okeechobee County
304 Northwest 2nd Street
Okeechobee, Florida 34972

Via Interagency Mail
Sheauching Yu, Assistant General Counsel
Department of Transportation
Haydon Burns Building, MS 58
605 Suwannee Street
Tallahassee, Florida 32399-0450

Via Interagency Mail
Michael Palecki
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

Via Interagency Mail

Sandra Whitmire
Intergovernmental Coordination &
Review Coordinator
Department of Transportation
605 Suwannee Street, MS 28
Tallahassee, Florida 32399-0450

Michelle Golden
PG & E Generating
7500 Old Georgetown Road
Bethesda, Maryland 20814

David Burrage
Indiantown Cogeneration, L. P.
Post Office Box 1799
Indiantown, Florida 34956

on this 12th day of May 2000.

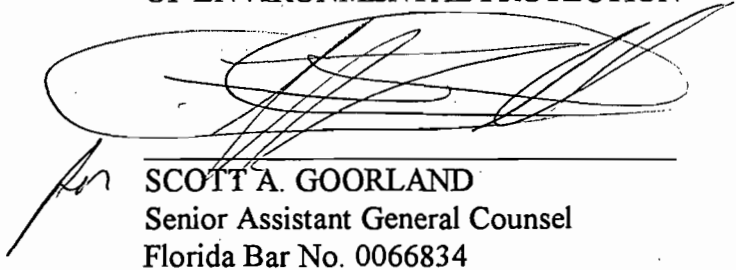
Via Interagency Mail

James Antista, General Counsel
Florida Fish and Wildlife Conservation Commission
Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600

David S. Dee
Attorney at Law
Landers & Parsons, P.A.
Post Office Box 271
Tallahassee, Florida 32302-0271

Andrew Jablonowski, P. E.
George Lipka, P. E.
Earth Tech
196 Baker Avenue
Concord, Massachusetts 01742-2167

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



SCOTT A. GOORLAND
Senior Assistant General Counsel
Florida Bar No. 0066834

Douglas Building, MS 35
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000
Telephone: (850) 488-9314/FAX 921-3000

**BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION**

In Re: Indiantown Cogeneration, L.P.)	
Indiantown Cogeneration Facility))	
Modification of Conditions)	DEP File No. PA90-31C
of Certification)	OGC Case No. 00-0048
Martin County, Florida)	
_____)	

**PROPOSED FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION**

On February 7, 1992, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration Project. The site certification order approved the construction and operation of a 330 megawatt (MW) (net) coal fired electrical power plant well and associated linear facilities to be located in Martin and Okeechobee Counties, Florida. The conditions of certification were subsequently modified on July 21, 1992, and April 3, 1995.

Pursuant to section 403.516, Florida Statutes, and rule section 62-17.211(4), Florida Administrative Code, the Department proposes to modify the conditions to conform to the revised Industrial Wastewater Facility Permit, permit number FL0183750, issued January 19, 2000, and to conform to a modification of the Prevention of Significant Deterioration (PSD) Permit, permit number PSD-FL-168, issued April 20, 2000. The proposed modifications allow emergency discharge of cooling water and process water, clarify allowable operation rates of auxiliary boilers, allow the addition of a carbon dioxide recovery facility and a chilled water plant, allow an increase in the cooling water storage pond elevation and allow automatic modifications for conforming conditions of certification to subsequently issued or modified federally delegated or approved permits. Additionally, the Department proposes to update the conditions to reflect the Department's current name and rule citations. Copies of the Department's proposed modifications, Industrial Wastewater Facility Permit, and Prevention of Significant Deterioration permit modification are available for public review.

On January 25, 2000, all parties to the original proceeding were sent a Notice of Receipt of Proposed Modification of Power Plant Certification. On May 10, 2000, all parties to the

original proceeding were furnished copies of the Notice of Intent to Issue Proposed Modification of Power Plant Certification and a copy of the proposed final order. On May 12, 2000, a Notice of Intent to Issue Proposed Modification of Power Plant Certification was published in the *Florida Administrative Weekly*. The notices specified that all parties to the original certification proceeding have 45 days from the issuance of the notice by mail to such party's last address of record in which to object to the requested modification. Failure of any of the parties to file a response constitutes a waiver of objection to the requested modification. The notices further specified that any person who is not already a party to the certification proceeding and whose substantial interest is affected by the requested modification has 30 days from the date of publication of the public notice to object in writing. If no objections are received, then a Final Order approving the modification shall be issued by the Department. If objections are raised and agreement cannot be subsequently reached, then pursuant to § 403.516(1)(c), F.S., the applicant may file a petition for modification seeking approval for those portions of the request for modification to which written objections were timely filed. No written objections to the proposed modifications have been received by the Department. Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Facility as described in the request for modification dated December 30, 1999; Industrial Wastewater Facility Permit No. FL0183750, issued January 19, 2000; and the modification of Permit No. PSD-FL-168, issued April 20, 2000, are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Indiantown Cogeneration Facility are **MODIFIED** as follows:

PART I

ADMINISTRATIVE CONDITIONS

- (1) ENTITLEMENT
- (1)-(2) NO CHANGE.
- (3) JURISDICTIONAL AGENCIES

The following agencies are deemed to have jurisdictional interest in the certification, and thus regulatory authority over the development, construction, operation, and maintenance of the facility:

Department of Environmental Protection Regulation [DEP] ~~[DER]~~

~~Game & Fresh Water~~ Fish and Wildlife Conservation Commission [FWCC] ~~[GFWFC]~~

~~Department of Natural Resources~~ [DNR]

Department of Community Affairs [DCA]

Department of Transportation [DOT]

South Florida Water ~~Eater~~-Management District [SFWMD]

Treasure Coast Regional Planning Council [TCRPC]

Martin County [MC]

Central Florida Regional Planning Council [CFRPC]

Okeechobee County [OC]

(4) NO CHANGE.

(5) TRANSFER OF CERTIFICATION

If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment shall immediately be submitted to the Florida Department of Environmental Protection Regulation and the Affected Agencies by the previous certification holder (Licensee) and the Assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

(6) – (7) NO CHANGE.

(8) RIGHT OF ENTRY

The Licensee shall allow during operational or business hours the Secretary of the Florida Department of Environmental Protection Regulation and/or authorized representatives, including personnel of the Affected Agencies, upon the presentation of credentials:

A. – D. No change.

(9) – (11) NO CHANGE.

(12) COMPLIANCE

A. Compliance with Conditions

1. No change.

2. An environmental control program shall be established under the supervision of a qualified Environmental Engineer/Specialist to assure that all construction activities conform to applicable environmental regulations and the applicable Conditions of Certification. If during construction there is detected a violation of standards, harmful effect or irreversible environmental damage not anticipated by the application, the evidence presented at the certification hearing, or a post-certification submittal, the Licensee shall notify the DEP ~~DER~~ Southeast District Office and Siting Coordination Office, as required in B.

3. No change.

4. In the event of a malfunction of the Cogeneration facility boiler's pollution control system resulting in a violation of this certification or DEP ~~DER~~ regulations, that unit shall be promptly shut down.

B. Non-compliance Notification

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department of Environmental Protection Regulation by telephone within one working day after said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. and 2. No change.

C. No change.

(13) POST CERTIFICATION REVIEW

Further information may be required by these conditions for site-specific or more detailed review and approval to determine compliance with the conditions of certification. Compliance determinations of the Department and other reviewing agencies are subject to review pursuant to Chapters 120, and 403, Florida Statutes.

A. In order to provide adequate lead time for review, such information, as developed, must be submitted for post-certification review at least 180 days prior to the intended commencement date of construction or operation of the feature undergoing review unless otherwise provided

herein. Notification of the submittal of the information, and any determinations made pursuant to these COC, shall be provided to the DEP ~~DER~~ Siting Coordination Office for record-keeping purposes.

B. and C. No change.

(14) NO CHANGE.

(15) COMMENCEMENT OF CONSTRUCTION

At least 30 days prior to the commencement of construction, the Licensee of Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office, the DEP ~~DER~~ Southeast District Office, and Affected Agencies of the construction start date. Quarterly construction status reports shall similarly be submitted by the Licensee beginning with the initial construction start date. The report shall be a short narrative describing the progress of construction.

(16) COMMENCEMENT OF OPERATION

At least 30 days prior to the commencement of operation, the Licensee or Project Engineer shall notify the DEP ~~DER~~ Siting Coordination Office and Affected Agencies of the operation start date.

(17) OPERATIONAL CONTINGENCY PLANS

A. Operating Procedures

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office a copy of written operating instructions for all aspects of the operations which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous or toxic wastes.

B. Contingency Plans

The Licensee shall develop and furnish the DEP ~~DER~~ Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans shall identify critical spare parts to be readily available.

C. and D. No change.

(18) and (19) NO CHANGE.

(20) ENFORCEMENT

The Department of Environmental ~~Protection Regulation~~, as supported by the applicable Affected Agency, may take any and all lawful actions to enforce any conditions of this Certification. Any agency which deems enforcement to be necessary shall notify the Secretary of ~~DEP DER~~ of the proposed actions. The affected agency may request the Department to initiate modification of this Certification for any change in any activity resulting from enforcement of this Certification which change will have a duration longer than 60 days.

(21) NO CHANGE.

(22) MODIFICATION OF CONDITIONS

A. Pursuant to Subsection 403.516 (1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations, conservation easements, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

B. Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately-issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or National Pollutant Discharge Elimination System (NPDES) permit for the Indiantown Cogeneration Project and the conditions of such permits shall be controlling over these Conditions of Certification.

C. All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

(23) FEDERAL ANNUAL OPERATING FEES AND PERMITS

A. DEP DER Responsibilities

The Department of Environmental ~~Protection Regulation~~ shall implement the provisions of Title V of the 1990 Clean Air Act for the Indiantown Cogeneration Project by developing Conditions of Certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with Federal Law and Federal Regulations. The

terms of such conditions shall be imposed under the modification provisions of Section 403.516(1), F.S., for which the Board specifically delegates the authority to prescribe said terms.

B. and C. No change.

PART II

DEPARTMENT OF ENVIRONMENTAL PROTECTION REGULATION

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 62-204, 62-210, 62-212, 62-296, 62-297, 17-2, 62-256, 17-256, and 62-702, 17-702, Florida Administrative Code, except for SO₂ and NO_x during startup, shutdown, and malfunction, then 40CFR60 shall apply.

A. Construction

1. General

a. No change.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DEP DER Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxiliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DEP DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DEP DER Bureau

of Air Regulation at least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. No change.

5. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter ~~62-256~~ ~~17-256~~, F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing, shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate ~~at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane at a combined total of less than 1.79×10^{12} British Thermal Units per year.~~ The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel.

2. CO₂ Recovery Plant

A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that

secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

2.3. Emissions Limitations

a. i. and ii. No change.

iii. VE (Visible Emissions)

VE from the pulverized coal boiler each-baghouse exhaust shall not exceed 10 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

VE from each other baghouse exhausts shall not exceed 10% opacity (six minute average).

No VE during lime silo loading operations (i.e., less than 5% opacity).

VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 fuel oil), shall be limited to a ~~maximum of 5,000 hours/year at the combined total heat input rates with up to 1,000 hrs/yr firing #2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

c. through g. No change.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1)B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for DEP's FDER's inspection.

i. and j. No change.

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental ~~Protection Regulation~~ pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II (1)B.2. of these conditions.

l. CO₂ Recovery Plant

The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. (Emissions from the PC boiler are regulated by Condition II.1.C.2.a.) If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.

~~3.~~ 4. Stack Testing

a. No change.

b. Compliance with emission limitation standards mentioned in Specific Condition No. ~~1~~ (1)B.2. above shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards for Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule ~~62-297.620~~ 17-2.700. ~~A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.~~

EPA Method

For Determination of

1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emissions limits.
<u>3, 3A & 3B</u>	Gas analysis when needed for calculation of molecular weight of or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in

	dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM₁₀ emissions
6, 6C, or 19	Sulfur dioxide
7, 7C, or 19 <u>7E</u>	Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emissions determination for opacity.
	(201)-At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	(202)-At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

Note: Use EPA draft method or other methods approved by the Department to test for ammonia.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The

permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O₂ and/or CO₂ content. The monitoring devices shall meet the applicable requirements of Section 62-297, 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DEP DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. No change.

d. The permittee shall provide stack sampling facilities as required by Rule 62-297.310(6), 17-2.700(4) F.A.C.

e. and f. No change.

g. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.

h. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the Department's Southeast District Office, detailing best practices for the minimization of secondary pollutant emissions.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of

commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Sections 62-210.370 and 62-210.700, 17-2-08, F.A.C.

b. and c. No change.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations shall be reported to DEP DER as specified in COC/I-(12).

(2) WETLANDS

A. No change.

B. Prior to the submission of any post-certification information to the Department, ICL shall arrange for a site inspection by DEP DER District personnel from the Southeast District office in West Palm Beach or from the Bureau of Submerged Lands and Environmental Resources Wetland Resource Management, Jurisdictional Evaluation Section, in Tallahassee to determine the extent of jurisdiction on the site and along the proposed pipeline route. At the time of the request, the Department will determine whether jurisdiction can be determined informally by the District office, or whether a binding jurisdictional declaratory statement, pursuant to Rule 62-340 17-312.040, F.A.C., is required. The permittee shall flag the outermost limits of construction for the entire pipeline route and shall provide aerial photographs at a scale determined to be appropriate by the Department prior to the site inspection to enable the District personnel to determine if the proposed pipeline will affect jurisdictional wetland areas.

C. At least 90 days prior to the anticipated start of construction, the permittee shall submit fully dimensioned or scaled drawings on 8.5" by 11" paper, signed and sealed by an engineer registered in the state of Florida, that show limits of jurisdictional wetlands that will be affected by the project. The submittal shall also include calculations showing the acreage of affected wetlands by wetland type, a narrative describing construction techniques to be used for the project at both the power plant site and along the alignment of the pipeline, measures proposed to control erosion and turbidity, and a narrative that provides:

1. a detailed description of each wetland impact area;
2. the acreage, type, and quality of all the jurisdictional wetlands that will be affected.

The drawings shall include plan view and cross-section views for each area of jurisdictional wetlands that will be affected by the project, as identified pursuant to Condition No. (2) B. above. In addition to showing the existing and proposed ~~DEP~~ ~~DER~~ jurisdictional limits, the drawing shall depict existing and proposed ground elevations, the limits of construction for the pipeline, and all existing and proposed locations, sizes and invert elevations of structures that may be located in the jurisdictional wetlands.

D. No change.

E. All clearing and construction activities shall be confined to the limits of construction as shown on the drawings that are accepted by the Department pursuant to Condition No. (2) C. above. Within 30 days of the completion of construction, ICL shall arrange a site visit by ~~DEP~~ ~~DER~~ District personnel from the Southeast Florida District office in West Palm Beach to verify that no wetland damage has occurred outside the construction limits. If wetland damage occurs outside the construction limits during construction, ICL shall submit to the Bureau of Wetland Resource Management for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approval of the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.

F. Prior to initiating construction, ICL shall submit a map and aerial photographs showing the location of all staging areas for the project construction to the Bureau of Wetland Resource Management for review and written approval. These areas shall be upland areas which are not

currently providing endangered or threatened species habitat. The staging areas shall not be used prior to receiving DEP ~~DER~~ approval.

G. and H. No change.

I. If determined to be appropriate by the Department, ICL shall provide mitigation to offset the loss and habitat degradation resulting from the construction of this project in jurisdictional wetlands.

The plan for performing the mitigation shall be submitted and approved by the Department prior to construction. The plan shall include the following information, which is to be submitted to the Bureau of Submerged Lands and Environmental Resources ~~Wetland Resource~~ Management:

1. through 6. No change.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset water quality degradation, wetland loss, and habitat degradation from this project, the permittee shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by the Department, the Department shall establish construction conditions, success criteria and monitoring plans to be carried out for the approved mitigation. These conditions, criteria and monitoring plans shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until the Department approves the mitigation plan, and the mitigation construction conditions, success criteria and monitoring plans are incorporated into the certification conditions.

J. and K. No change.

(3) DISCHARGES TO SURFACE WATERS

A. Stormwater

1. Construction

To control run-off during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or

pollutant-laden stormwater to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, beams, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden run-off. The pH of the run-off shall be kept within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters ~~17-25~~, 40E-2, and 40E-4. The Permittee shall complete the forms required by ~~17-25.09 (1)~~ and 40D-4 and submit those forms and the required information to the SFWMD for any modifications that might occur.

2. Operation

Any discharges from the site stormwater system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 62-302 ~~17-302~~, F.A.C., and the Standards of ~~Chapter 17-25, F.A.C.~~, and Chapter 40-E, F.A.C.

B. No change

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to the waters of the state, except emergency storm water-related discharges from the cooling water pond and the wastewater storage pond, as a result of extreme rainfall events and as specifically authorized by DEP Industrial Wastewater Permit No. FL0183750, issued on January 19, 2000, or as subsequently amended, and subject to all the terms and conditions provided therein. An extreme rainfall event is defined as a rainfall event exceeding a 100 year/72 hour storm for the wastewater storage pond, but the extreme rainfall event for the cooling water pond is defined as an event exceeding the 25 year/72 hour storm.

D. Tanks

Diesel fuel also will be used to fuel on-site locomotives which move rail cars around the site. Diesel fuel will be delivered by truck and stored in above-ground storage tanks designed, constructed and maintained in accordance with Chapter 62-761 ~~17-792~~, F.A.C., including secondary containment. Stormwater will be collected from the bermed area around the tanks and pumped back to the plant for treatment and use. Any pollutant storage tanks on-site for facility

construction activities must also be above-ground and designed, constructed and maintained in accordance with Chapter ~~62-761~~ ~~17-762~~, F.A.C., including secondary containment.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwater shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable Water Quality Standards of Sections ~~62-520.400~~ ~~17-301.402~~ and ~~62-520.404~~ ~~17-301.404~~, F.A.C. If monitoring should indicate a violation of the standards, the licensee shall immediately notify the Southeast District office and SFWMD and institute remedial action.

2. Groundwater Monitoring Program

a. A groundwater monitoring plan shall be submitted within 180 days of certification in accordance with Rule ~~62-522~~ ~~17-28.700~~ F.A.C., for approval by the Southeast District Office. The groundwater monitoring program shall be reviewed and approved in accordance with COC I.13. The complete groundwater monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of groundwater monitoring, testing, and analysis. The monitoring plan shall contain the following information:

1. and 2. No change.

3. Monitoring wells shall be constructed in accordance with Rule ~~62-532~~ ~~17-532~~, F.A.C., except as follows: The minimum inside diameter shall be two inches. Flush threaded couplings shall be used to join polyvinyl chloride (PVC) pipe.

b. and c. No change.

d. Upon completion of construction of the groundwater monitoring system, but no less than 12 months before the commencement of operation, the Permittee shall sample all groundwater monitoring wells for the Primary and Secondary Drinking Water parameters included in Chapter ~~62-550~~ ~~17-550~~, F.A.C., Public Drinking Water Systems. The specific parameters to be sampled are listed in Part II, Quality Standards, Analytical Methods, Sampling, Sections ~~62-550.310~~ ~~17-550.310~~ and ~~62-550.320~~ ~~17-550.320~~, F.A.C.

e. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapters ~~62-4.246~~ ~~17-4.246~~; ~~62-~~

~~160 17-160~~, and ~~62-550, Part V 17-301-401~~, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

f. and g. No change.

h. For four quarters commencing at least 12 months before the start of commercial operation all groundwater monitoring wells shall be sampled and the samples analyzed for the parameters on the following list. Thereafter, one down gradient well, as selected by the Department, shall be sampled and analyzed annually for parameters on the following list. Upon demonstration that key indicators such as sulfate, iron, pH or chloride show a significant increase over background levels, all affected wells shall be sampled and analyzed for the following parameters:

(No change to chart.)

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with quarterly data and shall be measured in reference to 1929 NGVD for all monitoring wells (1/100 of a foot) and surface waters (1/10 of a foot).

i. No change.

j. All groundwater analysis shall be submitted within 60 days of sampling on ~~DEP~~ DER form ~~62-522.900(2) 17-1-216(2)~~ with a summary of all exceedances of the MCL's per Rule 62-550, F.A.C., 17-550 to: Florida Department of Environmental Protection Regulation, Southeast Florida District Office, ~~400 North 1900 South~~ Congress Avenue, West Palm Beach, Florida ~~33401 32399-2400~~.

k. No change.

(5) SANITARY WASTES

A. No change.

B. A complete submittal of plans, drawings and specifications for waste pumps, lift stations, sewage collection systems, and wastewater collection systems in accordance with appropriate ~~DEP~~ DER rules shall be furnished to the Southeast District Office for approval at least 180 days prior to start of construction for the particular of such component. In order to obtain approval, the receiving sewage treatment plant shall indicate it has available capacity and

its acceptance of the proposed connection of the wastewater collection system. Also plans and specifications for connections to off-site sewage and wastewater transmission systems shall be furnished to the Southeast District Office for review in accordance with Condition I (13).

Department approval shall be obtained prior to the start of construction.

(6) SOLID/HAZARDOUS WASTES

A. Construction

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701 ~~17-701~~, F.A.C. Hazardous waste/materials handling contingency plans shall be submitted to the Southeast District Office for review and approval at least 90 days prior to start of construction.

B. Operation

1. No bottom ash, fly ash, spent acid gas control media, wastewater treatment sludges, or other forms of solid waste shall be disposed of in Florida, except in a licensed off-site landfill in accordance with all applicable portions of Chapters 62-701 ~~17-701~~ and 62-701 ~~17-702~~, F.A.C. Plans of solid waste disposal contingency plans for handling hazardous waste/materials, shall be provided to the Southeast District Office and the Division of Waste Management for review and approval at least 90 days prior to start of operation of the ICL Unit. Review shall be performed in accordance with Condition I(13). The final plans for this facility shall include provisions for the isolated temporary handling of suspected hazardous, or toxic wastes. The ICL shall not be operated until an out of state disposal area or a Florida landfill capable of disposing of plant wastes provides a letter or contract indicating acceptance of such wastes.

2. through 5. No change.

(7) OPERATIONAL SAFEGUARDS

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the ~~Industrial Safety Section of the Florida Department of Labor and Employment Security, Division of Safety Commeree~~ will be complied with during operation.

(8) and (9) NO CHANGE.

PART III

GAME AND FRESH WATER FISH AND WILDLIFE CONSERVATION COMMISSION

(1) No more than 60 days prior to commencement of any clearing activities on the Project Site or in the pipeline right-of-way, respectively, a wildlife survey shall be conducted of the site or the pipeline right-of-way, whichever is applicable, the purpose of which is to update and supplement the survey results presented in the Site Certification Application concerning the presence of listed species (endangered or threatened species, or species of special concern) likely to occur on the site or in the right-of-way based on range and habitat. This survey shall be consistent with methodologies established or accepted by the Florida ~~Game and Fresh Water Fish and Wildlife Conservation~~ Commission (FFWCC) (FGFWFC). Results of said survey(s) shall be submitted to the ~~FFWCC FGFWFC~~ and the United States Fish and Wildlife Service within seven days of completion thereof. If the survey indicates that any listed species will be affected by construction of the Project or pipeline, the Permittee and the ~~FFWCC FGFWFC~~, shall, within 15 days of receipt of the survey by the ~~FFWCC FGFWFC~~, consult and determine the appropriate measures necessary to avoid, minimize, mitigate, or otherwise appropriately address such impacts.

(2) ICL shall place or construct culverts or similar structures to facilitate movement of wildlife across or beneath the perimeter access road to and from upland preserve areas of the Project site. The structures shall be located in reference to the Project's Site layout, as follows:

(a) through (c) No change.

These structures shall be designed to remain dry during a two year storm event and shall be approximately 3 feet high and 5 feet wide.

ICL shall submit detailed designs of the structures and their location to the ~~FFWCC FGFWFC~~ for review and approval 60 days prior to construction of the portions of the access road being culverted.

(3) No change.

(4) At least 60 days before commencement of onsite construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water Fish and Wildlife~~

Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through an certified burn specialist and including, but not limited to burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures to be taken to remove exotic vegetation from both uplands and wetlands; legal instrument(s) by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

PART Part-IV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. LEGAL / ADMINISTRATIVE CONDITIONS

1. GENERAL

a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental Protection Regulation and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. – i. No change.

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. Operation Authorization

Operation of the cogeneration facility shall not begin until the Florida Department of Environmental Protection ~~Regulation~~ has received an executed agreement between the Permittee and an entity capable of receiving and disposing of the combustion waste products generated by the proposed facility.

l. No change

2. PROCESSING OF INFORMATIONAL REQUESTS

a. - d. No change

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule ~~62-17.211~~ 17-17.211, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. No change

B. WATER USE CONDITIONS

1. GENERAL

a. No change

b. Impacts on Existing Legal Uses

~~The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to~~

~~curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:~~

- ~~_____ (1) A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);~~
- ~~_____ (2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~
- ~~_____ (3) Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or~~
- ~~_____ (4) A change in water quality that causes impairment or loss of use of a well or water body.~~

The Permittee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. The adverse impacts can include:

- _____ (1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;
- _____ (2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;
- _____ (3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or
- _____ (4) A change in water quality caused by the Permittee that results in significant impairment or loss of use of a well or water body.

c. Impact on Existing Off-Site Land Uses

~~The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to~~

~~the enforcement provisions of Conditions IV.a.1.1 of these conditions. The adverse impacts can include:~~

- ~~(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~
- ~~(2) Land collapse or subsidence caused by a reduction in water levels;~~
- ~~(3) Damage to crops and other vegetation, causing financial harm to the landowner;~~
- ~~and/or~~
- ~~(4) Damage to the habitat of rare, endangered or threatened species.~~

The Permittee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

- (1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;
- (2) Land collapse or subsidence caused by a reduction in water levels; and/or
- (3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources

The Permittee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

- (1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;
- (2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;
- (3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;
- (4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or

5) Harm to the natural system including damage to habitat for rare or endangered species.

d e. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40-E ~~40E-3~~ (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	Maximum Annual Allocation (MGY)	Maximum Daily Source Allocation (MGD)
L-63N Canal	1484.00 <u>1942.00</u>	4.69 <u>5.32</u>
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridian Aquifer	174.0	2.32
<u>Surficial Aquifer</u>	<u>3.0</u>	<u>0.04</u>

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD, except as provided for in subsection (7) below.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD, or during tests and maintenance on the wells. Maintenance is defined as one hour of operation per week for each well or the minimum operation of the pump necessary to maintain mechanical integrity as specified by the pump manufacturer.

(3) No change

(4) Any withdrawals from the L-63N Canal, ~~or~~ the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) No change

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial Aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

(7) When operation of the SFWMD's S-191 control structure during flood events results in a water elevation of less than 17.50' NGVD in the L-63N Canal, withdrawals from the L-63N Canal may continue subject to the permittee obtaining prior confirmation from the SFWMD's Okeechobee Field Station (7:00 a.m. to 4:00 p.m., Monday through Friday) or the SFWMD's West Palm Beach Operations Control Center that the SFWMD is in a flood control operations mode.

(8) The permittee shall provide documentation of SFWMD approval of withdrawals from the L-63N Canal below 17.50' when the SFWMD is in a flood control operations mode. The documentation shall be in the form of a letter faxed to the SFWMD's West Palm Beach Operations Control Center within 24 hours of the verbal request to continue withdrawals and shall indicate the date and approximate time of approval and the name of the SFWMD employee granting the approval.

c. Authorized Withdrawal Facilities

2 - ~~2,550~~ 3,700 GPM Surface Water Pumps in L 63N

1 - 10" x 1340' Flowing Floridan Aquifer Well cased to 500'
(existing well)

1 - 10" x 1265' Flowing Floridan Aquifer Well cased to 750'

2 - 15" x 1350' Flowing Floridan Aquifer Wells cased to 750'

2 - 15" x 1650' Flowing Floridan Aquifer Wells cased to 1487'

1 - 8" x 118' Surficial Aquifer Well cased to 78'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD (~~See also Condition E.3.a(5)~~). except as provided for in Conditions B.2.b(1), (2), and (7).

e. No change.

f. Modification of Authorized Withdrawals

By January 1, 2005, and every ten years thereafter, unless extended by mutual agreement between the Permittee and SFWMD, the Permittee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information and issue a written notification to DEP DER and the Permittee as to whether the maximum annual withdrawals of water for consumptive use authorized by this certification remain in compliance with the provisions of Chapter 373, F.S., and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, SFWMD shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remains in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Section 403.516(1)(c) and 120.57, F.S. In any proceeding conducted pursuant to this Condition of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's non-procedural criteria. The Permittee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use

is consistent with the non-procedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The hearing officer shall submit a recommended order to the Siting Board whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Floridan Aquifer Withdrawals

The authorized withdrawals from the Floridan aquifer are subject to the submittal of the following tests and analyses, a SFWMD evaluation of the results for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., and SFWMD's written approval to initiate withdrawals. The following information shall be submitted:

(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by ~~DER~~ FDEP and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridan aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for approval at least 30 days prior to the commencement of the test.

(2) and (3) No change

b. - e. No change.

f. Water Conservation Plan

Within two (2) years of issuance of the modified Certification Order, the Permittee shall submit a Water Conservation Plan required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Permittee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Permittee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

C. SURFACE WATER MANAGEMENT CONDITIONS

1. GENERAL CONDITIONS

a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD ~~Field Engineer~~ Environmental Resource Compliance Division that the facilities are ready for inspection and approval. Such notification shall include as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. - k. No change.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. No change.

b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGVD 1-2" V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-2" V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader

	swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at 37.5' <u>38.5'</u> NGVD.

c. - e. No change.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. - d. No change.

e. Surface Water Quality Sampling and Monitoring Program for Surface Water Discharges

~~Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.~~

~~(1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames.~~

MONITOR TYPE AND SCHEDULE	PARAMETERS
A. GENERAL (EVERY OTHER MONTH)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, pH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.
B. ORGANIC (SEMI-ANNUAL)	OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.
C. METALS (SEMI-ANNUAL)	ALUMINUM, ANTIMONY, ARSENIC,

	BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.
--	--

~~(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.~~

Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable FDEP and EPA criteria. The monitoring results shall be reported to the SFWMD at the intervals specified in the applicable FDEP Conditions of Certification.

~~(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.~~

f. No change.

D. NO CHANGE.

E. LAND MANAGEMENT CONDITIONS

1. NO CHANGE.

2. GENERAL DESIGN CONDITIONS

a. through d. No change.

e. All excavations shall be in accordance with FDEP ~~DER~~ requirements and silt booms shall be employed where necessary.

f. – n. No change.

3. ADDITIONAL INFORMATION SUBMITTALS

a. Construction Plans for Authorized Uses in SFWMD Right of Way

Prior to the commencement of construction of any portion of the withdrawal facilities and associated piping to be located within the SFWMD ROW, the Permittee shall submit

complete detailed construction drawings showing the proposed facilities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall be identical to the plans to be provided to the Permittee's contractor, shall depict the proposed facilities in both plan and profile views and shall show at a minimum:

(1) - (4) No change.

(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Conditions IV.B.2.b.(1) and 7 and IV.B.2.d.);

(6) - (9) No change.

b. No change.

PART V

TREASURE COAST REGIONAL PLANNING COUNCIL

1. - 4. No change.

5. At least 60 days prior to construction, ICP shall submit and upland preserve and wetland management plan to the Florida ~~Game and Fresh Water Fish and Wildlife Conservation~~ Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

6. No change.

PART VI

DEPARTMENT OF TRANSPORTATION

- 1.-8. No change.
9. No new access to the State Highway System is proposed in the site certification modification proposed for calendar year 2000. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.
10. If any overweight or overdimensional vehicles are operated by the applicant, permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code, must be adhered to.
11. No new use of State of Florida right of way or transportation facilities, including any new or relocated transmission lines, is proposed via the calendar year 2000 modification. If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46.001, Utilities Installation or Adjustment, Florida Administrative Code.

PART VII

NO CHANGE.

PART VIII

DEPARTMENT OF COMMUNITY AFFAIRS

1. – 5. No change.

6. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida ~~Game and Fresh Water Fish~~ and Wildlife Conservation Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking and vegetation control; if controlled burning is proposed to control vegetation; a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future development uses; and the entity responsible for management.

PART IX

NO CHANGE.

PART X

TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

1. In the event that the facilities, pipeline or improvements constructed or maintained by ICL under this certification are placed on, under, over, or across lands owned by the Board of Trustees of the Internal Improvement Trust Fund, ICL shall first obtain the consent of the Trustees for the use of such lands prior to the construction of those facilities. Such requests for consent shall be made and granted pursuant to Chapter 253, F.S., and Chapter 18-21, F.A.C. The issuance of such consent shall be based upon the information provided during the certification proceeding and such other information necessary to demonstrate compliance with Chapter 253, F.S., and Chapter 18-21, F.A.C.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate district court of appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this _____ day of _____ 2000, in Tallahassee, Florida.

**STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

DRAFT

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
Telephone: (850) 488-7131

FILING IS ACKNOWLEDGED ON THIS DATE, PURSUANT TO
§120.52, FLORIDA STATUTES, WITH THE DESIGNATED
DEPARTMENT CLERK, RECEIPT OF WHICH IS HEREBY
ACKNOWLEDGED.

CLERK

DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying

Conditions of Certification was mailed to:

John Fumero
General Counsel
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

Roger G. Saberson, Esquire
70 Southeast 4th Avenue
Delray Beach, Florida 33483-4514

Norman White, Esquire
Post Office Box 1260
Lake Wales, Florida 33859-1260

Gary K. Oldehoff
County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, Florida 34996

R. Douglas Leonard
Executive Director
Central Florida Regional Planning Council
Post Office Box 2089
Bartow, Florida 33831

Michael Busha
Executive Director
Treasure Coast Regional Planning Council
301 East Ocean Boulevard
Suite 300
Stuart, Florida 34994

*** Via Interagency Mail**
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Tallahassee, Florida 32399-2100

George Long
County Administrator
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304 Northwest 2nd Street
Okeechobee, Florida 34972

*** Via Interagency Mail**
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Tallahassee, Florida 32399-0450

*** Via Interagency Mail**
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Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

*** Via Interagency Mail**

Sandra Whitmire
Intergovernmental Coordination & Review Coordinator
Department of Transportation
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Tallahassee, Florida 32399-0450

Michelle Golden
PG & E Generating
7500 Old Georgetown Road
Bethesda, Maryland 20814

David Burrage
Indiantown Cogeneration, L. P.
Post Office Box 1799
Indiantown, Florida 34956

on this _____ day of _____ 2000.

*** Via Interagency Mail**

James Antista, General Counsel
Florida Fish And Wildlife Conservation Commission
Bryant Building
620 South Meridian Street
Tallahassee, Florida 32399-1600

David S. Dee
Attorney At Law
Landers & Parsons, P.A.
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Andrew Jablonowski, P. E.
George Lipka, P. E.
Earth Tech
196 Baker Avenue
Concord, Massachusetts 01742-2167

DRAFT

SCOTT A. GOORLAND
Senior Assistant General Counsel
Florida Bar No. 0066834

DEP ROUTING AND TRANSMITTAL SLIP

TO: (NAME, OFFICE, LOCATION)

1. Mike Halpin

2. MS 5500

3. _____

4. _____

5. _____

PLEASE PREPARE REPLY FOR:

____ SECRETARY'S SIGNATURE

____ DIV/DIST DIR SIGNATURE

____ MY SIGNATURE

____ YOUR SIGNATURE

____ DUE DATE _____

ACTION/DISPOSITION

____ DISCUSS WITH ME

____ COMMENTS/ADVISE

____ REVIEW AND RETURN

____ SET UP MEETING

____ FOR YOUR INFORMATION

____ HANDLE APPROPRIATELY

____ INITIAL AND FORWARD

____ SHARE WITH STAFF

____ FOR YOUR FILES

COMMENTS:

FROM: Jamara Forbes DATE: 5/12/00 PHONE: 1-9682

INTEROFFICE MEMORANDUM

Date: 14-Apr-2000 03:52pm
From: Hamilton Oven TAL 850/487-0472
OVEN_H@A1
Dept:
Tel No:

To: Mike Halpin

(Mike.Halpin@dep.state.fl.us)

Subject: Indiantown Cogen

Attached are some comments from Indiantown on the draft Modification Order.
What is your opinion of the changes?

INTEROFFICE MEMORANDUM

Date: 14-Apr-2000 02:05pm
From: Burrage, David
David.Burrage@gen.pge.com
Dept:
Tel No:

Subject: Indiantown Cogeneration LP Site Cert Modifications.

> uck,
>
> Reviewing the Indiantown proposed final order we have some additions that
> we'd appreciate it if you could include. Hopefully, these are minor
> and can get addressed without any trouble.
>
> The additions are:
>
> - Language for the aux. boilers consistent with the 3/23/2000 Draft PSD
> Permit Modification. Aux. boiler capacity is discussed in two places in
> the
> Conditions of Certification; we've added the word "each" to the first
> discussion and added in the second discussion to be consistent with the
> PSD.
>
> - Minor modifications to the stack test methods and opacity limits
> consistent with the current PSD and Title V permits. The changes we added
> make the Conditions of Certification consistent with the PSD and Title V.
>
> - Addition of standard "modification" language. We request this to
> ensure
> future consistency among the PSD, Title V, NPDES and COC conditions.
>
> I've attached two files. The one called Redline.doc should show the
> changes
> we're requesting in red. The one called Revised.doc has those changes
> incorporated.
>
> We appreciate the courtesy copy of this proposed final order, and we hope
> you'll consider these changes. We will call you shortly to confirm
> receipt
> of this email and to discuss.
>
> Thanks again,
>
> David Burrage
>
> <<redlined.doc>> <<revised.doc>> <<redlined.doc>> <<revised.doc>>

PG&E Generating, PG&E Energy Trading and any other
company referenced herein that uses the PG&E name or
logo are not the same company as Pacific Gas and
Electric Company, the regulated California utility. Neither

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Indiantown Cogeneration, L.P.)
 Indiantown Cogeneration Facility) DEP CASE NO. PA 90-31C of
 Modification of Conditions) OGC Case No. 00-0048
Certification))
 Martin County, Florida))
_____)

**PROPOSED FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION**

On February 7, 1992, the Governor and Cabinet, sitting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration Project. The site certification order approved the construction and operation of a 330 MW (net) coal fired electrical power plant well and associated linear facilities to be located in Martin and Okeechobee Counties, Florida. The conditions of certification were subsequently modified on July 21, 1992, and April 3, 1995.

The Department proposes to modify the conditions to conform to the revised Industrial Waste Permit Number FL0183750 issued January 19, 2000, allowing emergency discharge of cooling water and process water, to clarify allowable operation rates of auxiliary boilers, to allow the addition of a carbon dioxide recovery facility and a chilled water plant, and to allow increasing the cooling water storage pond elevation pursuant to section 403.516, Florida Statutes, and Florida Administrative Code rule section 62-17.211(4). Copies of the Department's proposed modifications and Industrial Waste Permit are available for public review. By copies of this proposed Order and supporting documentation, all parties to the original proceeding are hereby noticed of the intent to modify. A hearing could be held if a party to the original certification hearing objects within 45 days from receipt of the Proposed Order or if any other person, whose interests would be substantially affected, objected in writing within 30 days after issuance of the public notice. If no objection is timely received, the following will occur:

The proposed changes to the Indiantown Cogeneration Facility as described in the January 19, 2000, Permit No. FL0183750 and the request for modification dated December 30, 1999, are APPROVED. Pursuant to Section 403.516(1)(b), F.S., the conditions of certification for the Indiantown Cogeneration Facility are **MODIFIED** as follows:

I. (24) Modification of Conditions

Subject to the notice requirements of 403.516(1), F.S., the certification shall be automatically modified to conform to subsequent DEP-issued amendments, modifications, or renewals of any separately-issued Prevention of Significant Deterioration (PSD) permit, Title V Air Operation permit, or National Pollutant Discharge Elimination System (NPDES) permit for the project and the conditions of such permits shall be controlling over these Conditions of Certification.

II.(1) B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane at a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel.

2. CO₂ Recovery Plant

A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. A slipstream, consisting of between 5% to 10% of the main boiler flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

2. 3. Emissions Limitations

a. iii. VE (Visible Emissions)

VE from the pulverized coal boiler baghouse exhaust shall not exceed 10 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

VE from each other baghouse exhausts shall not exceed 10% opacity (six minute average).

No VE during lime silo loading operations (i.e., less than 5% opacity).

VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 fuel oil), shall be limited to a maximum of 5,000 hours/year at the combined total heat input rates with up to 1,000 hrs/yr firing #2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. a combined total of less than 1.79×10^{12} British Thermal Units per year. The Auxiliary Boilers are each permitted to run 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

c through k. No change

l. CO₂ Recovery Plant

The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler (emissions from the PC boiler are regulated by Condition II.1.C.2.a). If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.

3. 4. Stack Testing—No change

b. Compliance with emission limitation standards mentioned in Specific Conditions No. 1 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards for Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90-days prior to testing.

<u>EPA Method</u>	<u>For Determination of</u>
<u>1</u>	<u>Selection of sample site and velocity traverses</u>
<u>2</u>	<u>Stack gas flow rate when converting concentrations to or from mass emissions limits</u>
<u>3, 3A & 3B</u>	<u>Gas analysis when needed for calculation of molecular weight of or percent O₂</u>
<u>4</u>	<u>Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.</u>

<u>5</u>	<u>Particulate matter concentration and mass emissions</u>
<u>201 or 201A</u>	<u>PM₁₀ emissions</u>
<u>6, 6C, or 19</u>	<u>Sulfur dioxide</u>
<u>7, 7C, or 19 7E</u>	<u>Nitrogen oxide emissions from stationary sources</u>
<u>8</u>	<u>Sulfuric acid mist from stationary source</u>
<u>9</u>	<u>Visible emissions determination for opacity</u>
	- <u>At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.</u>
	- <u>At least one lime vehicle unloading into the lime silo (from start to finish)</u>
<u>22</u>	<u>Fugitive emissions from transfer points</u>
<u>10</u>	<u>Carbon monoxide</u>
<u>12 or 101A</u>	<u>Lead</u>
<u>13A or 13B</u>	<u>Fluorides</u>
<u>18 or 25</u>	<u>Volatile organic compounds</u>
<u>101A or 108</u>	<u>Mercury</u>
<u>104</u>	<u>Beryllium</u>

Note: Use EPA draft method or other methods approved by the Department to test for ammonia.

C. Monitoring and Reporting

1. Air Monitoring Program

a. through f. No change

g. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.

h. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the Department's Southeast District Office, detailing best practices for the minimization of secondary pollutant emissions.

(2) Wetlands - No change

(3) Discharges to Surface Waters

A. and B. No change

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to the waters of the state, except emergency storm water-related discharges from the cooling water pond and the wastewater storage pond, as a result of extreme rainfall events and as specifically authorized by DEP Industrial Wastewater Permit No. FL0183750, issued on January 19, 2000, or as subsequently amended, and subject to all the terms and conditions provided therein. An extreme rainfall event is defined as a rainfall event exceeding a 100 year/72 hour storm for the wastewater storage pond, but the extreme rainfall event for the cooling water pond is defined as an event exceeding the 25 year/72 hour storm.

Part IV.A.

1.a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental ~~Protection Regulation~~ and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. - I. No change

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. - l. No change

2.a. - d. No change

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule ~~62-17.211~~ 17-17.211, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the

modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. No change

B. WATER USE CONDITIONS

1.a. No change

b. Impacts on Existing Legal Uses

~~The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:~~

~~_____ (1) _____ A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);~~

~~_____ (2) _____ A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~_____ (3) _____ Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or~~

~~_____ (4) _____ A change in water quality that causes impairment or loss of use of a well or water body.~~

The Permittee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;

(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;

(3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or

(4) A change in water quality caused by the Permittee that results in significant impairment or loss of use of a well or water body.

c. Impact on Existing Off-Site Land Uses

~~The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to the enforcement provisions of Conditions IV.a1.1 of these conditions. The adverse impacts can include:~~

~~(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(2) Land collapse or subsidence caused by a reduction in water levels;~~

~~(3) Damage to crops and other vegetation, causing financial harm to the landowner; and/or~~

~~(4) Damage to the habitat of rare, endangered or threatened species.~~

The Permittee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;

(2) Land collapse or subsidence caused by a reduction in water levels; and/or

(3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources

The Permittee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;

(2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;

(3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;

(4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or

(5) Harm to the natural system including damage to habitat for rare or endangered species.

d e. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter ~~40-E~~ 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	Maximum Annual Allocation (MGY)	Maximum Daily Source Allocation (MGD)
L-63N Canal	1484.00 <u>1942.00</u>	4.69 <u>5.32</u>

Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridian Aquifer	174.0	2.32
<u>Surficial Aquifer</u>	<u>3.0</u>	<u>0.04</u>

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD, except as provided for in subsection (7) below.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD: or during tests and maintenance on the wells. Maintenance is defined as one hour of operation per week for each well or the minimum operation of the pump necessary to maintain mechanical integrity as specified by the pump manufacturer.

(3) No change

(4) Any withdrawals from the L-63N Canal, ~~or~~ the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) No change

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial Aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

(7) When operation of the SFWMD's S-191 control structure during flood events results in a water elevation of less than 17.50' NGVD in the L-63N Canal, withdrawals from the L-63N Canal may continue subject to the permittee obtaining prior confirmation from the SFWMD's Okeechobee Field Station (7:00 a.m. to 4:00 p.m., Monday through Friday) or the SFWMD's West Palm Beach Operations Control Center that the SFWMD is in a flood control operations mode.

(8) The permittee shall provide documentation of SFWMD approval of withdrawals from the L-63N Canal below 17.50' when the SFWMD is in a flood control operations mode. The documentation shall be in the form of a letter faxed to the SFWMD's West Palm Beach Operations Control Center within 24 hours of the verbal request to continue withdrawals and shall indicate the date and approximate time of approval and the name of the SFWMD employee granting the approval.

c. Authorized Withdrawal Facilities

- 2. - ~~2,550~~ 3,700 GPM Surface Water Pumps in L 63N

- 1 - 10" x 1340' Flowing Floridan Aquifer Well cased to 500'
(existing well)

- 1 - 10" x 1265' Flowing Floridan Aquifer Well cased to 750'

- 2 - 15" x 1350' Flowing Floridan Aquifer Wells cased to 750'

- 2 - 15" x 1650' Flowing Floridan Aquifer Wells cased to 1487'

- 1 - 8" x 118' Surficial Aquifer Well cased to 78'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD (~~See also Condition E.3.a(5)~~), except as provided for in Condition B.2.b(1), (2), and (7).

e. - f. - No change

3.a.(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by ~~DER~~ FDEP and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridan aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for

approval at least 30 days prior to the commencement of the test.

(2) - (3) No change

b. - e. No change

f. Water Conservation Plan

Within two (2) years of issuance of the modified Certification Order, the Permittee shall submit a Water Conservation Plan required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Permittee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Permittee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

C.1.a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD Field Engineer Environmental Resource Compliance Division that the facilities are ready for inspection and approval. Such notification shall include

as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. - k. No change

2.a. No change

2.b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGVD 1-2' V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-2' V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at 37.5' 38.5' NGVD.

c. - e. No change

3.a. - d. No change

e. Surface Water Quality Sampling and Monitoring Program for Surface Water Discharges.

~~Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.~~

(1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames:

MONITOR TYPE AND SCHEDULE	PARAMETERS
A. GENERAL (EVERY OTHER MONTH)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, pH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.
B. ORGANIC (SEMI-ANNUAL)	OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.
C. METALS (SEMI-ANNUAL)	ALUMINUM, ANTIMONY, ARSENIC, BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.

(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.

Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable FDEP and EPA criteria. The monitoring results shall be reported to the SFWMD at the intervals specified in the applicable FDEP Conditions of Certification.

(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 62-302 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.

f. No change.

D. No change

E.2.e. All excavations shall be in accordance with FDEP DER requirements and silt booms shall be employed where necessary.

E.3.a.(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Conditions IV.B.2.b.(1) and 7 and IV.B.2.d.);

VI. Department of Transportation

1.-7. No change

8. No new access to the State Highway System is proposed in the site certification modification proposed for calendar year 2000. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

9. If any overweight or overdimensional vehicles are operated by the applicant, permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code, must be adhered to.

10. No new use of State of Florida right of way or transportation facilities, including any new or relocated transmission lines, is proposed via the calendar year 2000 modification. If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46.001, Utilities Installation or Adjustment, Florida Administrative Code.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this _____ day of _____, 2000, in Tallahassee, Florida.

**STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: Indiantown Cogeneration, L.P.)	
Indiantown Cogeneration Facility))	
Modification of Conditions)	DEP CASE NO. PA 90-31C
Certification)	OGC Case No. 00-0048
Martin County, Florida)	
_____)	

**PROPOSED FINAL ORDER MODIFYING
CONDITIONS OF CERTIFICATION**

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I. (24) Modification of Conditions

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II.(1) B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane at a combined total of less than 1.79×10^{12} British Thermal Units per year. The auxiliary boilers are each permitted to operate 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel.

2. CO₂ Recovery Plant

A CO₂ recovery plant is permitted to operate continuously for 8,760 hours per year. A slipstream, consisting of between 5% to 10% of the main boiler flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.

~~2.~~ 3. Emissions Limitations

a. iii. VE (Visible Emissions)

VE from the pulverized coal boiler baghouse exhaust shall not exceed 10 percent opacity (6 minute average), except for one 6-minute period per hour of not more than 27 percent opacity.

VE from each other baghouse exhausts shall not exceed 10% opacity (six minute average).

No VE during lime silo loading operations (i.e., less than 5% opacity).

VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 fuel oil), shall be limited to a ~~maximum of 5,000 hours/year at the combined total heat input rates with up to 1,000 hrs/yr firing #2 Fuel Oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane.~~ a combined total of less than 1.79×10^{12} British Thermal Units per year. The Auxiliary Boilers are each permitted to run 5,000 full load equivalent hours per calendar year, with no more than 1,000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 Fuel Oil:

c through k. No change

l. CO₂ Recovery Plant

The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler (emissions from the PC boiler are regulated by Condition II.1.C.2.a.). If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.

3. 4. Stack Testing

b. Compliance with emission limitation standards mentioned in Specific Conditions No. 1 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards for Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700. ~~A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.~~

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses
2	Stack gas flow rate when converting concentrations to or from mass emissions limits
<u>3, 3A & 3B</u>	Gas analysis when needed for calculation of molecular weight of or percent O ₂
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.

5	Particulate matter concentration and mass emissions
201 or 201A	PM ₁₀ emissions
6, 6C, or 19	Sulfur dioxide
7, 7C, or 19 7E	Nitrogen oxide emissions from stationary sources
8	Sulfuric acid mist from stationary source
9	Visible emissions determination for opacity
	- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
	- At least one lime vehicle unloading into the lime silo (from start to finish)
22	Fugitive emissions from transfer points
10	Carbon monoxide
12 or 101A	Lead
13A or 13B	Fluorides
18 or 25	Volatile organic compounds
101A or 108	Mercury
104	Beryllium

Note: Use EPA draft method or other methods approved by the Department to test for ammonia.

C. Monitoring and Reporting

1. Air Monitoring Program

a. through f. No change

g. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions accurately accounts for the exhaust gasses ducted to the CO₂ plant.

h. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the Department's Southeast District Office, detailing best practices for the minimization of secondary pollutant emissions.

(2) Wetlands - No change

(3) Discharges to Surface Waters

A. and B. No change

C. Wastewater

There shall be no discharge of industrial or domestic wastewaters from the site to the waters of the state, except emergency storm water-related discharges from the cooling water pond and the wastewater storage pond, as a result of extreme rainfall events and as specifically authorized by DEP Industrial Wastewater Permit No. FL0183750, issued on January 19, 2000, or as subsequently amended, and subject to all the terms and conditions provided therein. An extreme rainfall event is defined as a rainfall event exceeding a 100 year/72 hour storm for the wastewater storage pond, but the extreme rainfall event for the cooling water pond is defined as an event exceeding the 25 year/72 hour storm.

Part IV.A.

1.a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental ~~Protection Regulation~~ and the SFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. - I. No change

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD ~~Field Engineering~~ Environmental Resource Compliance Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. - l. No change

2.a. - d. No change

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quantity and/or quality of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule ~~62-17.211~~ 17-17.211, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the

modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. No change

B. WATER USE CONDITIONS

1.a. No change

b. Impacts on Existing Legal Uses

~~The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to curtail withdrawal rates pursuant to the enforcement provisions of Condition IV.A.1.1 of these conditions. The adverse impacts can include:~~

~~_____ (1) _____ A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);~~

~~_____ (2) _____ A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~_____ (3) _____ Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or~~

~~_____ (4) _____ A change in water quality that causes impairment or loss of use of a well or water body.~~

The Permittee shall mitigate any adverse impact on existing legal uses caused by the ground water withdrawals authorized by this Certification. When adverse impacts occur or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. The adverse impacts can include:

(1) A reduction in well water levels that impairs the ability of an adjacent well, including a domestic well, lawn irrigation well, or public water supply well, to produce by 10% or greater;

(2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system that impairs the ability to produce water by 10% or greater;

(3) Saline water intrusion or induced movement of pollutants into the water supply of an adjacent water user, resulting in a significant reduction in water quality; and/or

(4) A change in water quality caused by the Permittee that results in significant impairment or loss of use of a well or water body.

c. Impact on Existing Off-Site Land Uses

~~The Permittee shall be responsible for mitigating, to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to the enforcement provisions of Conditions IV.a1.1 of these conditions. The adverse impacts can include:~~

~~(1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;~~

~~(2) Land collapse or subsidence caused by a reduction in water levels;~~

~~(3) Damage to crops and other vegetation, causing financial harm to the landowner;~~
and/or

~~(4) Damage to the habitat of rare, endangered or threatened species.~~

The Permittee shall mitigate any adverse impacts on existing off-site land uses that are a consequence of the groundwater withdrawals authorized by this Certification. If increased withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A significant reduction in water levels in an adjacent water body, including impoundments, to the extent that the designed function of the water body is impaired;

(2) Land collapse or subsidence caused by a reduction in water levels; and/or

(3) Damage to crops and other types of vegetation.

d. Impacts to Natural Resources

The Permittee shall mitigate any adverse impacts to natural resources as a consequence of the groundwater withdrawals authorized by this Certification. When adverse impacts occur, or are imminent, the SFWMD reserves the right to curtail future withdrawal rates pursuant to the enforcement provisions of Condition A.1.1 of these conditions. Adverse impacts can include:

(1) A reduction in ground water levels that results in significant lateral movement of the fresh water/salt water interface;

(2) A reduction in water levels that adversely impacts the hydroperiod of protected wetland environments;

(3) A significant reduction in water levels or hydroperiod in a naturally occurring water body such as a lake or pond;

(4) Induced movement or induction of pollutants into the water supply resulting in a significant reduction in water quality; and/or

(5) Harm to the natural system including damage to habitat for rare or endangered species.

d e. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40-E 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	Maximum Annual Allocation (MGY)	Maximum Daily Source Allocation (MGD)
L-63N Canal	1484.00 <u>1942.00</u>	4.69 <u>5.32</u>

Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridan Aquifer	174.0	2.32
<u>Surficial Aquifer</u>	<u>3.0</u>	<u>0.04</u>

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17.50 feet NGVD: , except as provided for in subsection (7) below.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD: or during tests and maintenance on the wells. Maintenance is defined as one hour of operation per week for each well or the minimum operation of the pump necessary to maintain mechanical integrity as specified by the pump manufacturer.

(3) No change

(4) Any withdrawals from the L-63N Canal, ~~or~~ the Upper or Lower Production Zone of the Upper Floridan aquifer or the Surficial aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) No change

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer and the Surficial Aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridan aquifer during any consecutive 365 day period without prior approval from the SFWMD.

(7) When operation of the SFWMD's S-191 control structure during flood events results in a water elevation of less than 17.50' NGVD in the L-63N Canal, withdrawals from the L-63N Canal may continue subject to the permittee obtaining prior confirmation from the SFWMD's Okeechobee Field Station (7:00 a.m. to 4:00 p.m., Monday through Friday) or the SFWMD's West Palm Beach Operations Control Center that the SFWMD is in a flood control operations mode.

(8) The permittee shall provide documentation of SFWMD approval of withdrawals from the L-63N Canal below 17.50' when the SFWMD is in a flood control operations mode. The documentation shall be in the form of a letter faxed to the SFWMD's West Palm Beach Operations Control Center within 24 hours of the verbal request to continue withdrawals and shall indicate the date and approximate time of approval and the name of the SFWMD employee granting the approval.

c. Authorized Withdrawal Facilities

- 2. - ~~2,550~~ 3,700 GPM Surface Water Pumps in L 63N

- 1 - 10" x 1340' Flowing Floridan Aquifer Well cased to 500'
(existing well)

- 1 - 10" x 1265' Flowing Floridan Aquifer Well cased to 750'

- 2 - 15" x 1350' Flowing Floridan Aquifer Wells cased to 750'

- 2 - 15" x 1650' Flowing Floridan Aquifer Wells cased to 1487'

- 1 - 8" x 118' Surficial Aquifer Well cased to 78'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD (See also ~~Condition E.3.a(5)~~), except as provided for in Condition B.2.b(1), (2), and (7).

e. - f. - No change

3.a.(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by ~~DER~~ FDEP and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridan aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for

approval at least 30 days prior to the commencement of the test.

(2) - (3) No change

b. - e. No change

f. Water Conservation Plan

Within two (2) years of issuance of the modified Certification Order, the Permittee shall submit a Water Conservation Plan required by Chapter 40E-2, F.A.C., in effect at that time, for review and approval by SFWMD staff. The plan shall, at a minimum, incorporate the following components:

(1) An audit of the amount of water needed in the Permittee's operational processes. The following measures shall be implemented within one year of audit completion if found to be cost effective in the audit:

(a) Implementation of a leak detection and repair program;

(b) Implementation of a recovery/recycling or other program providing for technological, procedural or programmatic improvements to the Permittee's facilities; and

(c) Use of processes to decrease water consumption.

(2) Development and implementation of an employee awareness program concerning water conservation.

C.1.a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD ~~Field Engineer~~ Environmental Resource Compliance Division that the facilities are ready for inspection and approval. Such notification shall include

as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. - k. No change

2.a. No change

2.b. Authorized Discharge Facilities

BASIN 2:	1-0.25' diameter circular orifice with the invert at elevation 33.5' NGVD 1-21 V-notch with the invert at elevation 35.5' NGVD. 1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.
BASIN 3:	1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-21 V-notch with the invert at elevation 34.6' NGVD 1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader swale.
BASIN 6:	1-12' wide weir consisting of a 3 sided drop inlet with the crest at 37.5' 38.5' NGVD.

c. - e. No change

3.a. - d. No change

e. Surface Water Quality Sampling and Monitoring Program for Surface Water Discharges

~~Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.~~

(1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames:

MONITOR TYPE AND SCHEDULE	PARAMETERS
A. GENERAL (EVERY OTHER MONTH)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, pH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.
B. ORGANIC (SEMI-ANNUAL)	OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.
C. METALS (SEMI-ANNUAL)	ALUMINUM, ANTIMONY, ARSENIC, BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.

(2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1)B and (1)C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.

Surface water quality sampling and monitoring data shall be collected and analyzed in accordance with applicable FDEP and EPA criteria. The monitoring results shall be reported to the SFWMD at the intervals specified in the applicable FDEP Conditions of Certification.

(3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 62-302 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in order to provide assurances that the discharges will not cause additional off-site water quality impacts.

f. No change.

D. No change

E.2.e. All excavations shall be in accordance with FDEP DER requirements and silt booms shall be employed where necessary.

E.3.a.(5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Conditions IV.B.2.b.(1) and 7 and IV.B.2.d.);

VI. Department of Transportation

1.-7. No change

8. No new access to the State Highway System is proposed in the site certification modification proposed for calendar year 2000. If new access or modification of current access to the State Highway System is proposed at a later date, such as related to the borrow pit sites when they are identified, access will be subject to the requirements of Rule Chapters 14-96, State Highway System Connection Permits, Administrative Process, and 14-97, State Highway System Access Management Classification System and Standards, Florida Administrative Code, will be required.

9. If any overweight or overdimensional vehicles are operated by the applicant, permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, Florida Administrative Code, must be adhered to.

10. No new use of State of Florida right of way or transportation facilities, including any new or relocated transmission lines, is proposed via the calendar year 2000 modification. If any use of State of Florida right of way or transportation facilities is later proposed, such usage will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual and Rule Chapter 14-46.001, Utilities Installation or Adjustment, Florida Administrative Code.

Any party to this Notice has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department of Environmental Protection, M.S.35, Office of General Counsel, 3900 Commonwealth Boulevard, Tallahassee, Florida 32399-3000, and by filing a copy of the Notice of Appeal accompanied by the applicable filing fee with the appropriate District Court of Appeal. The Notice of Appeal must be filed within 30 days from the date that this Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this _____ day of _____, 2000, in Tallahassee, Florida.

**STATE OF FLORIDA, DEPARTMENT
OF ENVIRONMENTAL PROTECTION**

KIRBY B. GREEN, III
DEPUTY SECRETARY
3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP
Modified 04/03/95

CONDITIONS OF CERTIFICATION

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Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP
Modified 04/03/95

CONDITIONS OF CERTIFICATION (COCs)

PART I

ADMINISTRATIVE CONDITIONS

(1) ENTITLEMENT

Pursuant to S. 403.501-519, F.S., the Florida Electrical Power Plant Siting Act, this certification is issued to Indiantown Cogeneration L.P. (ICL) as owner/operators of the facility.

(2) SCOPE OF LICENSE

Site certification is limited to the construction and operation of the 330 MW (net) electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties.

(3) JURISDICTIONAL AGENCIES

The following agencies are deemed to have jurisdictional interest in the certification, and thus regulatory authority over the development, construction, operation, and maintenance of the facility:

Department of Environmental Regulation [DER]
Game & Fresh Water Fish Commission [GFWFC]
Department of Natural Resources [DNR]
Department of Community Affairs [DCA]
Department of Transportation [DOT]
South Florida Eater Management District [SFWMD]
Treasure Coast Regional Planning Council [TCRPC]
Martin County [MC]
Central Florida Regional Planning Council [CFRPC]
Okeechobee County [OC]

(4) DEFINITIONS

A. Licensee/Permittee: References herein to the "Licensee (Permittee)" apply to

Indiantown Cogeneration L.P. (ICL) as owner/operator, or to its successors or assigns. (See COC/I-(5). regarding transfer of certification).

B. Completeness/sufficiency: The term “complete” as used herein shall have the same meaning as contained in Chapter 120, F.S., not Chapter 403, F.S., i.e., a complete application shall also provide sufficient information for an agency to perform an analysis of compliance with the conditions of certification and applicable regulations. Where agency-recommended COCs have used the Chapter 403 FS term of “sufficient”, that shall have the same meaning as the term “complete” as used herein.

C. Affected Agencies: References to the “affected agencies” apply to the jurisdictional agencies listed in COC/I-(3).

D. Other terms: The meaning of terms not otherwise specified in A-C, as used herein, shall be governed by the definitions contained in Chapter 403, Florida Statutes and any regulations adopted pursuant thereto; by Chapter 373, Florida Statutes, for conditions of the South Florida Water Management District, or applicable rules of the SFWMD; or by the appropriate governing definitions of the Affected Agencies.

In the event of any dispute over the meaning of a term in these conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definition contained in any other state or federal statute or regulation.

(5) TRANSFER OF CERTIFICATION

If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment shall immediately be submitted to the Florida Department of Environmental Regulation and the Affected Agencies by the previous certification holder (Licensee) and the Assignee. Included in the notice shall be the identification of the entity responsible for compliance with the Certification. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification.

(6) SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances, is held invalid, the application of such provisions to other circumstances and the remainder of the certification shall not be affected thereby.

(7) PROFESSIONAL CERTIFICATION

Where post-certification submittals are required by these conditions, drawings shall be signed and sealed by a Professional Engineer, or Professional Geologist, as applicable, registered

in the State of Florida.

(8) RIGHT OF ENTRY

The Licensee shall allow during operational or business hours the Secretary of the Florida Department of Environmental Regulation and/or authorized representatives, including personnel of the Affected Agencies, upon the presentation of credentials:

A. To have access during normal business hours (Mon. - Fri., 9:00 a.m. to 5:00 p.m.) to any records required to be kept under the conditions of this certification for examination and copying; and

B. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge of pollutants; and

C. To assess any damage to the environment or violation of ambient standards; and

D. To have reasonable escorted access to the power plant site and any associated linear facilities to inspect and observe any activities associated with the construction, operation, maintenance, or monitoring of the proposed project in order to determine compliance with the conditions of this Certification. The Licensee shall not refuse immediate entry or access upon reasonable notice to any Affected Agency representative who requests entry for the purpose of the above noted inspections and presents appropriate credentials.

(9) DESIGN STANDARDS

The facility shall be constructed pursuant to the design standards presented in the application, responses to agency sufficiency comments, and any approved post-certification submittals, and shall be considered the minimum design standards for compliance.

(10) LIABILITY

The Licensee shall hold and save the Affected Agencies harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/or use of any facility authorized by this Certification, to the extent allowed under Florida law.

(11) PROPERTY RIGHTS

This certification does not convey any property rights in either real or personal property, nor any exclusive privileges, nor 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.

(12) COMPLIANCE

A. Compliance with Conditions

1. The Licensee shall at all times maintain in good working order and operate all treatment or control facilities or systems installed or used by the Licensee so as to achieve compliance with the terms and conditions of this certification. All discharges or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification.

2. An environmental control program shall be established under the supervision of a qualified Environmental Engineer/Specialist to assure that all construction activities conform to applicable environmental regulations and the applicable Conditions of Certification. If during construction there is detected a violation of standards, harmful effect or irreversible environmental damage not anticipated by the application, the evidence presented at the certification hearing, or a post-certification submittal, the Licensee shall notify the DER Southeast District Office and Siting Coordination Office, as required in B.

3. Any anticipated facility expansions beyond the certified steam electric generating capacity, production increases, or process modifications which may result in new, different, or increased discharges of pollutants, change in type of fuel, or expansion in steam generation capacity shall require submission of a modification petition pursuant to Chapter 403, Florida Statutes.

4. In the event of a malfunction of the Cogeneration facility boiler's pollution control system resulting in a violation of this certification or DER regulations, that unit shall be promptly shut down.

B. Non-compliance Notification

If, for any reason, the Licensee does not comply with or will be unable to comply with any limitation specified in this certification, the Licensee shall notify the Southeast District Office of the Department of Environmental Regulation by telephone within one working day after said noncompliance occurs and shall confirm this in writing within seventy-two (72) hours of becoming aware of such conditions, and shall supply the following information:

1. A description of the discharge and cause of noncompliance; and
2. The period of noncompliance, including exact 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 noncomplying event.

C. Adverse Impact

The Licensee shall take all reasonable steps to minimize any adverse impact resulting from noncompliance with any limitation specified on this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

(13) POST CERTIFICATION REVIEW

Further information may be required by these conditions for site-specific or more detailed review and approval to determine compliance with the conditions of certification. Compliance determinations of the Department and other reviewing agencies are subject to review pursuant to Chapters 120, and 403, Florida Statutes.

A. In order to provide adequate lead time for review, such information, as developed, must be submitted for post-certification review at least 180 days prior to the intended commencement date of construction or operation of the feature undergoing review unless otherwise provided herein. Notification of the submittal of the information, and any determinations made pursuant to these COC, shall be provided to the DER Siting Coordination Office for record-keeping purposes.

B. If complete information is submitted or if a written request for additional information is not issued within the thirty-day time period, the information will be deemed complete on the day it was received by the agency.

C. The agency will have ninety days from the date on which a complete information submission is received in which to makes its determination regarding compliance.

(14) PROPRIETARY DOCUMENTS OR INFORMATION

Proprietary or confidential data, documents or information submitted or disclosed to any agency shall be identified as such by the Licensee and shall be maintained as such pursuant to applicable Florida law.

(15) COMMENCEMENT OF CONSTRUCTION

At least 30 days prior to the commencement of construction, the Licensee of Project Engineer shall notify the DER Siting Coordination Office, the DER Southeast District Office, and Affected Agencies of the construction start date. Quarterly construction status reports shall similarly be submitted by the Licensee beginning with the initial construction start date. The report shall be a short narrative describing the progress of construction.

(16) COMMENCEMENT OF OPERATION

At least 30 days prior to the commencement of operation, the Licensee or Project Engineer shall notify the DER Siting Coordination Office and Affected Agencies of the operation start date.

(17) OPERATIONAL CONTINGENCY PLANS

A. Operating Procedures

The Licensee shall develop and furnish the DER Southeast District Office a copy of written operating instructions for all aspects of the operations which are critical to keeping the facility working properly. The instructions shall also include procedures for the handling of suspected hazardous or toxic wastes.

B. Contingency Plans

The Licensee shall develop and furnish the DER Southeast District Office written contingency plans for the continued operation of the system in event of breakdown. Stoppages which compromise the integrity of the operations must have appropriate contingency plans. Such contingency plans shall identify critical spare parts to be readily available.

C. Current Engineering Plans

The Licensee shall maintain a complete current set of modified engineering plans, equipment data books, catalogs and documents in order to facilitate the smooth acquisition or fabrication of spare parts or mechanical modifications.

D. Application Revisions

The Licensee shall furnish appropriate revisions to drawings and site plans submitted as part of the application, including operational procedures for isolation and containment of hazardous wastes.

(18) REVOCATION OR SUSPENSION

This certification may be suspended or revoked for violations of any of its conditions pursuant to Section 403.512, Florida Statutes.

(19) CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the Licensee from civil or criminal penalties for noncompliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subject to Section 403.511, Florida Statutes, this certification shall not preclude the institution of any legal action or relieve the Licensee from any responsibilities or penalties established pursuant to any other applicable State Statutes, or regulations.

(20) ENFORCEMENT

The Department of Environmental Regulation, as supported by the applicable Affected Agency, may take any and all lawful actions to enforce any conditions of this Certification. Any agency which deems enforcement to be necessary shall notify the Secretary of DER of the proposed actions. The affected agency may request the Department to initiate modification of this Certification for any change in any activity resulting from enforcement of this Certification which change will have a duration longer than 60 days.

(21) FIVE-YEAR REVIEW

The certification shall be final unless revised, revoked, or suspended pursuant to law. At least every five years from the date of issuance of certification, the Department shall review the project and these conditions of certification and proposed any needed modifications.

(22) MODIFICATION OF CONDITIONS

Pursuant to Subsection 403.516 (1), F.S., the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations, conservation easements, transfer or assignment of the Certification or related federally delegated permits, or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

All other modifications to these conditions shall be made in accordance with Section 403.516, Florida Statutes.

(23) FEDERAL ANNUAL OPERATING FEES AND PERMITS

A. DER Responsibilities

The Department of Environmental Regulation shall implement the provisions of Title V of the 1990 Clean Air Act for the Indiantown Cogeneration Project by developing Conditions of Certification requiring submission of annual operating permit information and annual pollutant emission fees in accordance with Federal Law and Federal Regulations. The terms of such conditions shall be imposed under the modification provisions of Section 403.516 (1), F.S., for which the Board specifically delegates the authority to prescribe said terms.

B. Indiantown Cogeneration L.P. Responsibilities

Indiantown Cogeneration Project shall submit the appropriate annual operating permit application information as well as the appropriate annual emission fees as required by Federal Law to the Department when such Conditions are defined under COC/I-(23)C. below.

C. Annual Operating Permit Application and Fee

(Reserved)

PART II

DEPARTMENT OF ENVIRONMENTAL REGULATION

(1) AIR

The construction and operation of the Indiantown Cogeneration Project (ICP) shall be in accordance with all applicable provisions of Chapter 17-2, 17-256, and 17-702, Florida Administrative Code, except for SO₂ and NO_x during startup, shutdown, and malfunction, then 40CFR60 shall apply.

A. Construction

1. General

a. Construction shall reasonably conform to the plans and schedule given in the application.

b. The permittee shall report any delays in construction and completion of the project which would delay commercial operation by more than 90 days to the DER Southeast District office in West Palm Beach.

2. Equipment Identification

The Licensee shall submit at least four copies of complete information as to the make and model numbers of the selected pulverized coal and auxiliary boilers, all pollution control and continuous emissions monitoring devices, operation and maintenance manuals and calibration procedures, updated process flow diagrams showing mass/energy/heat balances and ammonia injector locations and rates, and related equipment, to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of that particular item.

3. Stack Height and Design

The height of the boiler exhaust stack for ICL shall not be less than 495 ft. above grade. Detailed stack drawings showing sampling locations shall be submitted to the DER Bureau of Air Regulation at least 90 days prior to commencing on-site construction of the affected equipment or feature.

4. Fugitive Dust and Odors

The Licensee shall employ proper odor and dust-control techniques to minimize odor and fugitive dust emissions. Precautions to prevent fugitive particulate emissions

during construction shall be to coat the roads and construction sites used by contractors, regrass or water areas or disturbed soils. Control techniques shall be sufficient to prevent nuisance conditions on adjoining property.

5. Open Burning

Open burning in connection with initial land clearing shall be in accordance with Chapter 17-256, F.A.C., Chapter 51-2, F.A.C., Uniform Fire Code Section 33.101 Addendum, and any other applicable regulations of Martin or Okeechobee Counties, as applicable.

No open burning of construction generated material, after initial land clearing, shall be allowed.

B. Operation

1. Boilers

The Pulverized Coal (PC) boiler is permitted to operate at a maximum of 3422 MMBtu/hr heat input (nominal 330 MW). This facility shall be allowed to operate continuously (8,760 hrs/yr). In addition to the PC boiler, the facility will have one or two auxiliary boilers rated at up to a combined total of 342 MMBtu/hr (#2 Fuel Oil) and a combined total of 358 MMBtu/hr (Natural Gas or propane) which operate at the combined total heat input rate a maximum of 5,000 hours with up to 1,000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane.

2. Emissions Limitations

a. Pulverized Coal Boiler

Based on a permitted heat input of 342 MMBtu/hr heat input, the stack emissions from the main boiler shall not exceed any of the following limitations:

i. Combustion Emissions

Pollutant	Basis lb/MMBtu	Emission Limitation	
		lb/hr	TPY
SO ₂	0.170	582*	2549
NO _x	0.170	582*	2549
PM	0.018	61.6	270

PM ₁₀	0.018	61.6	270
CO	0.110	376*	1649
VOC at 7% O ₂	0.0036	12.30	54
H ₂ SO ₄	0.0004	1.450	6.350
Beryllium	0.00000273	0.0093	0.041
Mercury	0.0000114	0.039	0.172
Fluorides	0.002	7.26	22.26
Arsenic	0.0000511	0.175	0.765

*24 hour daily block average (midnight to midnight)

ii. NH₃ (Ammonia) - Slip from exhaust gases shall not exceed 50 ppmv.

iii. *VE (Visible Emissions)

- VE from each baghouse exhaust shall not exceed 10% opacity (six minute average).

- No VE during lime silo loading operations (i.e., less than 5% opacity).

- VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

b. Auxiliary Boiler

The auxiliary boiler or boilers, rated at up to a combined total of 358 MMBtu/hr (Natural Gas and propane) and a combined total of 342 MMBtu/hr (#2 Fuel Oil), shall be limited to a maximum of 5000 hours/yea at the combined total heat input rates with up to 1000 hrs/yr firing #2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing #2 fuel oil:

MAXIMUM EMISSIONS

<u>Pollutant</u>	<u>lbs/hr</u>	<u>tons/year</u>
NO _x	68.4	34
SO ₂	17.8	9
PM	1.40	0.70
PM ₁₀	1.40	0.70
CO	47.30	24
VOC	0.63	0.31
Be	4.1 x 10 ⁻⁵	2.0 x 10 ⁻⁵
Hg	5.1 x 10 ⁻⁴	2.6 x 10 ⁻⁴
Pb	3.6 x 10 ⁻²	1.8 x 10 ⁻²
As	6.8 x 10 ⁻³	3.4 x 10 ⁻³

c. Particulate emissions from the coal, and limestone handling facilities:

i. All conveyors and conveyor transfer points will be enclosed to preclude PM emissions (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in conditions 1.B.2.e.

ii. Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered.

iii. Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent, except when adding, moving or removing coal from the coal pile, which would be allowed no more than 20%.

iv. The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system.

v. The fly ash handling system (including transfer and silo storage) shall be totally enclosed and vented (including pneumatic system exhaust) through fabric filters; and

vi. The Licensee shall submit to the Department, Bureau of Air Regulation in Tallahassee within thirty (3) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department may, upon review of these data, disapprove the use of any such device if the Department determines

the selected control device to be inadequate to meet the emission limits specified in COC-(1) B.2.d. below. Such disapproval shall be issued within 30 days of receipt of the technical data.

d. Particulate emissions from bag filter exhausts from the following facilities shall be limited to 0.010 gr/acf: coal, lime and flyash handling systems. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test, as set forth in COC-(1) B.3. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

e. Emissions shall not be visible more than 2 minutes in any 15 minutes period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

f. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollution control devices are to be recorded, including duration, cause, and description of repair as specified in condition 1.D.

g. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

h. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified in COC-(1) B.2. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years available for FDER's inspection.

i. All fuel oil and coal shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous emission monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all the analyses shall be kept for public inspection for a minimum of two years after the data is recorded.

j. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units

(40 CFR 60 Part Da).

k. As a requirement of this specific condition, the applicant shall comply with all emissions limits and enforceable restrictions required by the State of Florida Department of Environmental Regulation pursuant to Section 403.511(5), F.S., which may be adopted by regulation and which are more restrictive, that is lower emissions limits or more strict operating requirements and equipment specifications, than the requirements of COC-II (1)B.2. of these conditions.

3. Stack Testing

a. Within 60 calendar days after achieving the maximum capacity at which the unit will be operated, but no later than 180 operating days after initial startup, the permittee shall conduct performance tests for particulates, SO₂, NO_x, and visible emissions during normal operations near ($\pm 10\%$) 342 MMBtu/hr heat input and furnish the Department a written report of the results of such performance tests within 45 days of completion of the tests. The performance tests will be conducted in accordance with the provisions of 40 CFR 60.46a and 48a.

b. Compliance with emission limitation standards mentioned in Specific Condition No. 1 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700. A test protocol shall be submitted for approval to the Bureau of Air Regulation at least 90 days prior to testing.

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.
5	Particulate matter concentration and mass emissions.
201 or 201A	PM ₁₀ emissions

6, 6C, or 19 7, 7C, or 19	Sulfur dioxide emissions from stationary sources. Nitrogen oxide emissions from stationary sources.
8	Sulfuric acid mist from stationary source.
9	Visible emission determination of opacity. - At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse. - At least one lime vehicle unloading into the lime silo (from start to finish).
22	Fugitive emissions from transfer points.
10	Carbon monoxide emissions from stationary sources.
12 or 101A	Lead concentration from stationary sources.
13A or 13B	Fluoride emissions from stationary sources.
18 or 25	Volatile organic compounds concentration.
101A or 108	Mercury emissions.
104	Beryllium emission rate and associated moisture content.

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

c. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department such records as may be necessary to determine the conditions of the performance tests.

d. The permittee shall provide 30 days notice of the performance tests or 15 days notice for stack tests in order to afford the Department the opportunity to have an observer present.

e. Stack tests for particulates (PM and PM₁₀), NO_x and SO₂ and visible emissions shall be performed annually in accordance with COC (1) B.3.b. above.

C. Monitoring and Reporting

1. Air Monitoring Program

a. A flue gas oxygen meter shall be installed for each unit to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback or manual controls to continuously maintain air/fuel ratio parameters at an optimum. Performance tests shall be conducted and operating procedures established. The document "Use of Flue Gas Oxygen Meter as BACT for Combustion Controls" may be used as a guide. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O₂ and/or CO₂ content. The monitoring devices shall meet the applicable requirements of Section 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

b. The permittee shall operate two continuous ambient monitoring devices for sulfur dioxide in accordance with DER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient monitoring devices for suspended particulates, and one continuous NO_x monitor. The monitoring devices shall be specifically located at a location approved by the Department's Bureau of Air Regulation. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Regulation. During construction and operation, a meteorological station will be operated and data reported with the ambient data.

c. The permittee shall maintain a log of the amounts and types of fuel received and copies of fuel analyses containing information on sulfur content, ash content and heating values. These logs shall be kept for at least two years.

d. The permittee shall provide stack sampling facilities as required by Rule 17-2.700 (4) FAC.

e. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation.

The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.

f. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

2. Reporting

a. For the ICL, stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

b. Utilizing the SAROAD or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

c. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

D. Malfunction or Shutdown

In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Licensee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments and industrial waste rules. During such malfunction or shutdown, the operation of the ICL shall comply with all other requirements of this certification and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems or four hours for other systems or operational malfunctions as defined in the operational contingency plans as specified in COC/I-(17) are to be reported as specified in COC/I-(12). Identified operational malfunctions which do not stop operation but may prevent compliance with emission limitations shall be reported to DER as specified in COC/I-(12).

(2) WETLANDS

A. The proposed pipeline from the project site to Nubbin Slough shall be routed within the ROW of the existing CSX Railroad as shown in the siting application.

B. Prior to the submission of any post-certification information to the Department, ICL shall arrange for a site inspection by DER District personnel from the Southeast District office in West Palm Beach or from the Bureau of Wetland Resource Management, Jurisdictional

Evaluation Section, in Tallahassee to determine the extent of jurisdiction on the site and along the proposed pipeline route. At the time of the request, the Department will determine whether jurisdiction can be determined informally by the District office, or whether a binding jurisdictional declaratory statement, pursuant to Rule 17-312.040, F.A.C., is required. The permittee shall flag the outermost limits of construction for the entire pipeline route and shall provide aerial photographs at a scale determined to be appropriate by the Department prior to the site inspection to enable the District personnel to determine if the proposed pipeline will affect jurisdictional wetland areas.

C. At least 90 days prior to the anticipated start of construction, the permittee shall submit fully dimensioned or scaled drawings on 8.5" by 11" paper, signed and sealed by an engineer registered in the state of Florida, that show limits of jurisdictional wetlands that will be affected by the project. The submittal shall also include calculations showing the acreage of affected wetlands by wetland type, a narrative describing construction techniques to be used for the project at both the power plant site and along the alignment of the pipeline, measures proposed to control erosion and turbidity, and a narrative that provides:

1. a detailed description of each wetland impact area;
2. the acreage, type, and quality of all the jurisdictional wetlands that will be affected.

The drawings shall include plan view and cross-section views for each area of jurisdictional wetlands that will be affected by the project, as identified pursuant to Condition No. (2) B. above. In addition to showing the existing and proposed DER jurisdictional limits, the drawing shall depict existing and proposed ground elevations, the limits of construction for the pipeline, and all existing and proposed locations, sizes and invert elevations of structures that may be located in the jurisdictional wetlands.

D. The Department shall review the submittal required by Condition No. (2) C. above for sufficiency within 30 days of receipt of the information, shall request additional information from the permittee as necessary to make the submittal sufficient and shall determine the appropriateness of mitigation. If mitigation is deemed to be appropriate, ICL shall submit a mitigation plan, as described in Condition No. (2) I. below which also shall be reviewed by the Department for sufficiency. If the Department does not object to the proposed work within 90 days of the date that all of this required information is determined sufficient, the proposed work shall be considered acceptable.

E. All clearing and construction activities shall be confined to the limits of construction as shown on the drawings that are accepted by the Department pursuant to Condition No. (2) C. above. Within 30 days of the completion of construction, ICL shall arrange a site visit by DER District personnel from the Southeast Florida District office in West Palm Beach to verify that no wetland damage has occurred outside the construction limits. If wetland

damage occurs outside the construction limits during construction, ICL shall submit to the Bureau of Wetland Resource Management for review a plan to restore the wetland area which was damaged and to provide mitigation for the damage. The plan shall be implemented within 30 days of the Department approval of the restoration and mitigation plan. This condition does not preclude the Department from taking enforcement action if unauthorized activities occur.

F. Prior to initiating construction, ICL shall submit a map and aerial photographs showing the location of all staging areas for the project construction to the Bureau of Wetland Resource Management for review and written approval. These areas shall be upland areas which are not currently providing endangered or threatened species habitat. The staging areas shall not be used prior to receiving DER approval.

G. During construction, best management practices, including but not limited to staked hay bales, filter cloth, and turbidity screens shall be utilized to control erosion and turbidity. All turbidity and erosion control devices shall be properly installed and maintained in good working order until project construction is complete. All side slopes shall be stabilized with grass seed, mulch, or sod within 72 hours of the final grading, and at any other time as necessary to prevent erosion or sedimentation into waters of the State.

H. If it is necessary to clear forested wetland areas during pipeline construction, the forested wetlands shall be cleared using low-impact equipment so as to minimize soil disturbance. Where practicable, the root mats and tree stumps shall be left in place to provide soil stabilization.

I. If determined to be appropriate by the Department, ICL shall provide mitigation to offset the loss and habitat degradation resulting from the construction of this project in jurisdictional wetlands.

The plan for performing the mitigation shall be submitted and approved by the Department prior to construction. The plan shall include the following information, which is to be submitted to the Bureau of Wetland Resource Management:

1. a detailed description of each wetland impact area;
2. the acreage of the type and quality of wetland being impacted at each site;
3. a narrative, fully scaled or dimensioned drawings, and aerial photographs that show and explain the proposed mitigation;
4. a detailed description of the existing vegetation, habitat, and water quality conditions at the mitigation area;
5. the acreage of the proposed mitigation by wetland type;

6. documentation providing reasonable assurance that the proposed mitigation will be both jurisdictional and successful.

If the mitigation submittal is deemed by the Department to provide insufficient information for review, additional information requested by the Department shall be submitted.

If the Department, upon review of the proposed mitigation, determines that the proposed mitigation is inadequate to offset water quality degradation, wetland loss, and habitat degradation from this project, the permittee shall propose additional mitigation.

If the proposed mitigation plan is deemed acceptable by the Department, the Department shall establish construction conditions, success criteria and monitoring plans to be carried out for the approved mitigation. These conditions, criteria and monitoring plans shall be incorporated into the certification conditions as a minor modification.

No construction within wetland areas shall commence until the Department approves the mitigation plan, and the mitigation construction conditions, success criteria and monitoring plans are incorporated into the certification conditions.

J. If determined to be appropriate by the Department to prevent future wetland losses or to ensure the success of the mitigation sites, the permittee shall agree to protect designated wetlands through a conservation easement document that is acceptable the Department. If required, the permittee shall record this easement in the public records of the respective counties where the wetlands are located prior to construction and after final approval by the Department.

K. The provisions of Condition II(2) are also applicable to wetlands located along the alternate rail corridors connecting the site to the CSX Railroad.

(3) DISCHARGES TO SURFACE WATERS

A. Stormwater

1. Construction

To control run-off during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater to ensure against spillage or discharge of excavated material that may cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, beams, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment laden run-off. The pH of the run-off shall be kept

within the range of 6.0 to 8.5. The Permittee shall comply with Florida Administrative Code Chapters 17-25, 40E-2, and 40E-4. The Permittee shall complete the forms required by 17-25.09 (1) and 40D-4 and submit those forms and the required information to the SFWMD for any modifications that might occur.

2. Operation

Any discharges from the site stormwater system via the emergency overflow structure which result from an event LESS than a ten-year, 24-hour storm (as defined by the U.S. Weather Bureau Technical Paper No. 40, or the DOT drainage manual, or similar documents) shall meet applicable State Water Quality Standards, Chapter 17-302, F.A.C., the Standards of Chapter 17-25, F.A.C., and Chapter 40-E, F.A.C.

B. Dewatering Operations

The dewatering operations during construction or plant operation shall be carried out in such a manner that all water withdrawn will not affected adjacent site cleanup activities, and all such water shall be detained on site. Any discharge of dewatering effluent offsite shall meet surface water quality standards and be approved by SFWMD.

C. Wastewater

There shall be no discharge of industrial or domestic wastewater from the site to waters of the state.

D. Tanks

Diesel fuel also will be used to fuel on-site locomotives which move rail cars around the site. Diesel fuel will be delivered by truck and stored in above-ground storage tanks designed, constructed and maintained in accordance with Chapter 17-792, F.A.C., including secondary containment. Stormwater will be collected from the bermed area around the tanks and pumped back to the plant for treatment and use. Any pollutant storage tanks on-site for facility construction activities must also be above-ground and designed, constructed and maintained in accordance with Chapter 17-762, F.A.C., including secondary containment.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwater shall be collected and treated as necessary, or otherwise be of high enough quality, to be able to meet the applicable Water Quality Standards of Sections 17-301.402 and 17-301.404, F.A.C. If monitoring should indicate a violation of the standards, the licensee shall immediately notify the Southeast District office and SFWMD and

institute remedial action.

2. Groundwater Monitoring Program

a. A groundwater monitoring plan shall be submitted within 180 days of certification in accordance with Rule 17-28.700 F.A.C., for approval by the Southeast District Office. The groundwater monitoring program shall be reviewed and approved in accordance with COC I.13. The complete groundwater monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of groundwater monitoring, testing, and analysis. The monitoring plan shall contain the following information:

1. Locations of proposed unaffected natural background and down gradient monitoring wells and construction details of the monitoring wells.

2. Hydro geological, physical, and chemical data for the site including: direction and rate of groundwater flow; background water quality; porosity, horizontal and vertical permeability for the superficial aquifer (s) and the depth to, and lithology of the any confining bed (s); vertical permeability, thickness, and extent of any confining bed (s); topography, soil classification descriptions, and surface drainage systems surrounding the site; and inventory, depth, construction details (well drilling logs), and cones of depression (if known) for any water supply wells located within a one mile radius of the site.

3. Monitoring wells shall be constructed in accordance with Rule 17-532, F.A.C., except as follows: The minimum inside diameter shall be two inches. Flush threaded couplings shall be used to join polyvinyl chloride (PVC) pipe.

b. Sampling of the shallow aquifer groundwater quality shall be conducted in at least four well clusters in the site vicinity. At least one of these wells shall be up the hydrologic gradient from the coalpile/wastewater pond area to provide current background data. Other wells shall be located down the hydrologic gradient from the groundwater discharge areas. Specific location of any new wells or modifications to the monitoring program may be proposed by the applicant, but shall be approved by the Southeast District Office prior to the construction of the new monitoring wells.

c. Upon completion of construction of the groundwater monitoring system, the following information shall be submitted to the Southeast District Office for all ground water monitoring wells and any new well (s) constructed:

Well identification	Drillers log
Latitude/Longitude	Total depth of well
Aquifer monitored	Casing diameter
Screen type & slot size	Casing type and length
Screen length	SFWMD well construction permit numbers

Elevation at top of pipe
Elevation at land surface

d. Upon completion of construction of the groundwater monitoring system, but no less than 12 months before the commencement of operation, the Permittee shall sample all groundwater monitoring wells for the Primary and Secondary Drinking Water parameters included in Chapter 17-550, F.A.C., Public Drinking Water Systems. The specific parameters to be sampled are listed in Part II, Quality Standards, Analytical Methods, Sampling, Sections 17-550.310 and 17-550.320, F.A.C.

e. The field testing, sample collection and preservation and laboratory testing, including quality control procedures, shall be in accordance with Chapters 17-4.246, 17-160, and 17-301.401, F.A.C. Approved methods as published by the Department or as published in Standard Methods, A.S.T.M. or EPA methods shall be used. Approved methods for chemical analyses are summarized in the Federal Register, December 1, 1976 (41FR52780) except that turbidity shall be measured by the Nephelometric Method.

f. All required submittals shall be sent to the Southeast District Office within 60 days of installation of the groundwater monitoring system. Upon receipt and review of the required data, quarterly sampling reports shall be submitted to the Southeast District Office commencing 12 months prior to commercial operation of the unit. Any required modifications of the groundwater monitoring system or program shall be made in accordance with the provisions of Condition I (22). The groundwater monitoring program may be reviewed annually.

g. Commencing at least 12 months before the start of commercial operation, the groundwater monitoring wells shall be sampled and analyzed on a quarterly basis for the following parameters:

Volatile Organics

Benzene
Toluene
Ethyl benzene
Xylenes

Acid Extractable Organics

Phenol
Methyl phenols
Dimethyl phenols

Inorganics

Base/Neutral Extractable Organics

Acenaphthene
Acenaphthylene
Anthracene
Naphthalene
Fluorene
Phenanthrene
1, 2-Benzofluorene
1-Methyl naphthalene
2-Methyl naphthalene
Fluoranthene

Metals

Ammonia	Iron
Cyanide	Manganese
pH	Arsenic
Specific conductance	Lead
Fluoride	Selenium
Chloride	Cadmium
Sulfate	Chromium
Sulfide	
Gross Alpha	

h. For four quarters commencing at least 12 months before the start of commercial operation all groundwater monitoring wells shall be sampled and the samples analyzed for the parameters on the following list. Thereafter, one down gradient well, as selected by the Department, shall be sampled and analyzed annually for parameters on the following list. Upon demonstration that key indicators such as sulfate, iron, pH or chloride show a significant increase over background levels, all affected wells shall be sampled and analyzed for the following parameters:

<u>Parameters</u>	<u>Storet Codes</u>	<u>Units</u>
Acrolein	034210	ug/l
Acrylonitrile	034215	ug/l
Benzene	034030	ug/l
Bromodichloromethane	03210	ug/l
Bromoform	032104	ug/l
Bromothane	034413	ug/l
Carbon Tetrachloride	032102	ug/l
Chlorobenzene	034301	ug/l
Chloromethane	034311	ug/l
Chloroform	032106	ug/l
2-Chlorethylvinylether	034576	ug/l
Chloromethane	034418	ug/l
Dibromochloromethane	032105	ug/l
1,2-Dichlorobenzene	034536	ug/l
1,3-Dichlorobenzene	034566	ug/l
1,4-Dichlorobenzene	034571	ug/l
1,1-Dichloroethane	034496	ug/l
1,2-Dichloroethane	034531	ug/l
1,2-Dichloroethene	034501	ug/l
trans-1,2-Dichloroethene	034546	ug/l
1,2-Dichloropropane	034541	ug/l
cis-1,3-Dichloropropane	034704	ug/l

trans-1,2-Dichloropropane	034699	ug/1
Ethyl benzene	034371	ug/1
Methylene chloride	034423	ug/1
1,1,2,2-Tetrachloroethane	034516	ug/1
Tetrachloroethane	034475	ug/1
Toluene	034010	ug/1
1,1,1-Trichloroethane	034506	ug/1
1,1,2-Trichloroethane	034511	ug/1
Trichloroethane	034475	ug/1
Trichlorofluoromethane	034488	ug/1
Vinyl chloride	039175	ug/1
Acenaphthene	034205	ug/1
Acenaphthylene	034200	ug/1 Anthracene
034220	ug/1	
Aldrin	039330	ug/1
Benzol (a) anthracene	034034	ug/1
Benzol (b) fluoranthene	034230	ug/1
Benzol (k) fluoranthene	034242	ug/1
Benzol (a) pyrone	034247	ug/1
Benzol (g,h,i) perilune	034521	ug/1
Benzyl Butyl Phthalate	034292	ug/1
beta-BHC	039338	ug/1
delta-BHC	034259	ug/1
Bis (2-chloroethyl) ether	034273	ug/1
Bis (2-chloroethoxy) methane	034278	ug/1
Bis (2-ethylhexyl) phthalate	039100	ug/1
Bis (2-chloroisopropyl) ether	034283	ug/1
4-Bromophenol phenyl ether	034636	ug/1
Chlordane	039350	ug/1
2-Chloronaphthalene	034581	ug/1
4-Chlorophenol phenyl ether	034641	ug/1
Chrysene	034420	ug/1
4,4' -DDD	039310	ug/1
4,4' -DDE	039320	ug/1
4,4' -DDT	039300	ug/1
Dibenzo (a,h) anthracene	034556	ug/1
Di-n-butyl phthalate	039110	ug/1
1,2-Dichlorobenzene	034536	ug/1
1,3-Dichlorobenzene	034566	ug/1
1,4-Dichlorobenzene	034571	ug/1
3,3-Dichlorobenzidine	034631	ug/1
Dieldrin	039380	ug/1
Dimethyl phthalate	034336	ug/1

Dimethyl phthalate	034341	ug/1
2,4-Dinitro toluene	034611	ug/1
2,6-Dinitro toluene	034626	ug/1
Endosulfan sulfate	034351	ug/1
Edrin aldehyde	034366	ug/1
Fluoranthene	034376	ug/1
Fluorene	034381	ug/1
Heptachlor	039410	ug/1
Heptachlor epoxide	039420	ug/1
Hexachlorobenzene	039700	ug/1
Hexachlorobutadiene	034391	ug/1
Hexachloroethane	034396	ug/1
Indeno (1,2,3-cd) pyrene	034403	ug/1
Isophorone	034408	ug/1
Naphtanene	034696	ug/1
Nitrobenzene	034447	ug/1
N-Nitrosodi-n-Propyl amine	034428	ug/1
PCB-1016	034671	ug/1
PCB-1221	039488	ug/1
PCB-1232	039492	ug/1
PCB-1242	034496	ug/1
PCB-1248	039500	ug/1
PCB-1254	039504	ug/1
PCB-1260	039508	ug/1
Phenanthrene	034461	ug/1
Pyrene	034469	ug/1
Toxaphene	039400	ug/1
1,2,4-Trichlorobenzene	034551	ug/1
4-Chloro-3-methyl phenol	034452	ug/1
2-Chlorophenol	034586	ug/1
2,4-Dichlorophenol	034601	ug/1
2,4-Dimethyl phenol	034606	ug/1
2,4-Dinitrophenol	034616	ug/1
4,6-Dinitro-o-cresol	034657	ug/1
2-Nitrophenol	034591	ug/1
4-Nitrophenol	034646	ug/1
Pentachlorophenol	039032	ug/1
Phenol	034694	ug/1
2,4,6-Trichlorophenol	034621	ug/1
Benzidine	039120	ug/1
Alpha-BHC	039337	ug/1
Gamma-BHC (Lindane)	039340	ug/1
Endosulfan I	034361	ug/1

Endosulfan II	034356	ug/1
Endrin	039390	ug/1
Hexachlorocyclopentadiene	034386	ug/1
N-Nitrosodimethylamine	034438	ug/1
N-Nitrosodiphenylamine	034433	ug/1
Antimony	001097	ug/1
Arsenic	001002	ug/1
Beryllium	001012	ug/1
Cadmium	001027	ug/1
Chromium	001034	ug/1
Copper	001042	ug/1
Cyanide	000720	ug/1
Lead	001051	ug/1
Mercury	071900	ug/1
Nickel	001067	ug/1
Selenium	001147	ug/1
Silver	001077	ug/1
Thallium	001059	ug/1
Zinc	001092	ug/1
2,3,7,8-tetrachlorodibenzo-p-dioxin	034675	ug/1

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with quarterly data and shall be measured in reference to 1929 NGVD for all monitoring wells (1/100 of a foot) and surface waters (1/10 of a foot).

i. Records of monitoring information shall include: the date, exact place, and time of sampling or measurements; the person responsible for performing the sampling or measurements; the date (s) analyses were performed; the person responsible for performing the analyses; analytical techniques or methods used; and results of such analyses.

j. All groundwater analysis shall be submitted within 60 days of sampling on DER form 17-1.216 (2) with a summary of all exceedances of the MCL's per F.A.C. 17-550 to: Florida Department of Environmental Regulation, Southeast Florida District Office, 1900 South Congress Avenue, West Palm Beach, Florida 32399-2400.

k. In order to assure that representative samples are obtained, it shall be the responsibility of the permittee to maintain the integrity of the monitoring stations and protect them from destruction or vandalism. Should any of the well clusters be destroyed, the permittee shall notify the Department immediately. The notification shall include pertinent information as to the cause, and what steps are being taken to replace the monitoring station and prevent the recurrence of such problems in the future.

(5) SANITARY WASTES

A. Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

B. A complete submittal of plans, drawings and specifications for waste pumps, lift stations, sewage collection systems, and wastewater collection systems in accordance with appropriate DER rules shall be furnished to the Southeast District Office for approval at least 180 days prior to start of construction for the particular of such component. In order to obtain approval, the receiving sewage treatment plant shall indicate it has available capacity and its acceptance of the proposed connection of the wastewater collection system. Also plans and specifications for connections to off-site sewage and wastewater transmission systems shall be furnished to the Southeast District Office for review in accordance with Condition I (13). Department approval shall be obtained prior to the start of construction.

(6) SOLID/HAZARDOUS WASTES

A. Construction

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 17-701, F.A.C. Hazardous waste/materials handling contingency plans shall be submitted to the Southeast District Office for review and approval at least 90 days prior to start of construction.

B. Operation

1. No bottom ash, fly ash, spent acid gas control media, wastewater treatment sludges, or other forms of solid waste shall be disposed of in Florida, except in a licensed off-site landfill in accordance with all applicable portions of Chapters 17-701 and 17-702, F.A.C. Plans of solid waste disposal contingency plans for handling hazardous waste/materials, shall be provided to the Southeast District Office and the Division of Waste Management for review and approval at least 90 days prior to start of operation of the ICL Unit. Review shall be performed in accordance with Condition I (13). The final plans for this facility shall include provisions for the isolated temporary handling of suspected hazardous, or toxic wastes. The ICL shall not be operated until an out of state disposal area or a Florida landfill capable of disposing of plant wastes provides a letter or contract indicating acceptance of such wastes.

2. No suspected or known hazardous, toxic, or infectious wastes as defined by Federal, State or local statutes, rules, regulations or ordinances shall be burned or land filled at the site.

3. Ash and FGD waste prior to transport to the offsite disposal site shall be stored in an enclosed building on an impervious surface. Final disposal of this solid waste shall not be placed into a landfill in Florida without prior approval of Department. Use of an offsite

lined landfill or other method in Florida may be approved by the Southeast District Office. Any leachate generated within the solid waste storage area shall be collected and disposed of by a method approved by the Southeast District Office. The Southeast District Office shall notify the SFWMD of the plans and specifications regarding the above referenced method.

4. A report shall be prepared detailing the amount and type (ash, FGD, special wastes, boiler residue, and water treatment sledges, etc.) of materials produced at the site, and the treatment or disposal provided. These reports shall be furnished to the Southeast District Office quarterly, commencing 120 days after the ICL becomes operational and is producing residues.

5. There shall be no discharge to waters of the State of polychlorinated biphenyl compounds.

(7) OPERATIONAL SAFEGUARDS

The overall design and layout of the facilities shall be such as to mitigate potential adverse effects to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Section 440.56, Florida Statutes, by the Industrial Safety Section of the Florida Department of Commerce will be complied with during operation.

(8) PROTECTION OF VEGETATION

The Licensee shall develop the site so as to retain a buffer of trees or shall plant a buffer of trees sufficient to minimize the aesthetic and noise impacts of the facility. The buffer, as far as practicable, shall be of sufficient height and width suitable for the purpose of mitigating both construction and operational impacts of the facility.

(9) USE OF TREATED WASTEWATER

Treated domestic wastewater may be used as makeup water to the Project's cooling water system upon receipt of permission from the Department and the South Florida Water Management District. Such approval may be obtained by submission of the following information:

- A. The name and address of the domestic treatment system to supply the treated effluent.
- B. The DEP permit number for the supplying treatment system.
- C. Plans and specifications for the proposed connecting pipeline and pumps

necessary to transmit the treated effluent to the Project.

D. An analysis of the characteristics of the treated effluent.

E. Demonstration that the treated effluent is treated to meet the following requirements prior to use in the cooling system:

1. Maintenance of a minimum of a 1.0 mg/liter free chlorine residual after a 15 minute contact time.*
2. Turbidity not to exceed 5 NTU.
3. Continuous chlorine monitoring.

* The Department may approve a lower level of chlorination upon demonstration that a viral concentration of less than one PFU per 25 gallons can be achieved at a lower level of concentration and that satisfactory control of biological growth in the cooling tower can be maintained.

PART III

GAME AND FRESH WATER FISH COMMISSION

(1) No more than 60 days prior to commencement of any clearing activities on the Project Site or in the pipeline right-of-way, respectively, a wildlife survey shall be conducted of the site or the pipeline right-of-way, whichever is applicable, the purpose of which is to update and supplement the survey results presented in the Site Certification Application concerning the presences of listed species (endangered or threatened species, or species of special concern) likely to occur on the site or in the right-of-way based on range and habitat. This survey shall be consistent with methodologies established or accepted by the Florida Game and Fish and Fresh Water Fish Commission (FGFWFC). Results of said survey (s) shall be submitted to the FGFWFC and the United States Fish and Wildlife Service within seven days of completion thereof. If the survey indicates that any listed species will be affected by construction of the Project or pipeline, the Permittee and the FGFWFC, shall, within 15 days of receipt of the survey by the FGFWFC, consult and determine the appropriate measures necessary to avoid, minimize, mitigate, or otherwise appropriately address such impacts.

(2) ICL shall place or consult culverts or similar structures to facilitate movement of wildlife across or beneath the perimeter access road to and from upland preserve areas of the Project site. The structures shall be located , in reference to the Project's Site layout, as follows:

- (a) One structure under the road in the area of the cooling water storage pond;
- (b) -One structure under the road in the area of Wetland No. 3; and
- (c) One structure under the road in the area of Wetland No. 1.

These structures shall be designed to remain dry during a two year storm event and shall be approximately 3 feet high and 5 feet wide.

ICL shall submit detailed designs of the structures and their location to the GFWFC for review and approval 60 days prior to construction of the portions of the access road being culverted.

(3) Existing wetlands shall not be used as stormwater retention areas for run-off from developed areas of the Project site.

(4) At least 60 days before commencement of onsite construction, ICP shall submit an upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the PUD planned unit development (industrial) zoning

agreement of Martin County, and illustrated on figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking, and vegetation control; if controlled burning is proposed to control vegetation, a schedule of fire management through an certified burn specialist and including, but not limited to burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures to be taken to remove exotic vegetation from both uplands and wetlands; legal instrument (s) by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

Part IV

SOUTH FLORIDA WATER MANAGEMENT DISTRICT

A. LEGAL/ ADMINISTRATIVE CONDITIONS

1. GENERAL

a. Responsible Entity

The Permittee shall be responsible for compliance with the Certification Conditions. If contractual rights, duties, or obligations are transferred under this Certification, notice of such transfer or assignment, including the identification of the entity responsible for compliance with the Certification, shall immediately be submitted to the Florida Department of Environmental Regulation and the SWFWMD by the previous certification holder (Permittee) and the Assignee. Any assignment or transfer shall carry with it the full responsibility for the limitations and conditions of this Certification. The previous Permittee shall be responsible for informing the Assignee of all authorized facilities and uses and the conditions under which they were authorized.

b. Minimum Standards

This Certification is based on the Permittee's submitted information to the SWFWMD which reasonably demonstrates that adverse off-site water resources related impacts will not be caused by the authorized activities. The plans, drawings and design specifications submitted by the Permittee shall be considered the minimum standards for compliance.

c. Compliance Requirements

This Project must be constructed, operated and maintained in compliance with and meet all non-procedural requirements set forth in Chapter 373, F.S., and Chapter 40E-2 (Consumptive Use), 40E-3 (Water Wells), 40E-4 (Surface Water Management), and 40E-6 (Right-of-Way), F.A.C., and as expressly allowed in these Conditions of Certification.

d. Off-site Impacts

It is the responsibility of the Permittee to ensure that adverse off-site water resources related impacts do not occur during the construction, operation, and maintenance of the project.

e. Liability

The Permittee shall hold and save the SFWMD harmless from any and all damages, claims, or liabilities which may arise by reason of the construction, operation, maintenance and/ or use of any facility authorized by this Certification, to the extent allowed under Florida Law.

f. Construction, Operation, and Maintenance Responsibilities

The Permittee shall be responsible for the construction, operation, and maintenance of all facilities installed for the proposed project.

g. Access

SFWMD representatives shall have the same rights of access as set forth in Conditions I (8) of the Administrative Conditions of this certification.

h. Post Certification Information Submittals

Information submitted to the SFWMD subsequent to Certification, in compliance with the conditions of this Certification, shall be for the purpose of the SFWMD determining the Permittee's compliance with the Certification conditions and the non-procedural criteria contained in Chapters 40E-2, 40E-3, 40E-4 and 40E-6, F.A.C., as applicable, prior to the commencement of the subject construction, operation and/ or maintenance activity covered thereunder.

i. Post Certification Construction Modifications

Once this certification has been issued, the SFWMD will require modification of any permits issued by the SFWMD to any entities whose activities will be affected by the proposed project to reflect the activities authorized by this Certification.

j. Post Certification Construction Notifications

At least 30 days prior to the commencement of construction, the Permittee or Project Engineer shall notify the SFWMD Field Engineering Division (using the appropriate SFWMD Form) of the actual or anticipated construction start date and the expected completion date/duration of construction. Annual construction status reports shall be submitted by the Permittee to the SFWMD Field Engineering Division (using the appropriate SFWMD Form) beginning one year after the initial construction start date.

k. Operation Authorization

Operation of the cogeneration facility shall not begin until the Florida Department of Environmental Regulation has received an executed agreement between the Permittee and an

entity capable of receiving and disposing of the combustion waste products generated by the proposed facility.

1. Enforcement

The SFWMD may enforce this certification pursuant to conditions I (20) of the Administrative Conditions of this certification.

2. PROCESSING OF INFORMATIONAL REQUESTS

a. At least ninety (90) days prior to the commencement of construction of any portion of the proposed project, the Permittee shall submit to SFWMD staff, for a completeness and sufficiency review, any pertinent additional information required under the SFWMD's conditions of Certification for the portion proposed for construction. If SFWMD staff does not issue a written request for additional information within thirty (30) days, the information will be presumed to be complete and sufficient.

b. Within sixty (60) days of the determination by SFWMD staff that the additional information is complete and sufficient, the SFWMD shall determine and notify the Permittee in writing whether the proposed activities conform to SFWMD criteria, as required by Chapter 40E-2, 40E-4, and 40E-6, F.A.C., and the Conditions of Certification. If necessary, the SFWMD shall identify what items remain to be addressed. No construction activities shall begin until the SFWMD has determined either in writing, or by failure to notify the Permittee in writing, that the activities are in compliance with the applicable SFWMD criteria.

c. Since this Certification is the only form of permit required from any agency, it is understood that the Permittee and the SFWMD shall strive to resolve disputes by mutual agreement.

d. Objections to modifications of the terms and conditions of certification shall be resolved through the process established in Section 403.516, F.S.

e. Subsequent modifications to the drawings and supporting calculations submitted to the SFWMD which may alter the quality and/or quantity of waters discharges off-site shall be made pursuant to Section 403.516, F.S., and Rule 17-17.211, F.A.C. As part of this process, these modifications shall be reviewed by the SFWMD for a determination that the modifications are in compliance with the non-procedural requirements of Chapter 40E-2, 40E-4, and 40E-6, F.A.C., prior to the commencement of construction.

f. The SFWMD and the Permittee may jointly agree to vary the informational requirements.

B. WATER USE CONDITIONS

1. GENERAL

a. Water Shortage Compliance

In the event of a declared water shortage, the Permittee must comply with any water withdrawal reductions or monitoring requirements ordered by the SFWMD in accordance with the Water Shortage Plan, Chapter 40E-21, F.A.C.

b. Impacts on Existing Legal Uses

The Permittee shall be responsible for mitigating to the satisfaction of the SFWMD, any adverse impacts on existing legal uses caused by the surface ground water withdrawals authorized by this Certification. If adverse impacts occur, or are imminent, SFWMD reserves the right to curtail withdrawal rates pursuant to the enforcement provisions of Condition IV. A.1.1 of these conditions. The adverse impacts can include:

- (1) A reduction in well water levels that impairs the ability of an adjacent well to produce water (an adjacent well may be a domestic well, lawn irrigation well, public water supply well etc.);
- (2) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;
- (3) Saline water intrusion or induction of pollutants into the water supply of adjacent water user, resulting in a significant reduction in water quality; and/ or
- (4) A change in water quality that causes impairment or loss of use of a well water body.

c. Impact on Existing Off-Site Land Uses

The Permittee shall be responsible for mitigating , to the satisfaction of the SFWMD, any adverse impacts on existing off-site land uses as a consequence of the surface or ground water withdrawals authorized by this Certification. If the withdrawals cause an adverse impact on existing land uses, the SFWMD reserves the right to curtail future withdrawals rates pursuant to the enforcement provisions of Conditions IV.a1.1 of these conditions. The adverse impacts can include:

- (1) A significant reduction in water levels in an adjacent water body such as a lake, pond, wetland, or canal system;
- (2) Land collapse or subsidence caused by a reduction in water levels;

- (3) Damage to crops and other vegetation, causing financial harm to the landowner; and/or
- (4) Damage to the habitat of rare, endangered or threatened species.

d. Well System Operations

At any time, if there is an indication that the well casing, valves, or controls associated with the on-site backup well system leak or have become inoperative, the Permittee shall be responsible for making the necessary repairs or replacement to restore the well system to an operating condition acceptable to the SFWMD. Failure to make such repairs shall be cause for requiring that the well(s) be filled and abandoned in accordance with the procedures outlined in Chapter 40-E (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

<u>Source</u>	<u>Maximum Annual Allocation (MGY)</u>	<u>Maximum Daily Source (MGD)</u>
L-63N Canal	1484.00	4.69
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone- Lower Floridan Aquifer	174.0	2.32

b. Limitations on Authorized Withdrawals

(1) Withdrawals from the L-63N Canal shall only occur when the water level in the L-63N Canal is at or above 17050 feet NGVD.

(2) Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer shall only occur when the water level in the L-63N Canal is below 17.50 feet NVGD.

(3) Withdrawals from the L-63N Canal shall be used for cooling, plant processing and irrigation purposes.

(4) Any withdrawals from the L-63N Canal or the Upper or Lower Production Zone of the Upper Floridan aquifer in excess of the amounts specified herein shall require prior SFWMD approval.

(5) The authorization of withdrawals from the Upper Floridian aquifer is predicted on the successful completion of the Aquifer Performance Test required by Condition IV.B.3.a of this Certification and, if shown to be necessary, the successful implementation of the required mitigation for impacts to existing legal users. If mitigation is required for impacts to Caulkins Citrus Company, the mitigation shall be consistent with the terms of the agreement between the Permittee and Caulkins Indiantown Citrus Company dated July 18, 1991.

(6) The withdrawals from the Upper and Lower Production Zones of the Upper Floridian aquifer are authorized for a period not to exceed 75 days at the specified maximum daily allocation or 90 days at an allocation not to exceed the maximum annual allocation. The permittee shall not exceed a total of 90 withdrawal days from the Floridian aquifer during any consecutive 365 day period without prior approval from the SFWMD.

c. Authorized Withdrawal Facilities

- 2 - 2,550 GPM Surface Water Pumps in L 63N
- 1 - 10" x 1340' Flowing Well cased to 500' (existing well)
- 1 - 10" x 1265' Flowing Well cased to 750'
- 2 - 15" x 1350' Flowing Wells cased to 750'
- 2 - 15" x 1650' Flowing Wells cased to 1487'

d. Authorized Surface Water Withdrawal Elevation

The intake for the surface water withdrawal facilities in L-63N shall be designed such that surface water withdrawals shall cease when water levels in the canal fall below 17.50' NVGD (See also Condition E.3.a(5)).

e. Artesian Floridan Wells

The maximum installed capacity of any authorized Floridian aquifer well shall be that capacity at which the well is capable of flowing in a free flowing mode relative to the existing land elevation at the well site. Pumping equipment shall not be installed on any well as a means to retain or increase capacity unless otherwise allowed by SFWMD regulations.

f. Modification of Authorized Withdrawals

By January 1, 2005, and every ten years thereafter, unless extended by mutual agreement between the Permittee and SFWMD, the Permittee shall submit to the SFWMD a report on the project's consumptive water use which contains the information required by Chapter 40E-2, F.A.C., as in effect at that time. Within 90 days after receipt of the report, SFWMD shall evaluate the information and issue a written notification to DER and the Permittee as to whether the maximum annual withdrawals of water for consumptive use authorized by this certification remain in compliance with the provisions of Chapter 373, F.S.,

and Chapter 40E-2, F.A.C., as in effect at that time. If the notification indicates that the withdrawals are not in compliance with those provisions, SFWMD shall recommend possible alternatives for bringing the withdrawals into compliance or otherwise meeting the minimum consumptive water use needs of the certified project. If mutual agreement cannot be reached within 180 days after issuance of the written notification on whether the maximum annual withdrawals of water for consumptive use remains in compliance, then the written notification shall be immediately referred to the Division of Administrative Hearings (DOAH) for resolution in accordance with the procedural provisions of Section 403.516(1)(C) and 120.57, F.S. In any proceeding conducted pursuant to this Conditions of Certification, SFWMD shall demonstrate that the authorized water uses are no longer consistent with SFWMD's non-procedural criteria. The Permittee shall then demonstrate its entitlement to maintaining the authorized water uses by showing that the authorized water use is consistent with the non-procedural criteria of SFWMD for such water uses or that a variance or other relief is warranted. The hearing officer shall submit a recommended order to the Siting Board whether the authorized water uses should be modified. The Siting Board shall then enter a final order on the matter, which order will constitute final agency action.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Florida Aquifer Withdrawals

The authorized withdrawals from the Floridian aquifer are subject to the submittal of the following tests and analyses, a SFWMD evaluation of the results for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., and SFWMD's written approval to initiate withdrawals. The following information shall be submitted:

(1) The results of the Aquifer Performance Test (APT) to be conducted at the project site once the on-site water storage pond has been constructed or an alternate disposal method is approved by DER and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production zones of the Upper Floridian aquifer and the leakance between the zones. A plan which details the APT shall be submitted to the SFWMD for approval at least 30 days prior to the commencement of the test.

(2) An analysis of the potential impacts to existing legal users, which exist on the date of this certification, using the results obtained from the Hydrogeologic Study, previously submitted and accepted by the SFWMD, and the APT. The SFWMD shall approve the method for determining adverse impacts. Should adverse impacts be predicted to occur to any existing legal user, the Permittee shall mitigate these impacts, to the satisfaction of the SFWMD, and consistent with the terms of the agreement between the Permittee and Calkins Indiantown Citrus Company, dated July 18, 1991.

(3) The Aquifer Performance Test results and any impact/ mitigation

analysis shall be submitted , signed, and sealed by a Florida Registered Professional Geologist.

b. Dewatering Operations

Prior to the commencement of construction of those portions of the project which involve dewatering activities, a detailed plan for the proposed dewatering activities must be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2, 40E-3, and 40E-4, F.A.C. The following information shall be submitted:

(1) A detailed site plan which shows the location (s) for each proposed dewatering area;

(2) The method (s) used for each dewatering operations;

(3) The maximum depth for each dewatering operation;

(4) The location and specifications for all proposed wells and/or pumps associated with each dewatering operation;

(5) The discharge method, route, and location of receiving waters generated by each dewatering operation, including the measures (Best Management Practices) that will be taken to prevent water quality problems in the receiving operation;

(6) The duration of each dewatering operation;

(7) An analysis of the impact of each proposed dewatering operation which indicates that no significant impacts will occur to any existing on-site and/or off-site legal users, wetlands, or existing plumes of groundwater contamination;

(8) The location of any infiltration trench(es) and/or recharge barriers;
and

(9) All plans must be signed and sealed by a professional Engineer and a Professional Geologist, both registered in the State of Florida.

c. Surface and Groundwater Withdrawals Monthly Reporting Requirements

The Permittee shall submit daily surface water and groundwater withdrawals quantities, separated by source, to the SFWMD on a monthly basis beginning with the month following initiation of construction dewatering and/or construction and operation of the proposed canal and/or the well withdrawal facilities.

d. Surface Water and Groundwater Monitoring Programs

Within six months of issuance of this Certification, the Permittee shall develop and implement a surface water and groundwater monitoring program. Within three months of issuance of this Certification, a preliminary proposal shall be submitted to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2 and 40E-4, F.A.C. In developing the monitoring program, the Permittee shall consider canal withdrawal facility and well locations, depth and method of construction, types of screens, and frequency of data collection. In addition, the monitoring program shall include the following:

(1) Permittee shall monitor water levels and water quality from the Upper and Lower Production Zones of the Floridian aquifer system. Water quality monitoring from each zone shall include the determination of the chloride ion concentration and specific conductance on a monthly basis during periods of withdrawals. Water levels shall be collected from each zone monthly and referenced to NGVD. Data shall be submitted to the District in the month following data collection.

(2) Permittee shall collect water level data from the L-63 Canal adjacent to the pump station on a daily basis. Water levels shall be reference to NGVD and submitted to the District monthly. Permittee shall collect water quality data from the discharge end of the pipeline on a monthly basis. Water quality shall include the determination of the chloride ion concentration, specific conductance, TDS, PH, total phosphorus and total nitrogen. The data shall be submitted to the District on a monthly basis.

(3) Permittee shall monitor the Surficial aquifer for water level (references to NGVD) and water quality data during the dewatering operations. The frequency of data collection and water quality constituents to be collected shall be determined by the permittee and approved by District staff prior to commencement of dewatering.

e. New Well Construction

Prior to the construction of the proposed on-site back-up wells, the Permittee shall submit the drilling plans and other pertinent information required by Chapter 40E-3, F.A.C., to the SFWMD for review and approval. If the final wells location are different from those ordinarily proposed in the certification application, the Permittee shall also submit to the SFWMD, for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C., an evaluation of the impacts of the proposed well location(s) on adjacent existing legal users, pollution sources, environmental features, the saline water interface, and water bodies.

C. SURFACE WATER MANAGEMENT CONDITIONS

1. GENERAL CONDITIONS

a. Professional Engineer Certificate

The operation of the surface water management system authorized under this Certification shall not become effective until a Florida Registered Professional engineer certifies, upon completion of each phase, that these facilities have been constructed in accordance with the design approved by the SFWMD. Within 30 days after completion of construction of the surface water management system, the Permittee or authorized agent shall submit the engineer's certification and notify the SFWMD Field Engineer Division that the facilities are ready for inspection and approval. Such notification shall include as-built drawings of the site which shall include elevations, locations, and dimensions of components of the surface water management system.

b. Impacts on Fish, Wildlife, Natural Environment Values and Water Quality

The Permittee shall prosecute the work authorized under this Certification in a manner so as to minimize any adverse impacts of the authorized works on fish, wildlife, natural environment values and water quality. The Permittee shall institute necessary measures during the construction period, including necessary compaction of any fill materials placed around newly installed structures and/or the use of silt screens, hay bales, seeding and mulching, and/or other similar techniques, to reduce erosion, turbidity, nutrient loading and sedimentation in the receiving waters. References: Sections 373.413(1) and 373.416(1) F.S.; Rule 40E4.091(1)(a), 40E-4.301, and 40E-4.381(2)(a), F.A.C.

c. Discharge Structures

Discharge structures, where appropriate, shall include a baffle, skimmer, or other mechanism suitable for preventing oil, grease, or other floatable materials from discharging to and/or from retention/detention areas.

d. Off-site Discharges

Off-site discharges during construction and development shall be made only through the discharge facilities authorized by this Certification. No roadway or building constructions, except for the site access road and incidental construction activities, shall commence on-site until completion of the permitted discharge structure and detention areas. All runoff generated by incidental construction activities shall be retained on-site until the discharge facility is operational. Water discharged from the project shall be through structures having a mechanism suitable for regulating upstream water stages. Stages may be subject to operating schedules satisfactory to the SFWMD.

e. Correction of Adverse Impacts Due to Ditch Relocation

The Permittee shall be responsible for correcting in a timely manner any adverse on-site or off-site impacts to water quality, water quantity and/or the environment which may occur as a result of the relocation of the existing on-site drainage ditch and the installation of additional culverts. Reference: sections 373.413 and 373.414; Rules 40E-4.091, 40E-4.301 and 40E-4.381, F.A.C.

f. Correction of Water Quality Problems

The Permittee shall be responsible for the correction of any sedimentation, turbidity, erosion, shoaling and/or other water quality problems that result from the construction, operation, and/or maintenance of the works authorized under this Certification.

g. Additional Water Quality Requirements

The Permittee may be required to incorporate additional water quality treatment methods into the surface water management system if such measures are shown to be necessary.

h. Pipeline Access Roads

The Permittee shall, whenever available, utilize adjacent existing roads for access to the water transmission pipeline for construction, operation and/or maintenance purposes. Access roads which must be constructed in areas where an existing road is not available shall be constructed in a manner which does not impede natural drainage flows and minimizes impacts to on-site and adjacent wetlands.

i. Dike Designs for Minor Impoundments

Dike designs for minor impoundments shall be in accordance with commonly acceptable engineering principles and State laws. Side slopes shall be no steeper than 2:1 (horizontal to vertical) and top widths no less than five feet.

j. Minimum Freeboard for Minor Impoundments

The minimum freeboard for minor impoundments above the maximum water depth shall be equal to the maximum water depth dimensions for a 25 year, 72 but not less than two feet nor more than three feet.

k. In the event the rail spur selected by the permittee impacts the surface water management system of an existing legal user, the permittee shall be responsible for correcting any water quality or water quantity problems resulting from the selected rail spur. Detailed plans and supporting calculations shall be submitted to SFWMD pursuant to Conditions IV.C.3.a.(3).

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Allowable Discharge

The surface water management system for the proposed project shall be designed such that peak post-development discharges from the developed area of the project site meet the following allowable discharges:

<u>BASIN NO.</u>	<u>ALLOWABLE DISCHARGE (CFS)</u>	<u>RECEIVING BODY OR USE</u>
1	0	Used in Plant Process
2	1	Discharge into Wetland #6
3	1	Discharge into Wetland #4
4	0	Used in Plant Process
5	0	Used in Plant Process
6	9	Discharges into On-Site Toe Ditch

b. Authorized Discharge Facilities

BASIN 2:

1-0.25' diameter circular orifice with the invert at elevation 33.5' NGV 1-20ø V-notch with the invert at elevation 35.5' NGVD.

1-4.0' wide weir with the crest at elevation 36.5' NGVD and a length of 18" diameter culvert discharging into 20' of rip-rapped spreader swale.

BASIN 3:

1-0.25' diameter circular orifice with the invert at elevation 32.7' NGVD 1-20ø V-notch with the invert at elevation 34.6' NGVD

1-4.0' wide weir with the crest at elevation 36.0' NGVD and a length of 18" diameter culvert discharging into a 20' of rip-rapped spreader swale.

BASIN 6:

1-12' wide weir consisting of a 3 sided drop inlet with the crest at 37.5' NGVD.

c. Authorized Receiving Water

C-44 Canal via existing ditch system

d. Authorized Design Elevations

<u>BASIN NO</u>	<u>CONTROL ELEVATION</u>	<u>MINIMUM ROAD CROWN ELEVATION</u>	<u>MINIMUM FINISHED FLOOR ELEVATION</u>
1	N/A (Lined Basin)	35.7' NGVD	37.3' NGVD
2	33.5' NGVD	35.5' NGVD	36.8' NGVD
3	32.7' NGVD	34.9' NGVD	37.7' NGVD
4	N/A (Lined Basin)	34.4' NGVD	36/2' NGVD
5	N/A (Lined Basin)	N/A	N/A
6	N/A (Lined Basin)	N/A	N/A

e. Revision to Site Specific Design Authorizations

Any revisions to the above site specific design authorizations proposed by the Permittee subsequent to the issuance of this Certification shall be submitted to the SFWMD for review and approval at least 90 days prior to implementation. The submittal shall include all the information necessary to support the proposed request, including detailed drawings, topographic maps, average wet season water table elevations, calculations and/or any other applicable data. Such requests may be included as part of the surface water management system construction plan submittals required by this Certification provided they are clearly identified as a requested revision to the previously authorized design.

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Surface Water Management System Construction Plans

Prior to the commencement of construction of any portion of the project which affects the movement of waters, all construction activities for that portion of the proposed project which may obstruct, divert, control, impound or cross waters of the state shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2 and 40E-4, F.A.C. All plans, detail sheets and calculations shall be signed and sealed by a Florida Registered Professional Engineer. For all construction activities, the following information shall be submitted unless previously submitted to and accepted by the District:

- (1) Detailed paving, grading and drainage plans which clearly show all on-site water management areas, all on-site and perimeter site grades, all internal and external discharge structures, how runoff will be routed within and discharged from the site, a description of and specific location for a benchmark in the vicinity of the control structure (s), and calculations which demonstrate that the design

storm will be held on-site and verify the stage/storage assumptions;

- (2) Detailed plans of all proposed roads, parking lots and building pads which demonstrate compliance with Martin County and SFWMD flood protection criteria;
- (3) Detailed plans and supporting calculations for the surface water management systems that will serve the proposed on-site access roads and railroad spur which demonstrate compliance with SFWMD flood protection and water quality criteria;
- (4) Cross-sections of all proposed control structures which demonstrate compliance with SFWMD water quality and quantity design criteria;
- (5) Detailed plans and supporting calculations for the erosion control mechanism and liner to be provided within the relocated drainage ditch which demonstrate that the proposed erosion control mechanism has been designed to form an occlusive seal with the hardpan confining layer in order to prevent seepage of water from the adjacent wetland areas, to prevent scouring of the channel cross-section, and to maintain existing flows through the ditch (See also Condition D.3.a.(3));
- (6) If control elevations are revised for any portion of the proposed surface water management system, revised calculations which demonstrate compliance with the SFWMD's retention/detention criteria for both quantity and quality purposes;
- (7) If control elevations are revised for any portion of the proposed surface water management system, revised soil storage calculations; and
- (8) If the existing downstream control structure is either removed or modified, detailed calculations which demonstrate that there will be no adverse environmental, flood protection, or water quality impacts upstream or downstream of the structure.

b. Site Access Road Construction Plans

Prior to the commencement of construction of any portion of the proposed Site access road from S.R. 710 to the project site which will be located immediately adjacent to the Caulkins Citrus processing facility site, the final road alignment and any related construction activities shall be reviewed by the SFWMD for a determination of compliance with the non-

procedural requirements of Chapter 40E-2 and 40E-4, F.A.C., including Appendix 7 (Isolated Wetlands Rule) of the Basis of Review for Permit Applications within the SFWMD. For all site access road construction activities, the following information shall be submitted:

(1) Documentation, including an aerial photograph at a scale of 1":300' with the alignment clearly indicated, which demonstrates that the proposed access road will not encroach upon or otherwise adversely impact the existing on-site and off-site wetlands located immediately west of the proposed road alignment;

(2) Construction details and cross-sections of the final road alignment and any proposed buffers, including fences;

(3) Documentation (such as a legal instrument) which conveys authority from the adjacent landowner (Caulkins Indiantown Citrus Company) to the Permittee to construct the road within the alignment proposed during the sufficiency review of the Site Certification Application.

c. Water Storage Area (Minor Impoundment) Construction Plans

(1) Prior to the commencement of construction of either of the two proposed on-site minor impoundments (the 2604 acre cooling water storage pond and the 8.0 acre wastewater storage pond), all proposed construction activities shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2 and Chapter 40E-4, F.A.C., including Appendix 6 (Above Ground Impoundments) of the basis of Review for Surface Water Management Permit Applications within the SFWMD. All plans, detail sheets, and calculations shall be signed and sealed by a Florida Registered Professional Engineer. The Permittee shall provide the same type of information requested in Condition C.3.a above (Surface Water Management System Construction Plans), including a flood routing analysis for each of the above ground impoundments which routes the 25 year/72 hour and the 100 year/ 72 hour storm events through each basin and assumes a water elevation in each of the ponds equivalent to the maximum maintained water elevation of each pond.

(2) Upon completion of construction, the Permittee shall submit a report to the SFWMD on the engineering adequacy of all above ground dikes, levees and berms behind which water will be contained and where failure could impact off-site areas. Such reports shall include proposed techniques and a schedule for repairing any deficiencies noted and shall be signed and sealed by a Florida Registered Professional Engineer.

(3) On an annual basis, in May of each year, beginning no later than one year after construction is completed and certified, the Permittee shall submit a report to the SFWMD on the engineering adequacy of all above ground dikes, levees and berms behind which water will be contained and where failures could impact off-site areas. The reports shall address the following items:

- (a) An assessment of vegetative conditions in all impoundments and on all dikes;
- (b) An assessment of the structural conditional if all dikes, which address any erosion, settlement, cracking, and stability impacts.
- (c) An assessment of the operational and structural conditions of any structures and pumps that are an integral part of the dike's operation;
- (d) Any evidence of encroachment or misuse of land, and
- (e) Recommendations for short term repairs and permanent modifications, if necessary.

(4) The Permittee shall submit Interim or more detailed Annual Reports when emergencies or major problems arise that require immediate modifications to the the design and/ or operation of the dike and/ or its structures.

d. Water Pipeline

Prior to the commencement of construction of any portion of the proposed water pipeline, all construction activities for that portion of the water pipeline which may obstruct, divert, control, impound or cross waters of the state, either temporarily or permanently, shall be reviewed by the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2 and 40E-4, F.A.C. "Construction activities" in this situation shall include the placement of access/ maintenance roads, culverts and/or fill materials, excavation activities, and any related activities. All plans, detail sheets and calculations shall be signed and sealed by a Florida Registered Professional Engineer. For all pipeline construction activities, the following information shall be submitted:

- (1) A centerline profile of existing topographic features along any proposed aaccess/maintenance road (s);
- (2) A preliminary design and typical cross-section of any proposed access maintenance road(s) with elevations marked;
- (3) Specifications showing the location of any access/ maintenance road, culvert, and/or other related structure or facility to be constructed, including all areas to be filled or excavated;

- (4) Specifications, including supporting assumptions and calculations, showing the type and size of water control structures (pipe, culvert, equalizer, etc.) to be used, with proposed flowline elevations marked, drainage areas identified, and design capacity verified;
- (5) Identification of proposed control elevations for each drainage facility to be constructed, including documentation which demonstrates that the proposed control elevations are sufficient to hydrologically maintain all wetlands to be preserved, enhanced/restored, and/or created within or adjacent to the right-of-way;
- (6) A cross-section of all proposed excavation areas showing the proposed depth of excavation and the position of the pipeline;
- (7) Documentation that none of the proposed construction and/or excavation activities will adversely impact off-site wetlands;
- (8) Calculations and supporting documentation which demonstrate compliance with all applicable criteria, particularly as they relate to allowable discharge;
- (9) Identification of wet season water table elevations for each basin in which facilities will be located;
- (10) Calculations and supporting documentation which demonstrate that the proposed construction activities will not adversely impact the water quantity and/or quality of existing and/or permitted surface water management systems; and
- (11) If construction of the proposed water pipeline contributes to the necessity for future modifications to adjacent/existing roads, consideration of the water quality treatment requirements of the modified roads in the surface water management system design for the water pipeline line.

e. Surface Water Quality Monitoring Program for Surface Water Discharges

Within six months of issuance of this certification, the Permittee shall develop and implement a monitoring program for surface water discharges. Within three months of issuance of this Certification, the Permittee shall submit a preliminary surface water quality monitoring program to the District for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C. At a minimum, the program shall monitor all off-site

discharges from the surface water management system and all surface water management system discharges into the on-site wetlands, specifically where Basin No. 2 discharges into Wetland No. 6 and Basin No. 3 discharges into Wetland No. 4.

- (1) While the program may incorporate additional monitoring requirements and parameters required by the other agencies, at a minimum, it shall include the following parameters and time frames.

<u>MONITOR TYPE AND SCHEDULE</u>	<u>PARAMETERS</u>
A. GENERAL (EVERY OTHER MONTH)	TOTAL ORGANIC CARBON, DISSOLVED OXYGEN, PH, TURBIDITY, SPECIFIC CONDUCTANCE, CHEMICAL OXYGEN DEMAND, TOTAL SUSPENDED SOLIDS, ALKALINITY.
B. ORGANIC (SEMI-ANNUAL)	OIL AND GREASE, DETERGENTS, EPA METHODS 601 AND 602.
C. METALS (SEMI-ANNUAL)	ALUMINUM, ANTIMONY, ARSENIC, BERYLLIUM, CADMIUM, COPPER, CYANIDE, IRON, LEAD, MERCURY, NICKEL, SELENIUM, SILVER, ZINC.

- (2) Water quality samples shall be taken at the above noted locations in accordance with the above schedule during periods of discharge. A laboratory certified by the State of Florida shall be responsible for all water quality analyses under (1) B and (1) C above. Reports shall be submitted to the SFWMD on a semi-annual basis. Initial sampling results shall be reported to the SFWMD no later than six months following the issuance of this Certification.
- (3) The SFWMD will evaluate the monitoring results to determine whether the discharge degrades receiving waters and conforms to State water quality standards as defined in Chapter 17-302, F.A.C. If water quality problems develop, the SFWMD reserves the right to require more frequent sampling and more thorough analyses in

order to provide assurances that the discharges will not cause additional off-site water quality impacts.

f. Hazardous Materials Management

Prior to the commencement of construction of this project, the Permittee shall submit a copy of the Comprehensive Hazardous Materials and Waste Management Plan for the Indiantown Cogeneration Project to the SFWMD for a determination of compliance with the requirements of Chapter 40E-4, F.A.C. The plan shall provide an adequate level of detail for early warning and detection of hazardous materials within the shallow groundwater. At a minimum, the plan shall include a groundwater monitoring network, including proposed up-gradient and down-gradient locations of monitoring wells, prepared by a hydrogeology consultant.

D. ENVIRONMENTAL CONDITIONS

1. GENERAL

a. Wetland Avoidance

The Permittee shall avoid impacting wetlands within the plant site, water withdrawal facilities, and water transmission line corridor wherever practicable. Where necessary and feasible, the location of the facilities and/or water transmission line alignment shall be varied to eliminate or reduce wetland impacts.

b. Fill Materials

No fill materials shall be obtained from excavated wetlands within the project site, unless in accordance with a mitigation plan submitted in compliance with the conditions of this Certification.

c. Wetlands Mitigation

The Permittee may be required to provide mitigation and/or other measures if wetland monitoring and/or the treatment of on-site wetlands shall require additional environmental review by SFWMD staff in order to determine whether any additional mitigation activities may be required.

d. Additional Environmental Review

Any future changes in on-site land use, project design, and/or the treatment of on-site wetlands shall require additional environmental review by SFWMD staff in order to determine whether any additional mitigation activities may be required.

e. Other Wetland Impacts

Any potential impacts to on-site and/or off-site wetlands from the cooling tower drift shall be addressed to the satisfaction of the FDER.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Minimum Road Grades Adjacent to Wetlands

All roads adjacent to wetland areas, including those located west of Wetland No. 4 and east of the proposed northwest access road from S.R. 710 to the project site, shall have road grade elevations established a minimum of two feet above the wetland control elevation.

b. Erosion Control Mechanism Authorization

Erosion control mechanisms for the wetland water distribution channels shall be constructed in accordance with Drawing COY 0191 of the Site Certification Application Additional Information Submittal dated June 11, 1991. Any proposed changes to the design of the erosion control mechanisms authorized by this Certification shall be reviewed and approved by the SFWMD prior to construction.

c. Authorized Wetland Control Elevations

Wetland No. 4: 32.7' NGVD
Wetland No. 6: 33.5' NGVD

3. ADDITIONAL INFORMATION REQUIREMENTS

a. Wetlands Protection

Prior to the commencement of construction of any facilities to be located adjacent to the wetlands identified for preservation, the Permittee shall:

(1) Stake and rope off the protected wetlands and buffer zones to prevent encroachment during construction. The stakes and ropes shall remain in place until all adjacent construction activities have been completed. Verification of staked areas by SFWMD staff shall be required prior to the commencement of and upon completion of any construction activities.

(2) Submit documentation to the SFWMD that all protected and/or mitigated areas, including buffer zones, have been legally reserved so that they will be managed

in a manner consistent with their proposed use as conservation areas.

(3) Submit manufacturer's specifications for the liner to be installed in the relocated ditch to the SFWMD for review and approval. The liner shall be of sufficient quality to prevent the drawdown of the water table of the adjacent wetland into the relocated ditch. (See also Condition C.3.a.(5).)

b. Preserved Wetlands Monitoring Plan

Prior to the commencement of construction, the Permittee shall submit to the SFWMD, for review and approval, a monitoring plan designed to document the conditions of the wetlands designated for preservation on the project site. This plan may be part of a monitoring program designed to document the condition of all preserved on-site areas. However, at a minimum, the plan shall include the following:

- (1) Provisions for both quantitative and qualitative observations of wildlife and macro invertebrate utilization;
- (2) Weekly water level readings;
- (3) Documentation of the condition of the wetlands which shall include panoramic photographs or an equivalent method;
- (4) An evaluation of the success of the preservation/enhancement effort; and
- (5) An annual report which includes the above and any other relevant information.

c. Future Mitigation Plans

If the construction of the proposed water pipeline and/or changes to the proposed site access road alignment or any other portion of the project design result in impacts to any on-site and/or off-site wetlands, the Permittee shall submit a mitigation and monitoring plan to the SFWMD prior to the commencement of construction for that portion which may affect wetlands for a determination of compliance with the non-procedural requirements of Chapter 40E-4, F.A.C., including Appendix 7 (Isolated Wetlands Rule) of the Basis of Review of Surface Water Management Permit Applications in the SFWMD, in effect at the time of submittal. The plan shall include the following information:

- (1) A discussion of the alternatives considered to reduce or avoid wetland impacts, including a statement explaining why there are no feasible alternatives to the proposed design if wetland impacts are unavoidable;

- (2) Aerial photographs, at a minimum scale of 1":300', which show the locations of the proposed facilities/alignments and all the wetlands, including those within and adjacent to the project site, the access road right-of-way, and/or the water transmission line alignment, that would be impacted by the proposed construction activities;
- (3) A summary which identifies individual and total acres for all existing and impacted wetlands and a evaluation of the condition of all such wetlands;
- (4) At a minimum, locations and sizes of all proposed mitigation areas, species to be planted, planting densities, details of the proposed elevations and water depths, and an estimated time schedule for completion of the construction of the mitigation areas;
- (5) At a minimum, provisions for both quantitative and qualitative observations of wildlife and macro invertebrate utilization, weekly water level readings, documentation of the condition of the mitigation areas which shall include panoramic photographs or an equivalent method, an evaluation of the success of the mitigation effort, and an annual report incorporating this information and any other relevant information.
- (6) If mitigation/restoration activities are proposed, a wetland mitigation and/or restoration work schedule which details each specific mitigation task (e.g. grading to proper elevation, mulching, planting, regularly scheduled maintenance and monitoring, etc.) and the calendar dates for the start and completion of each task.
- (7) If mitigation shall occur within the areas designated for preservation on the Indiantown Cogeneration Plant site, documentation that sufficient areas have been legally reserved to compensate for the proposed wetland impacts.

E. LAND MANAGEMENT CONDITIONS

1. SITE SPECIFIC DESIGN AUTHORIZATIONS

- a. This Certification authorizes the installation, operation and maintenance of dual 30" water withdrawal lines, screens, and an appurtenant intake facility to be located on the L-63N northeasterly Right-of-Way (ROW) at the confluence of L-63N, L-63S and C-59.
- b. This Certification authorizes the temporary use of the L-63N northeasterly

ROW for construction access to the surface water withdrawal facilities to be installed in the L-63N ROW and the pump station site to be located immediately adjacent to the southern boundary of the CSX Railroad ROW. However, the Permittee shall secure permanent access to the pump station site which does not involve the permanent use of SFWMD ROW.

c. This Certification does not authorize the use of SFWMD ROW for the proposed pump station site. The Permittee shall acquire the pump station site through application to the SFWMD for the sale of surplus lands.

2. GENERAL DESIGN CONDITIONS

a. The Permittee shall provide and maintain General Liability Insurance through the term of this certification. The coverage shall be of a comprehensive form on an occurrence basis and shall provide coverage for death, bodily injury, personal injury and property damage that could arise directly or indirectly from the performance of this certification. The limits of coverage shall be:

- (1) \$5,000,000.00 per occurrence, combined single limit for bodily injury and property damage liability. Coverage shall be no more restrictive than as specified in the latest edition of the Commercial General Comprehensive Liability Policies of the Insurance Services Office (ISO).
- (2) Workers' Compensation shall be as prescribed by Florida Statutes, including Employees Liability.
- (3) The Permittee shall be identified as the insured on the policy/certificate of insurance and the SFWMD identified as an additional insured as it relates to General Liability.
- (4) Where motor vehicles will make use of a SFWMD Project Work, Comprehensive Automobile Liability insurance shall be provided in the same limits as the Comprehensive General Liability insurance.
- (5) All insurance shall be written by a company duly authorized to do business in Florida. Certificates of insurance for the coverage amounts required shall be furnished to the SFWMD.

b. The Permittee shall keep all access gates locked when not actually being used to prevent unauthorized public access.

c. The Permittee shall erect a substantial handrail or guardrail along the top

of the end wall of the withdrawal facility.

d. The Permittee is advised that the SFWMD periodically treats the L-63N, L-63S and C-59 canals with herbicides for aquatic weed control. With some herbicides the U.S. Environmental Protection Agency requires that restrictions be placed on the use of treated water for purposes such as watering livestock, irrigation and domestic use for a given period of time. The SFWMD will post a notice in the immediate vicinity of the Permittee's Intake Structure in L-63N whenever this occurs which identifies any restrictions that may be associated with the weed control activities. The Permittee is advised to inquire at the Okeechobee Field Station [(813) 763-2197] if additional information is required regarding any posted notices.

e. All excavations shall be in accordance with DER requirements and silt booms shall be employed where necessary.

f. Backfilling of the pipe trench shall be accomplished in 6" lifts and shall be thoroughly compacted.

g. The Permittee shall be responsible for the correction of any erosion or shoaling attributable to the construction, operation and maintenance of the authorized facilities.

h. The SFWMD is not responsible for any damages to installations located within its ROW.

i. The Permittee shall be responsible for the repair and/or replacement of any existing facilities located within the SFWMD ROW which may be damaged by the Permittee or his agents during the construction, operation or maintenance of the authorized facilities/uses.

j. The Permittee shall restore any canal ROW disturbed during construction, installation and/or maintenance of the authorized facilities to original or better condition.

k. The Permittee shall be solely responsible for any relocations which may be required as a result of this Certification and for any notification or coordination with the owners of previously permitted facilities located within the SFWMD ROW.

l. The Permittee acknowledges that any or all authorized facilities/uses within the SFWMD ROW are, in an emergency situation, subject to immediate alteration, modification or removal by District staff. Any resulting damage shall be the responsibility of the Permittee.

m. Any additional facilities or alterations to existing authorized facilities shall require prior approval from the SFWMD.

n. The SFWMD may request a modification to this Certification if the

authorized use of the SFWMD's ROW is later found to be contrary to SFWMD policies, operations, and/or other uses contrary to SFWMD needs requirements.

3. ADDITIONAL INFORMATION SUBMITTALS

a. Construction Plans for Authorized Uses in SFWMD Right of Way

Prior to the commencement of construction of any portion of the withdrawal facilities and associated piping to be located within the SFWMD ROW, the Permittee shall submit complete detailed construction drawings showing the proposed facilities to the SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-6, F.A.C. The drawings shall be identical to the plans to be provided to the Permittee's contractor, shall depict the proposed facilities in both plan and profile views and shall show at a minimum:

- (1) The canal right of way lines;
- (2) The top of the canal bank and its elevation;
- (3) The width and elevation of any berms or levees;
- (4) Three cross sections of the canal taken adjacent to the water withdrawal facility, 50' upstream and 50' downstream of the water withdrawal facility. The cross sections shall be taken at 10' intervals from top of bank to top of bank and shall be plotted on standard 10 x 10 cross section paper to the same horizontal and vertical scale using NGVD datum. The design section for the channel shall also be plotted on the submitted cross sections;
- (5) Design details which demonstrate that withdrawals from the canal cannot occur below elevation 17.50 NGVD (see also Condition B.2.d);
- (6) The wall thickness and "schedule" of the pipe, conduit or culvert;
- (7) The design of any concrete end alls, forebays, rubble and/or sand-cement rip rap;
- (8) Any appurtenances such as fences, guardrails, safety barriers or devices, signs, security enclosures, paved areas, meters, valves, blow-off lines, cathodic protection systems, utility or communications lines or services either buried or above ground, etc.;

- (9) The location of the proposed facilities in relation to a section line, major road or other prominent well-known landmark by which the facilities have been located in the field.

b. Temporary Use of SFWMD Right of Way During Initial Construction

In order to use the SFWMD ROW for temporary short-term construction activities associated with the construction of the authorized withdrawal facilities and/or access during construction of the pumping station, the Permittee shall submit the following information to the SFWMD for review and approval and/or otherwise comply with the following requirements:

- (1) A construction schedule and detailed plan identifying the proposed route, type and number of vehicles to be used and the frequency of such use;

- (2) A document (e.g., map/drawing) which identifies all other proposed uses of the ROW such as work areas, spoil disposal areas, stockpiling or drying areas, materials storage areas, temporary construction or office trailer sites, etc.;

- (3) A document (e.g., map/drawing) which identifies activity (such as trenching for pipe or culvert construction) which could interfere with SFWMD access through the construction site or otherwise interfere with the ability of the SFWMD to operate or maintain project works;

- (4) A document (e.g., map/drawing) which identifies any construction activities within the canal similar to but not limited to the installation of coffer dams or fills. The SFWMD reserves the right to prohibit such activities if they are not in the best interest of the SFWMD;

- (5) A document (e.g., map/drawing) which identifies the location of any proposed temporary facilities or uses of the SFWMD ROW in relation to a section line, major road or other prominent well-known landmark by which the facilities may be located in the field;

- (6) Prior to the use of any portion of the SFWMD ROW, shall post a \$25,000.00 surety bond in favor of the SFWMD to ensure restoration of any damages to the SFWMD ROW upon completion of the construction phase and keep it in force until the release of the bond is authorized by the SFWMD;

- (7) Shall obtain a SFWMD Key Permit for those portions of the SFWMD ROW for which the Permittee does not currently have keys; pay all associated key fees, and abide by the key permit regulation;

(8) Conduct all use of the SFWMD ROW in accordance with the non-procedural and advance notification requirements of Chapter 40E-6, F.A.C.

PART V

TREASURE COAST REGIONAL PLANNING COUNCIL

1. The Permittee shall implement a program to assist the citizens of the Region to become more energy efficient and reduce their reliance on fossil fuels. The program shall emphasize the use of the latest energy conservation techniques and make available the latest information on producing electricity by means other than burning fossil fuels. The program shall be designed to offer the public assistance in the design, construction, and use of energy saving products and systems. The intent of the program shall be to work toward the reduction of the demand for fossil fuel derived electricity over time by the same amount as that generated by this facility. A plan for the program shall be developed in consultation with Treasure Coast Regional Planning Council (TCRPC) and the Department of Community Affairs (DCA). The program will be implemented prior to operation of the Indiantown Cogeneration Project. The Permittee shall submit annually to TCRPC and DCA a report on the program's progress and on expected activities for the following year.
2. In the event of discovery of any archaeological artifacts during construction of the Indiantown Cogeneration Project, Permittee shall stop construction in that area and immediately notify the Division of Historical Resources, Florida Department of State (DHR). Permittee shall consult with DHR to determine appropriate action. If avoidance is not reasonably possible, the impact will be mitigated through archeological salvage excavation operation or by other methods acceptable to DHR.
3. All Brazilian pepper, Australian pine, and Melaleuca shall be removed from the entire project site, as well as within the water pipeline right-of-way. Removal shall be in a manner that minimizes seed dispersal. The maintenance of these areas shall include continual removal of these species.
4. The Permittee shall use water-saving plumbing fixtures and other water conserving devices in restrooms and employee locker rooms, as specified in the Water Conservation Act, Section 553.14, Florida Statutes.
5. At least 60 days prior to construction, ICP shall submit and upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated of Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures

such as perimeter staking, and vegetation control if controlled burning is proposed to control vegetation, a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future developmental uses; and the entity responsible for management.

6. The Permittee will initiate construction of the southbound right turn lane from State Road 710 into the plant access road concurrent with the start of site development work and will complete construction of the right turn lane prior to the initiation of building construction.

PART VI

DEPARTMENT OF TRANSPORTATION

1. Prior to the delivery of coal to the Project Site, a constant warning time device shall be installed to control the existing railroad warning devices and gates at the crossing of the Plant Access Road and the CSX railroad. The device shall be operated to provide a constant warning time at this crossing for trains or varying speeds.
2. The Permittee shall construct and maintain the access road to the pump intake structure in Okeechobee County as a private access road for purposes of crossing the CSX Railroad at this location. The Permittee shall take appropriate measures to prevent public use of this private access road, which may include signs, fencing and cables across the access road.
3. The Permittee shall construct the connection of the intake structure access road to State Road 710 in Okeechobee County at its own expense and shall conform to DOT Design Standards. The Department agrees to process the permit application for this connection within 30 days of submittal.
4. The Permittee shall maintain safe and adequate access to the Project Site during Project construction. During construction, the Permittee shall provide law enforcement officials, at its expense, to monitor left turn traffic from State Road 710 into the Plant Access Road during the AM and PM peak hours to determine if waiting left turning traffic during Project construction impedes north bound traffic on State Road 710. If such traffic is impeded, the Permittee shall provide, at its own expense, law enforcement personnel to direct traffic at the intersection during the AM and PM peak hours. If the Permittee is unable to provide officials to control traffic at this intersection, the Permittee will use other measures at its expense acceptable to DOT to maintain safe turning movements at this intersection. These measures shall be provided until no longer justified by Project construction traffic.
5. During Project construction, the Permittee shall provide public information to the local media as to its construction schedule, the expected level of traffic and any expected traffic delays or interference on local roads.
6. The Permittee is required to construct, at its own expense, a south bound right-turn lane from State Road 710 at the Plant Access Road, conforming to DOT Design Standards, as approved by the District Traffic Engineer. The Permittee shall obtain all necessary approvals and property interests from adjacent property owners, including CSX Railroad, to comply with DOT Design Standards. The design of the right turn lane shall be compatible with any other planned or permitted improvements at the intersection. The Department agrees to process the permit application within 30 days of submittal of a

sufficient application.

7. ICL shall construct at its own expense an additional right-turn lane with increased radius at the intersection of State Road 710 and the existing outlet of the new Plant Access Road. This improvement shall consist of additional paving along the eastbound lane of the Plant Access Road between State Road 710 and the railroad track to allow storage of additional right-turning traffic. These improvements shall conform to DOT Design Standards and the intent of this condition. A "Do Not Stop on Tracks" sign shall be erected at ICL's expense and as per the Manual of Uniform Traffic Control Devices (MUTCD) on the Plant Access Road south of the railroad crossing. The Department agrees to process the permit application for this connection improvement within 30 days of submittal.

- 8 The permittee shall obtain approval from the Department of Transportation, pursuant to Rule 14-46.003(2), F.A.C., for any public railroad-highway grade crossings associated with the rail spur the permittee selects to connect the Project Site to the CSX Railroad.

PART VII

MARTIN COUNTY

1. Construction and operation of the Indiantown Cogeneration Project shall be undertaken in accordance with the planned unit development (industrial) agreement ("PUD Agreement") between the Permittee and Martin County, Florida, dated July 24, 1991 as amended on July 28, 1992. Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provisions of that agreement were contained in these Conditions. An amendment of the PUD Agreement which is adopted in accordance with the laws and ordinances of Martin County then in effect shall be deemed incorporated into these Conditions of Certification for purposes of compliance and enforcement. If an amendment of the PUD Agreement conflicts with any other Condition of Certification, with an applicable nonprocedural requirement within the regulatory authority of an agency other than Martin County, or with a material statement of fact or study of the permittee in the record on which certifications based, then such an amendment to the PUD Agreement shall also require modification of certification pursuant to Section 403.516, F.S., before that amendment to the PUD agreement may become enforceable under this certification. Upon submittal to Martin County of an amendment to the PUD Agreement, the permittee shall provide a copy of the proposed PUD amendment to all agency parties to this certification for review for consistency with this Condition.
2. In constructing the new site access road, the Permittee shall comply with the standards of Martin County as set forth in Chapter 30 ½, Article II, Subdivision Regulations, Code of Laws and Ordinances of Martin County, Florida, for roads to be dedicated to Martin County for maintenance. Martin County shall issue a permit for the interconnection of the access road with any road maintained by Martin County within 30 days of the submission of a complete application for such interconnection.

PART VIII

DEPARTMENT OF COMMUNITY AFFAIRS

1. The Permittee shall endeavor to recycle the Project's combustion wastes where practicable. The Permittee shall file an annual report with the Department of Environmental Regulation detailing its progress in marketing these wastes.
2. The Permittee shall take steps to minimize the impact of noise generated during operation and construction which exceeds a day/night weighted average of 55 dBA at the nearest existing residential areas. These steps may include the use of quiet equipment, erection of noise barriers, notification to nearby landowners and daytime scheduling of particularly noisy events, and other measures as feasible.
3. The Permittee will initiate construction of the south bound right turn lane from State Road 710 to the plant access road concurrent with the start of site development work and will complete construction of the right turn lane prior to the initiation of building construction.
4. The Permittee shall assist unemployed and economically disadvantaged persons in the Indiantown area in finding employment during construction and operation of the Project.
5. The Permittee shall seek to provide innovative arrangements such as referrals to local day care facilities to increase the access of working parents to employment at the Project.
6. At least 60 days prior to construction, ICP shall submit an upland preserve and wetland management plan to the Florida Game and Fresh Water Fish Commission and to Martin County for review and approval. This plan shall present management practices for the seven wetlands and the upland preserve areas, as designated in the Application and the PUD planned unit development (industrial) zoning agreement of Martin County, and illustrated on Figure 1. At a minimum, this plan shall include a statement of preserve management objectives; a statement of what habitat functions the preserves are expected to provide; a description of how habitat values will be maintained, including measures such as perimeter staking and vegetation control; if controlled burning is proposed to control vegetation; a schedule of fire management through a certified burn specialist and including, but not limited to, burn conditions, burn frequency, and measures taken to avoid spread of wildfire; measures taken to remove exotic vegetation from both uplands and wetlands; legal instrument by which preserve areas and wetlands have been reserved from future development uses; and the entity responsible for management.

PART IX

OKEECHOBEE COUNTY

1. In constructing the water pipeline across roads under the jurisdiction of Okeechobee County, the Permittee shall comply with the standards of Okeechobee County as set forth in Okeechobee County ordinance 86-1, for crossing of county roads. Okeechobee County shall issue a permit for the crossing of any road maintained by Okeechobee County as set forth therein.

PART X

TRUSTEES OF THE INTERNAL IMPROVEMENT TRUST FUND

1. In the event that the facilities, pipeline or improvements constructed or maintained by ICL under this certification are placed on, under, over, or across lands owned by the Board of Trustees of the Internal Improvement Trust Fund, ICL shall first obtain the consent of the Trustees for the use of such lands prior to the construction of those facilities. Such requests for consent shall be made and granted pursuant to Chapter 253, F.S., and Chapter 18-21, F.A.C. The issuance of such consent shall be based upon the information provided during the certification proceeding and such other information necessary to demonstrate compliance with Chapter 253, F.S., and Chapter 18-21, F.A.C.

History

Certification Issued 02/07/92; signed by Governor Chiles
Modification 07/21/92; signed by Secretary Browner
Modification 04/03/95; signed by Secretary Wetherell

AGENDA FOR INDIANTOWN COGENERATION SITE CERTIFICATE
MODIFICATION MEETING - JANUARY 27, 2000

Introductions/Kickoff - David S. Dee, Landers & Parsons

Discussion of Proposed Changes - AJ Jablonowski, Earth Tech

- 1 CO₂ Plant
- 2 Megawatt Increase
- 3 Other Proposed Changes

Discussion of application organization – David S. Dee

- 1 Modification versus amendment
- 2 Backup data
- 3 Submittal list

Review Process – David S. Dee

- 1 Sufficiency Responses
- 2 Public Comment
- 3 Final Approval
- 4 Schedule

Department Questions

If time allows: Brief item-by-item review to address Department questions and obtain guidance on how to expedite each item

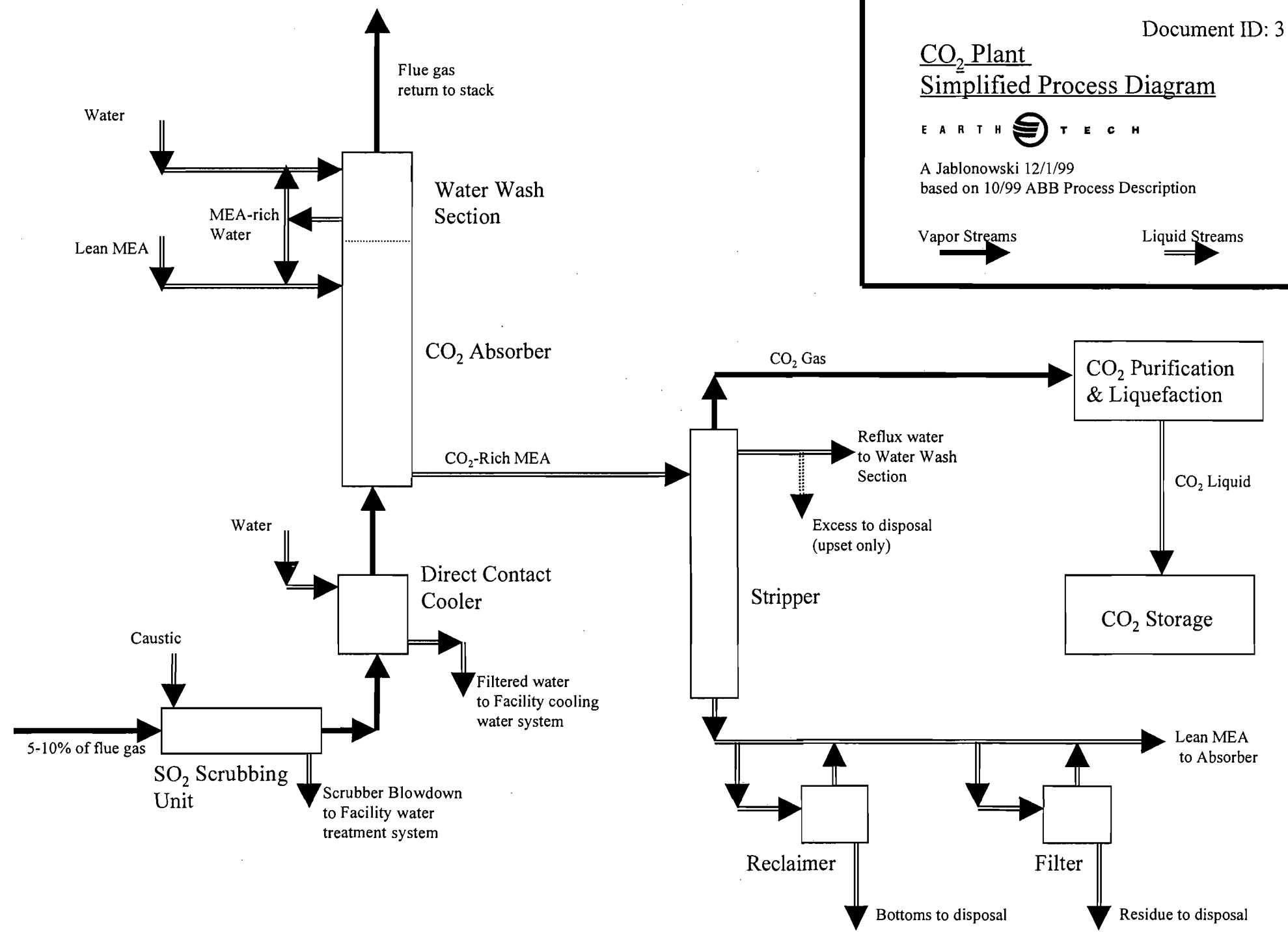
Discussion

Adjournment

CO₂ Plant Simplified Process Diagram



A Jablonowski 12/1/99
based on 10/99 ABB Process Description



Best Available Copy

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DER File No. PSD-FL-168
Martin County

Mr. Stephen A. Sorrentino
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

Enclosed is Permit Number PSD-FL-168 to construct a cogeneration project,
issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the
permit pursuant to Section 120.68, Florida Statutes, 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 Office of General Counsel, 2600 Blair Stone Road,
Tallahassee, Florida 32399-2400; 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 days from the date this
Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

Barry D. Antler
C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this
NOTICE OF PERMIT and all copies were mailed before the close of business on
3/26/92 to the listed persons.

Clerk Stamp

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

[Signature]
(Clerk) 3/26/92
(Date)

Copies furnished to:
Jewell A. Harper, EPA
Isidore Goldman, SED
James W. Coleman, Jr., NPS
Steve Jelinek, ENSR

[Handwritten list of names]
C. Shambaugh NPS
B. J. Allen

Final Determination

PG&E/Bechtel Generating Company
Indiantown Cogeneration, L.P.
Martin County, Florida

Indiantown Cogeneration Project

PSD-FL-168

Department of Environmental Regulation
Division of Air Resources Management
Bureau of Air Regulation

March 17, 1992

Final Determination

The Indiantown Cogeneration, L.P. (ICL) PSD permit application (part of the Power Plant Siting application) has been reviewed by the Division of Air Resources Management. Comments received from EPA Region IV dated February 25, 1992 (see attachment 1) and United States Department of the Interior, National Park Service (NPS), Southeast Regional Office dated February 21, 1992 (see attachment 2) are addressed below.

Best Available Control Technology (BACT): The EPA agreed that FDER's BACT was consistent with the most recent determinations for pulverized coal (PC) boilers for particulate, SO₂, and NO_x. However, EPA recommended that the permit include a new specific condition to follow in the event that the selective noncatalytic reduction (SNCR) system was incapable of achieving the 0.17 lb/MMBtu (24-hour avg.) NO_x level. FDER has written Specific Condition No. 6 addressing EPA's concern. We are also requesting an opportunity to review the plans and specifications to assure that an appropriate design basis exists.

The NPS also expressed agreement with FDER's determination for particulate and SO₂ emission limitations and the method of control. However, they recommended that the source be required to install selective catalytic reduction (SCR) for NO_x control since it is being required for similar projects in New Jersey and Virginia. In the case of New Jersey, it is our understanding that the facilities are in ozone nonattainment areas. However, the ICL project is in an attainment area for all pollutants. Over the past two years FDER has required sources to achieve lower and lower NO_x levels as the technology advances. The NO_x level required for the Indiantown Cogeneration facility meets FDER's goals and time table. As indicated above, the source will be required to achieve the specified NO_x limit using whatever technologies are necessary.

Modeling: The NPS expressed concern about the impact of SO₂, NO_x, and VOC emissions on Class I areas. FDER is also concerned about the emissions of these pollutants even though the source is more than 100 km from any national park. However, the EPA ISCST model run for the ICL project indicated that the emissions were well below levels of concern for Class I areas.

The final action of the Department will be to issue construction permit PSD-FL-168 as proposed in the Technical Evaluation and Preliminary Determination.



Florida Department of Environmental Regulation

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

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:
Indiantown Cogeneration, L.P.
7475 Wisconsin Ave.
Bethesda, MD 20814-3422

Permit Number: PSD-FL-168
County: Martin
Latitude/Longitude: 27°02'20"N
80°30'45"W

Project: Indiantown
Cogeneration Project

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

The Indiantown Cogeneration, L.P. (ICL) proposes to construct a cogeneration project near Indiantown, Florida. The proposed plant is a pulverized-coal-fired facility that will produce approximately 330 megawatts (MW) of electricity for sale to the Florida Power and Light Company (FPL) and approximately 225,000 lb/hour of process steam for sale to the Caulkins Indiantown Citrus Company ("Caulkins"). The site, which occupies approximately 232 acres, is located 9 miles east of Lake Okeechobee and about 3 miles northwest of the community of Indiantown in southwestern Martin County.

The proposed facility includes one main boiler and one steam generator, and an auxiliary boiler operated during lightoff and startup of the main boiler or if the main boiler is down and process steam is required for Caulkins Citrus Processing. The primary source of air emissions will be the main boiler, firing coal. Secondary air emission sources include the auxiliary boiler firing natural gas or No. 2 fuel oil, and the material handling systems. The operation of these units will result in significant net emissions increases of regulated air pollutants over the current emissions levels and thus, is subject to review by the Department under the prevention of significant deterioration (PSD) regulations (Rule 17-2.500, Florida Administration Code).

The power plant site certification number for this project is PA 90-31.

The source shall be constructed in accordance with the permit application, plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions.

PERMITTEE:
Indiantown Cogeneration, L. P.

Permit Number: PSD-FL-168
Project: Indiantown
Cogeneration Project

Attachments are listed below:

1. Power Plant Site Certification Package PA 90-31 and its associated attachments, dated September 6, 1991.
2. DER's Technical Evaluation and Preliminary Determination dated December 26, 1991.
3. Letter from National Park Service dated February 20, 1992.
4. Letter from EPA dated February 25, 1992.

GENERAL CONDITIONS:

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.
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 403.087(6) and 403.722(5), Florida Statutes, 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 the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement 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.
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.

PERMITTEE:
Indiantown Cogeneration, L. P.

Permit Number: PSD-FL-168
Project: Indiantown
Cogeneration Project

GENERAL CONDITIONS:

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.

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 any 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.

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.

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

PERMITTEE:
Indiantown Cogeneration, L. P.

Permit Number: PSD-FL-168
Project: Indiantown
Cogeneration Project

GENERAL CONDITIONS:

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.

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.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, 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:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

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,

PERMITTEE:
Indiantown Cogeneration, L. P.

Permit Number: PSD-FL-168
Project: Indiantown
Cogeneration Project

GENERAL CONDITIONS:

report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- 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 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.

SPECIFIC CONDITIONS:

1. Beginning with the fifth quarter of operation, the Permittee shall submit to the Bureau of Air Regulation and the Air Section, Southeast District office, a quarterly report for the previous quarter showing the 12 month rolling average capacity factor for the generating unit.

The 12 month rolling average capacity factor shall be calculated by dividing each unit's megawatt hours output of generation by the product of the official megawatt rating of the unit and the number of hours in the 12 month period.

2. Only coal, natural gas or No. 2 fuel oil shall be fired in the pulverized coal (PC) boiler and auxiliary boiler.

3. The maximum heat input to the PC boiler shall not exceed 3422 MMBtu/hr while firing coal. The auxiliary boiler shall not exceed 342 MMBtu/hr while firing No. 2 fuel oil and 358 MMBtu/hr firing natural gas or propane.

4. The PC boiler shall be allowed to operate continuously (8760 hrs/yr). The auxiliary boiler shall operate a maximum of 5000 hrs with up to 1000 hrs/yr on No. 2 fuel oil with 0.05% sulfur, by

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weight, and the balance on natural gas or propane. Fuel consumption must be continuously measured and recorded by fuel type (coal, natural gas or No. 2 fuel oil) for both the PC boiler and auxiliary boiler.

5. Based on a permitted heat input of 3422 MMBtu/hr, the stack emissions from the main boiler shall not exceed any of the following limitations:

Pollutant	Basis lb/MMBtu	Emission Limitation	
		lb/hr	TPY
SO ₂	0.170*	582*	2549
NO _x	0.170*	582*	2549
PM	0.018	61.6	270
PM ₁₀	0.018	61.6	270
CO	0.110	376*	1649
VOC	0.0036	12.32	54.0
H ₂ SO ₄	0.0004	1.45	6.51
Beryllium	0.0000027	0.0094	0.041
Mercury	0.0000114	0.039	0.17
Lead	0.00001	0.034	0.15
Fluorides	0.0015	5.08	22.3
Arsenic	0.000051	0.18	0.77

*24 hour daily block average (midnight to midnight)

6. The 0.170 lb/MMBtu NO_x emission rate is the basis for the above maximum emission limitation. The permittee is allowed to use any technology (e.g. SNCR, SCR, or combustion controls) to achieve the NO_x limitation. Should a technology be chosen which does not meet the specified NO_x limits, the permittee must apply whatever technologies deemed necessary to ensure that the NO_x limitation is met. Plans and specifications must be submitted to DER's Bureau of Air Regulation in Tallahassee for review within 90 days after they become available.

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7. NH₃ (Ammonia) - Slip from exhaust gases shall not exceed 50 ppmv.

8. Visible Emissions (VE) from each baghouse exhaust shall not exceed 10% opacity (six minute average). No VE during lime silo loading operations (i.e., less than 5% opacity). VE from the ash handling baghouse shall not exceed a particulate limit of 0.010 grains/acf and VE of 5% opacity.

9. The auxilliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (No. 2 fuel oil), shall be limited to a maximum of 5000 hours/year with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. The maximum annual emissions will be as follows when firing No. 2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

Pollutant	lbs/hr	tons/year
NO _x	68.0	34
SO ₂	18.0	9
PM	1.4	0.70
PM ₁₀	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0 x 10 ⁻⁵	2.0 x 10 ⁻⁵
Hg	5.2 x 10 ⁻⁴	2.6 x 10 ⁻⁴
Pb	3.6 x 10 ⁻²	1.8 x 10 ⁻²
As	6.8 x 10 ⁻³	3.4 x 10 ⁻³

10. Particulate emissions from the coal, and limestone handling facilities shall be controlled by enclosing all conveyors and conveyor transfer points (except those directly associated with the coal stacker/reclaimer for which an enclosure is operationally infeasible). Fugitive emission shall be tested as specified in Specific Condition No. 19. Inactive coal storage piles shall be shaped, compacted, and oriented to minimize wind erosion, and covered. Water sprays or chemical wetting agents and stabilizers shall be applied to uncovered storage piles, roads, handling equipment, etc. during dry periods and as necessary to all facilities to maintain an opacity of less than or equal to 5 percent. When adding, moving or removing coal from the coal pile an opacity of 20% is allowed. The lime handling system including the lime silos shall be maintained at a negative pressure while operating and the exhaust vented to a control system. The fly ash handling system (including transfer and silo storage) shall

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be totally enclosed and vented (including pneumatic system exhaust) through fabric filters.

Submit for approval to the Department, Bureau of Air Regulation in Tallahassee within thirty (30) days after it becomes available, copies of technical data pertaining to the selected particulate emissions control for the coal, and lime handling facilities. These data shall include, but not be limited to guaranteed efficiency and emission rates, and major design parameters such as air/cloth ratio and flow rate. The Department shall issue a response within 30 days of receipt of the technical data.

11. Particulate emissions from bag filter exhausts from the coal, lime and flyash handling systems shall be limited to 0.010 gr/acf. A visible emission reading of 5% opacity or less may be used to establish compliance with this emission limit. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test. Verification and recording of the above requirements for particulate emissions shall be done at least annually.

12. Emissions shall not be visible more than 2 minutes in any 15 minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DER referenced Method 22 and opacity Method 9 (Appendix A, 40 CFR 60).

13. Coal shall not be burned in the unit unless the spray dryer scrubber, fabric filter baghouse and other air pollution control devices are operating properly except as provided under 40 CFR Part 60, Subpart Da. Any malfunctions of these air pollution control devices are to be recorded; including duration, cause, and description of repair.

14. The fuel oil to be fired in the PC boiler and the auxiliary boiler shall be "new oil" which means an oil which has been refined from crude oil and has not been used. The quality of the No. 2 fuel oil used by the auxiliary boiler shall not contain more than 0.05% sulfur, by weight, based on each shipment analysis report.

15. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing

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the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.

16. All fuel oil and coal shipments shall have a shipment analysis for sulfur content, ash content, and heating value. In the event continuous emission monitoring of sulfur dioxide is not performed, a daily analysis of coal sulfur content for the purpose of establishing the percentage reduction in potential sulfur emissions shall be made. Such determination shall be in accordance with EPA reference Method 19. Records of all the analyses shall be kept for FDER inspection for a minimum of two years after the data is recorded.

17. The applicant shall comply with applicable requirements and provisions of the New Source Performance Standard for electric utility steam generating units (40 CFR 60 Part Da).

18. Within 60 calendar days after achieving the permitted capacity at which the unit will be operated, but no later than 180 calendar days after initial startup, the permittee shall conduct stack tests for particulates, SO₂, NO_x, and visible emissions and furnish the Department a written report of the results of such tests within 45 days of completion of the tests. The tests shall be conducted in accordance with the provisions specified in 40 CFR 60 and shall be conducted within 90-100% of capacity.

19. Compliance with emission limitation standards shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method approved by the Department and EPA, in accordance with F.A.C. Rule 17-2.700.

<u>EPA Method</u>	<u>For Determination of</u>
1	Selection of sample site and velocity traverses.
2	Stack gas flow rate when converting concentrations to or from mass emission limits.
3	Gas analysis when needed for calculation of molecular weight or percent O ₂ .
4	Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits.

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| 5 | Particulate matter concentration and mass emissions. |
| 201 or 201A | PM ₁₀ emissions. |
| 6, 6C, or 19 | Sulfur dioxide emissions from stationary sources. |
| 7, 7C, or 19 | Nitrogen oxide emissions from stationary sources. |
| 8 | Sulfuric acid mist from stationary source. |
| 9 | Visible emission determination of opacity. <ul style="list-style-type: none">- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.- At least one lime vehicle unloading into the lime silo (from start to finish). |
| 22 | Fugitive emissions from transfer points. |
| 10 | Carbon monoxide emissions from stationary sources. |
| 12 or 101A | Lead concentration from stationary sources. |
| 13A or 13B | Fluoride emissions from stationary sources. |
| 18 or 25, | Volatile organic compounds concentration. |
| 101A or 108 | Mercury emissions. |
| 104 | Beryllium emission rate and associated moisture content. |

NOTE: Use EPA draft method or other methods approved by Department to test for ammonia.

20. Performance tests shall be conducted under such conditions as the Department shall specify based on representative performance of the facility. The permittee shall make available to the Department

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such records as may be necessary to determine the conditions of the performance tests.

21. The permittee shall provide written notice to the Southeast District office 30 days prior to the tests in order to afford the Department the opportunity to have an observer present.

22. Stack tests for particulates (PM and PM₁₀), NO_x and SO₂ and visible emissions shall be performed annually.

23. Stack emission monitoring shall include a flue gas oxygen meter to continuously monitor a representative sample of the flue gas. The oxygen monitor shall be used with automatic feedback controls to continuously maintain air/fuel ratio parameters at an optimum. The permittee shall install and operate continuously monitoring devices for each main boiler exhaust for sulfur dioxide, nitrogen dioxide and opacity, including flue gas O₂ and/or CO₂ content. The monitoring devices shall meet the applicable requirements of Section 17-2, F.A.C., and 40 CFR 60 a minimum of 95% of the time the source is operating.

24. The permittee shall operate two continuous ambient air monitoring sites for sulfur dioxide in accordance with FDER quality control procedures and EPA reference methods in 40 CFR, Part 53, and two ambient air monitoring sites for suspended particulates, and one continuous NO_x monitor site. The ambient monitoring site locations shall be approved by the Department's Bureau of Air Monitoring and Assessment. The frequency of operation of the particulate monitors shall be every six days commencing as specified by the Department's Bureau of Air Monitoring and Assessment. During construction and operation, wind speed/wind direction will be recorded and reported with the ambient data.

25. The permittee shall provide stack sampling facilities as required by Rule 17-2.700(4) FAC.

26. The ambient monitoring program shall begin at least one year prior to initial start up of the unit and shall continue for at least one year after commencement of commercial operation. The Department's Bureau of Air Monitoring and Assessment and the permittee shall review the results of the monitoring program annually and determine the necessity for the continuation of or modifications to the monitoring program.

27. Prior to operation of the source, the permittee shall submit to the Department's Bureau of Air Regulation a plan or procedure

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that will allow the permittee to monitor emission control equipment efficiency and enable the permittee to return malfunctioning equipment to proper operation as expeditiously as possible.

28. Stack monitoring, fuel usage and fuel analysis data shall be reported to the Department's Southeast District Office on a quarterly basis commencing with the start of commercial operation in accordance with 40 CFR, Part 60, Section 60.7, and 60.49a and in accordance with Section 17-2.08, FAC.

29. Utilizing the Aerometric Information and Retrieval System (AIRS) or other format approved in writing by the Department, ambient air monitoring data shall be reported to the Bureau of Air Monitoring and Assessment of the Department quarterly. Upon commencement of ambient air monitoring, such reports shall be due within 45 days of the end of the quarterly reporting period. Reporting and monitoring shall be in conformance with 40 CFR Parts 53 and 58.

30. Beginning one month after certification, the permittee shall submit to the Department a quarterly status report briefly outlining progress made on engineering design and purchase of major pieces of air pollution control equipment. All reports and information required to be submitted under this condition shall be submitted to the Siting Coordination Office, Department of Environmental Regulation, 2600 Blair Stone Road, Tallahassee, Florida, 32301.

31. In the event of a prolonged (thirty days or more) equipment malfunction or shutdown of air pollution control equipment, operation shall be allowed to resume and continue to take place under appropriate Department order, provided that the Permittee demonstrates such operation will be in compliance with all applicable ambient air quality standards and PSD increments. During such malfunction or shutdown, operation of the facility shall comply with all other requirements of this permit and all applicable state and federal emission standards not affected by the malfunction or shutdown which is the subject of the Order. Operational stoppages exceeding two hours for air pollution control systems are to be reported to the Southeast District office. Operational malfunctions which do not stop operation but may prevent compliance with emission limitations must also be reported to the Southeast District office.

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Issued this 25th day
of March, 1992

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Carol M. Browner, Secretary



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Carol Browner
FROM: Steve Smallwood *[Signature]*
DATE: March 17, 1992
SUBJ: Approval of Construction Permit PSD-FL-168
Indiantown Cogeneration, L.P.

Attached for your approval and signature is the Final Determination and permit based on the Best Available Control Technology (BACT) determination, Prevention of Significant Deterioration (PSD) determination, and New Source Performance Standards (NSPS) compliance. The attached was prepared by the Bureau of Air Regulation for the above mentioned company to construct a cogeneration project.

I recommend your approval and signature.

SS/PL/plm

Attachments

Carol - Let me know if you want a verbal briefing on this
[Signature]
3-19-92