earthtech for the planet.
engineering and technology

Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility

November 2000

Prepared for:

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane f.k.a. 19140 SW Warfield Blvd
Indiantown, FL 34956

Prepared By:

Earth Tech

196 Baker Avenue
Concord, Massachusetts 01742

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

November 10, 2000

Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: ICLP's Request for Modifications

Dear Mr. Oven:

Indiantown Cogeneration L.P. (ICLP) hereby submits the attached Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility.

ICLP's Application for Modifications of the Site Certificate (the Modifications) describes 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 Modifications also are being sent to the people identified in the attached Distribution List.

Per your discussions with our consultant, A.J. Jablonowski of Earth Tech, this application for modifications is being submitted as a follow-up to the application submitted in December 1999, and therefore no new fee is required 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 Modifications for ICLP's Facility. In the interim, please call me at 561-597-6500, or our consultant, A.J. Jablonowski of Earth Tech at 978-371-4339, if you have any questions regarding these submissions.

Thank you for your assistance with this issues.

Sincerely,

George Allen
General Manager

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

November 10, 2000

Hamilton S. Oven, P.E.
Administrator, Siting Coordination Office
Florida Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

RE: ICLP Amendment to the Site Certification Application

Dear Mr. Oven:

Indiantown Cogeneration L.P. (ICLP) hereby submits one proposed amendment to the Site Certification Application (SCA) for the Indiantown Cogeneration Facility.

ICLP wishes to amend the SCA to indicate that potable water is used as needed to supplement process water uses at the Facility. Water is drawn from the existing 4-inch potable water supply line (supplied by Indiantown Water Co.). Water usage is less than one million gallons in any one day, and less than 100,000 gallons per day on an annual-average basis. The water is used for existing, permitted processes at the Facility, on an on-going basis.

This proposed amendment will not require changes to the Facility's Conditions of Certification, and does not have substantial environmental impacts.

Thank you for your assistance with this issue.

Sincerely,

George Allen
General Manager

cc: David S. Dee, Landers & Parsons
James DesHotels, Doug Bullock, ICLP
Robert De Hart, PG&E Generating
AJ Jablonowski, Earth Tech

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

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)**	John Fumero **(3 copies)** General Counsel South Florida Water Management District P.O. Box 24680 West Palm Beach, Florida 33416-4680
Cathy Carter Agency Clerk Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000	Michael Busha Executive Director Treasure Coast Regional Planning Council 301 E. Ocean Blvd., Suite 300 Stuart, Florida 34994
Scott Goorland Assistant General Counsel Office of General Counsel Department of Environmental Protection 3900 Commonwealth Blvd., MS: 35 Tallahassee, Florida 32399-3000	Gary K. Oldehoff County Attorney Martin County 2401 Southeast Monterey Road Stuart, Florida 34996
Clair Fancy Bureau Chief Bureau of Air Regulation Department of Environmental Protection 2400 Blair Stone Road, MS: 5505 Tallahassee, Florida 32399-2400	R. Douglas Leonard Executive Director Central Florida Regional Planning Council P.O. Box 2089 Bartow, Florida 33831
Cari Roth General Counsel Office of General Counsel Department of Community Affairs 2555 Shumard Oak Blvd. Tallahassee, Florida 32399	George Long County Administrator Okeechobee County 304 N.W. 2nd Street Okeechobee, Florida 34972
Pam Leslie General Counsel Department of Transportation 605 Suwannee Street, MS: 58 Tallahassee, Florida 32399-0458	Cathy Beddell Acting General Counsel Public Service Commission 2540 Shumard Oak Blvd. Tallahassee, Florida 32399

Sandra Whitmire Intergovernmental Coordination & Review Coordinator Department of Transportation 605 Suwannee Street, MS: 28 Tallahassee, Florida 32399-0450	Jim Antista General Counsel Florida Fish and Wildlife Conservation Commission 620 S. Meridian Street Tallahassee, Florida 32399-1600
Melissa L. Meeker **(3 copies)** Director District Management Department of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33401	Robert DeHart PG&E National Energy Group 7500 Old Georgetown Road Bethesda, Maryland 20814
David S. Dee **(2 copies)** Attorney at Law Landers & Parsons, P.A. P.O. Box 271 Tallahassee, Florida 32302-0271 (Counsel for Applicant)	George Allen **(2 copies)** Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, Florida 34956 (Applicant)
Andrew Jablonowski, P.E. George Lipka, P.E. Earth Tech 196 Baker Avenue Concord, Massachusetts 01742-2167 (Consultant for Applicant)	

Application for Modifications of the Site Certificate for the Indiantown Cogeneration Facility

November 2000

Prepared for:

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane f.k.a. 19140 SW Warfield Blvd
Indiantown, FL 34956

Prepared By:

Earth Tech

196 Baker Avenue
Concord, Massachusetts 01742

TABLE OF CONTENTS

1.0 INTRODUCTION

Indiantown Cogeneration, L.P. (ICLP) is the owner and operator of the Indiantown Cogeneration Facility (the Facility) located in Indiantown, Florida. The construction and operation of the Facility was authorized in a Site Certificate which was issued on February 6, 1992 and then modified by orders issued in July 1992, March 1995, and July 2000. The 1992 and 1995 modifications addressed several changes that were identified as the Facility's conceptual design evolved into a more detailed design for construction. The 2000 modifications permitted the construction of a carbon dioxide plant, clarified permit conditions, and made minor facility operational changes.

This request for modification of the Site Certificate supplements the 2000 modifications. Specific requests are as follows:

- Request authorization for modifications to ICLP's water withdrawal system to withdraw additional groundwater from the Upper Floridan Aquifer during drought periods;
- Clarify the authority of the South Florida Water Management District (SFWMD) to approve and authorize emergency water withdrawals;
- Request modifications to the DEP groundwater monitoring requirements;
- Request modifications to the SFWMD groundwater and surface water monitoring requirements; and
- Request wording change to account for proposed PSD modifications related to the increase in heat input at the Facility.

In addition, ICLP notes that the Facility's street address has changed.

The current Conditions of Certification (Conditions) for ICLP's Facility are included in Attachment A for reference. This application proposes specific changes to those Conditions where appropriate.

2. MODIFICATIONS REQUESTED

2.1 Requested Increase in Allowable Groundwater Withdrawal

Through the spring and early summer of 2000, ICLP used the Facility's backup groundwater supply because insufficient water was available in Taylor Creek. Through that period, it became clear that the groundwater quality in the Upper Floridan Aquifer was acceptable for short-term use. ICLP is submitting this request in order to increase its use of the Upper Floridan Aquifer. This will allow ICLP's Facility to operate primarily on groundwater when insufficient water is available from Taylor Creek.

This section provides a brief discussion of the existing water use at ICLP's Facility, the additional water use being proposed, a summary of the requested water allocation, and a discussion of water sources.

Existing Water Use

ICLP is permitted by the existing conditions of certification to make the following water withdrawals for use at the Facility:

Table C-1: Existing Water Allocation

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGD)
L-63N	1943.00	5.32
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone- Lower Floridan Aquifer	174.0	2.32
Surficial Aquifer	3.0	0.04

From Condition Part IV B.2, Revised 5/2000.

Details Regarding Water Quality from the Different Water Sources

Water from L-63N and the Upper Floridan Aquifer is of sufficient quality to support short-term operations at ICLP. Water from the Upper Permeable Zone of the Lower Floridan Aquifer can be blended with water from the other sources, but this will seriously affect the performance of the demineralization system. Longer term use of the Upper Permeable Zone of the Lower Floridan Aquifer is therefore not feasible.

Discussion of Water Sources

ICLP is permitted to withdraw water from Taylor Creek (L-63N) when the elevation of the creek is above 17.5 feet NGVD. During the first five years of operating experience at ICLP, there were no periods when ICLP needed to use the Facility's backup water supply. However, during the first half of calendar year 2000, there were periods when L-63N fell below 17.5 feet NGVD and onsite well water was

used. ICLP had been concerned that the poor water quality of the on-site wells would prevent their effective use as a water source, but through experience in 2000 ICLP learned that water from the Upper Floridan Aquifer is of adequate quality to support short-term plant operations.

ICLP proposes to continue to use Taylor Creek/Nubbin Slough (L-63N) as the primary source of water for all periods when adequate water is available through L-63N. This includes periods when L-63N is below 17.5 feet NGVD because of actions being taken by SFWMD, rather than a water scarcity situation.

For periods when the water level of L-63N is below 17.5 feet temporarily because of drought conditions, ICLP can treat and use groundwater from the existing permitted groundwater wells. However, to sustain operations over longer periods of drought conditions, ICLP will need additional withdrawals from the Upper Floridan Aquifer for the Facility.

Summary of Requested Water Allocation

ICLP is requesting an increase in the water withdrawal rate from the Upper Floridan Aquifer, in order to be able to continue operations during periods when water from L-63N is unavailable. The Facility will not use any additional water; ICLP is simply requesting authorization to obtain its groundwater allocation from the Upper Floridan Aquifer rather than the Lower Floridan Aquifer.

ICLP proposes to increase the short-term water withdrawal rate from the Upper Floridan Aquifer from 2.60 million gallons a day (MGD) to 4.92 MGD. This corresponds to a short-term flowrate of 3400 gallons/minute. ICLP understands that this rate is not sufficient for sustained full operation of the Facility. ICLP may request authorization for emergency withdrawals from SFWMD in cases where sustained full operation is needed. This would be done according to the existing Condition IV B. 2 b (4), and as discussed in Section 2.2, below.

ICLP would increase its annual allocation from the Upper Floridan Aquifer, but would not increase its total groundwater allocation. Therefore, the requested maximum annual allocation is 369 MGY, which could be obtained from either the Upper Floridan Aquifer or the Lower Floridan Aquifer.

Options for Additional Ground Water Withdrawal Capacity

In reviewing the most appropriate method for obtaining additional water withdrawal capacity, ICLP reviewed the following options:

- Assessing the technical and permitting feasibility of modifying their existing Lower Floridan Aquifer wells to draw water from the Upper Floridan Aquifer;

- Assessing the permitting feasibility of installing new Upper Floridan Aquifer wells onsite at Indiantown; and

- Assessing the permitting feasibility of installing new Upper Floridan Aquifer wells at other sites.

Each option is discussed further below.

Modifying Existing Lower Floridan Aquifer Wells

The two existing, Lower Floridan Aquifer wells could be modified by backfilling the open hole and cased interval to 700 feet bls with a neat cement grout. Then, a perforation gun could be set to perforate the casing in a selected interval. After casing perforation, the well would be acidized and developed.

However, this procedure carries significant risk of inadequate well yield and may not be effective. In addition, it appears that the well casings are of steel construction. This causes concerns with species of iron bacteria and other species of bacteria that are slime forming, such as *Pseudomonas sp.* Therefore, because of these factors and the well inefficiencies related to perforation, modification of the existing wells is not a preferred option.

New On-Site Wells

Installing new wells would allow a proper material design, sizing, and depth interval selection, with a significantly higher chance of successful completion. The new wells would be constructed using PVC well casing, eliminating and/or minimizing the iron bacteria concern and making the wells and system easier to maintain and more reliable as a standby capacity. New well construction could reuse the existing pumps, motors, and appurtenances.

New Wells at Other Sites

Wells could be constructed off-site, away from the existing Indiantown Facility. One scenario would be to install wells near the Facility's Taylor Creek surface water intake structure, or elsewhere nearby in Okeechobee, and use the Facility's existing pipeline to transport water to the Indiantown Facility.

The use of offsite locations could increase logistical problems during construction and operation. At this time it appears that this option offers no clear advantage from a water availability perspective, so this option is not pursued further.

Procedure to Permit Additional Ground Water Withdrawal Capacity

Based on the assessment summarized above, ICLP is pursuing obtaining additional water withdrawal capacity through the existing procedures in the Conditions of Certification. The steps ICLP is currently taking to permit this additional capacity are per Condition IV.B.3.e, as follows:

1. Preparing drilling plans and other pertinent information required by Chapter 40E-3, F.A.C.,

2. Preparing an evaluation of impacts on

A. existing legal users,

B. pollution sources,

C. environmental features,

D. the saline water interface, and

E. water bodies.

The plans, information, and evaluation will be submitted to SFWMD for a determination of compliance with the non-procedural requirements of Chapter 40E-2, F.A.C. ICLP will update the data provided to the Department in August of 1994 as needed.

ICLP expects that two 15-inch wells, drilled to 1350 feet and cased to 750 feet, will provide the requested capacity. This will be confirmed during the preparation of the drilling plans.

Because it will take some time to plan for, drill, and test new wells, and because the efficacy of the new wells is not assured, ICLP would like to maintain the option to use the existing Lower Floridan Aquifer wells instead of the new wells. The total water allocation will not increase. The goal is to avoid a situation where ICLP needs ground water at a time when the new Upper Floridan Aquifer wells are not yet installed or are not operating properly or are otherwise unable to provide enough water. ICLP proposes to allow the use of either set of wells and aquifers, as described below.

Requested Modifications to Conditions of Certification

ICLP proposes the following changes to the Conditions of Certification to reflect the modified ground water allocation:

Condition Part IV B.2.a, Authorized Withdrawal

Source	*Maximum Annual Allocation (MGY)*	*Maximum Daily Allocation (MGD)*
L-63N	*1943.00*	*5.32*
Upper Floridan Aquifer	*369 ~~195.00~~*	*4.92 ~~2.60~~*
Upper Permeable Zone- Lower Floridan Aquifer	*174.0*	*2.32*
Surficial Aquifer	*3.0*	*0.04*

Total withdrawal from all zones of the Floridan Aquifer shall not exceed 4.92 million gallons per day, and shall not exceed 369 million gallons per year.

Condition Part IV B.2.c, Authorized Withdrawal Facilities

2 – 3,700 GPM Surface Water Pumps in L-63 N

1 – 10" x 1340' Flowing Well cased to 500' (existing well)

1 – 10" x 1265' Flowing Well cased to 750'

4 2 – 15" x 1350' Flowing Wells cased to 750'

2 – 15" x 1650' Flowing Wells cased to 1487'

1 – 8" x 118' Surficial Aquifer Well cased to 78'

2.2 Clarification of SFWMD Authority to Allow Emergency Water Withdrawals

During the calendar year 2000 drought season, some confusion arose regarding the authority of DEP and SFWMD to grant/approve emergency water withdrawals for ICLP's Facility. To eliminate any uncertainty, ICLP requests that the Conditions of Certification be modified to clarify that SFWMD has the authority to approve emergency water withdrawals at its discretion.

Condition IV.B.2.b.(4) currently indicates that SFWMD must approve withdrawals above the amounts specified in the Conditions of Certification. ICLP requests the following changes to this condition to make it clear that SFWMD has the right to permit such withdrawals:

(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 (or during conditions other than specified herein) shall require prior SFWMD approval. The SFWMD may grant such approval for any withdrawal less than 90 days in duration, without modifying these Conditions of Certification. The SFWMD's approval shall be based on the non-procedural requirements of Chapter 40E, F.A.C.

2.3 Modification of DEP Groundwater Monitoring Requirements

The Conditions of Certification include a stringent groundwater quality monitoring protocol. Now that this program has been in place for over five years, it has become apparent that the situation is stable and that the presence of the Facility is not having any impact on the existing ground water quality. As the implementation of the existing program is time-consuming and expensive, ICLP is requesting that the program be modified.

This request for modification is similar to the request made in Section 2.7 of the December 1999 Request for Modification. No agency action was taken on the original request.

ICLP proposes to modify the requirement to sample and analyze the groundwater from a quarterly basis to an annual basis. ICLP is also proposing to remove the requirement for further testing for most organic compounds. These parameters have not been shown to be present in significant concentrations at the Facility, and none of the ICLP operations are likely to affect any of these parameters.

ICLP proposes the following additional text to be added to Part II.(4).2, Groundwater Monitoring Program, of the Conditions to Certification:

g. *[following the list of parameters] In 2000 and subsequent years, testing shall be performed on an annual basis, and shall be limited to the Volatile Organics, Inorganics, and Metals listed above.*

h. *[following the list of parameters] In 2000 and subsequent years, annual testing shall only be required for the metals listed above, as well as phenol and napthalene (except upon demonstration that key indicators show a significant increase above background levels).*

In addition, ICLP proposes the removal of the specific reference to DER Form 17-1.216(2) from Part II.(4).2.j. This is not the appropriate reporting form.

In a meeting with Terry Davis of FDEP – PSL Branch Office on July 29, 1999, Mr. Davis suggested that ICLP should petition to reduce the frequency of groundwater monitoring. A copy of Mr. Davis' September 10, 1999 correspondence, which rates the Facility as "satisfactory" for all the compliance areas evaluated, is presented in Attachment B.

2.4 Requested Modification to SFWMD Surface Water and Groundwater Monitoring Programs

In addition to the DEP groundwater monitoring requirements listed in Part II of the Conditions of Certification and discussed in Section 2.2, above, the Facility is also subject to SFWMD groundwater and surface water monitoring requirements under Part IV of the Conditions of Certification.

ICLP is requesting modifications to the surface water and groundwater monitoring programs discussed in IV.B.3.d. Paragraph 1 of this condition requires groundwater monitoring "during periods of withdrawals." ICLP would like to clarify this condition to exclude periods of testing and maintenance:

(1) Permittee shall monitor water levels and water quality from the Upper and Lower production zones of the Floridan 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 (exclusive of withdrawals conducted for maintenance and testing purposes). 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.

ICLP also is requesting removal of the requirement to collect daily water level data from L-63 Canal and submit the data to SFWMD. The ICLP pump station is less than one mile from the SFWMD monitoring station at S-191. SFWMD monitors the water level at that site continuously, and water level data are available in real-time on SFWMD's website. Since the water level will not be significantly different at the ICLP pump station, monitoring the water level at the ICLP pump station will not

provide any useful information. ICLP requests modification of Condition IV.B.3.d. 2) as follows:

(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 referenced 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.

2.5 Wording Change to Correspond with PSD Modification

Through the PSD air permitting processes, ICLP is currently pursuing authorization to increase the allowable heat input, and to fire alternative fuels, in its pulverized-coal boiler. Per Condition I.(22).B, the Conditions of Certification will be automatically updated to reflect the new PSD permit conditions, if approved.

There also is an administrative provision whose wording will be affected by the increased heat input. Specifically, Part I, Administrative conditions, (2) Scope Of License, should be revised as follows:

Site certification is limited to the construction and operation of the~~330~~390 MW (net) electrical power plant and associated linear facilities to be located in Martin and Okeechobee Counties.

Any alternative fuel used at the Facility will behave similarly to coal. Therefore, references to coal in the Conditions of Certification should be deemed to refer to coal or alternative fuel.

2.5 Facility Address change

The Martin County Board of County Commissioners has approved Silver Fox Lane as an official road. This street designation replaces Warfield Boulevard and means the Facility has a new street address. The new address is:

13303 Southwest Silver Fox Lane

ICLP retains its current U.S. Mail address (P.O. Box 1799, Indiantown FL 34956). Since the facility address is not referenced in the Conditions of Certification, ICLP are not requesting any change to the Conditions of Certification. However, ICLP requests that future correspondence referencing the Facility location use the 13303 SW Silver Fox Lane street address.

Correspondence regarding this change of site address is included in Attachment C.

Attachment A

Existing Conditions of Certification and Revisions

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)		
)		

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 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 Conditions of Certification as described in the request for modification dated December 30, 1999; to conform to the modification of Industrial Wastewater Facility Permit No. FL0183750, issued January 19, 2000; and to conform to 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 or 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 SO_2 and NOx 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 al 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. CO_2 Recovery Plant

A CO_2 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 CO_2 recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO_2. The CO_2 will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO_2 plant will be designed to produce 400 tons per day (TPD) of liquid CO_2. 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. CO_2 Recovery Plant

The CO_2 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 CO_2 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.
3, 3A & 3B	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. (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 O_2 and/or CO_2 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 NOx 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 CO_2 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 CO_2 plant.

h. Within 90 days of initial operation of the CO_2 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 CO_2 recovery level of 400 TPD of liquid CO_2 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 62-702 ~~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 ~~Commerce~~ 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.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~~ 1942.00	~~4.69~~ 5.32
Upper Floridan Aquifer	195.00	2.60
Upper Permeable Zone-Lower Floridian Aquifer	174.0	2.32
Surficial Aquifer	3.0	0.04

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'~~ 38.5' 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 26th day of July 2000, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green III

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.

Beverly Reardon
Deputy CLERK

7/26/00
DATE

CERTIFICATE OF SERVICE

I CERTIFY that a true and correct copy of the foregoing Final Order Modifying Conditions of Certification was mailed to the following on this 26 day of July 2000.

SCOTT A. GOORLAND
Senior Assistant General Counsel
Florida Bar No. 0066834

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**
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

*** Via Interagency Mail**
Michael Palecki
Division of Legal Services
Florida Public Service Commission
2540 Shumard Oak Boulevard
Tallahassee, Florida 32399-0850

*** Via Interagency Mail**
James Antista, General Counsel
Florida Fish And Wildlife Conservation Commiss
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

MICHELLE GRIFFIN

BEFORE THE STATE OF FLORIDA APR 6 1995
DEPARTMENT OF ENVIRONMENTAL PROTECTION

In Re: INDIANTOWN COGENERATION L.P., MODIFICATION OF CERTIFICATION PA 90-31 MARTIN COUNTY, FLORIDA	)	DEP CASE NO. PA 90-31B OGC NO. 91-0146

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 6, 1992, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration, L.P., (ICL) Project. That certification order approved the construction and operation of a 330 MW (net) cogeneration facility and associated facilities to be located in Martin and Okeechobee Counties, Florida.

On August 25, 1994, ICL filed a request to modify the conditions of certification pursuant to Section 403.516(1)(b), F.S. ICL requested that the conditions be modified to approve changes to the Planned Unit Development condition as agreed to by Martin County, a change in groundwater withdrawal rates and groundwater withdrawal zones, a change in surface water pumping rates, and a new condition to allow use of treated wastewater for cooling system makeup.

Copies of ICL's request were distributed to all parties to the certification proceeding and made available for public review. On January 6, 1995, a Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. The notice specified that a hearing would be held if a party to the original certification hearing objects within 45 days from receipt of the proposed modification or if a person whose substantial interests will be affected by the proposed modification objects in writing within 30 days after issuance of the public notice. No written objection to the proposed

modifications was received by the Department.

Accordingly, in the absence of any timely objection,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Project, described in the August 25, 1994, request for modification, are APPROVED. Pursuant to Section 403.516(1)(b), F.S. the Department hereby MODIFIES the conditions of certification for the Indiantown Cogeneration Project as follows:

Condition Part II.(9) is added as follows:

(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 that lower level of concentration and that satisfactory control of biological growth in the cooling tower can be maintained.

Condition Part IV B.2. is revised to read as follows:

B. WATER USE CONDITIONS

2. Site Specific Design Authorizations

a. Authorized Withdrawal

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGY)
L-63N	1484.00	4.69
~~Upper-Production-Zone~~ Upper Floridan Aquifer	195.00 ~~38.70~~	2.60 ~~0.43~~
Upper Permeable ~~Lower-Production~~ Zone-Lower Upper Floridan Aquifer	174.0 ~~336.60~~	~~4.46~~ 2.32

c. Authorized Withdrawal Facilities

~~3 1,700-GPM-Surface-Water-Pumps-in-L-63N~~

2 - 2,550 GPM Surface Water Pumps in L-63N

1 - 10" x 1340' Flowing Well cased to 500' (existing well)

1 - 10" x ~~1300~~ 1265' Flowing Well cased to ~~600~~ 750'

2 - 15" x 1350' Flowing Wells cased to 750'

~~4 - 14" x 1600' Flowing Wells cased to 1400'~~

2 - 15" x 1650' Flowing Wells cased to 1487'

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 accordance with the laws and ordinances of Martin County in effect shall be deemed incorporated into these Conditions of Certification for purposes of 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 certification is 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.

~~1. Construction and operation of the Indiantown Cogeneration Project shall be undertaken in accordance with the planned unit~~

development (industrial) agreement between the Permittee and Martin County, Florida, dated July 24, 1991. Said agreement is incorporated into these Conditions of Certification by this reference and shall be complied with and enforced as if the provision of that agreement were contained in these Conditions.

Any party to this Order had the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection 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 that the Final Order is filed with the Department of Environmental Protection.

DONE AND ENTERED this 31st day of March, 1995, in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL PROTECTION

Kirby B. Green III for
Virginia B. Wetherell
Secretary

3900 Commonwealth Boulevard
Tallahassee, FL 32399-3000
(904) 488-4805

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

Clerk 4/3/95 Date

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing was sent by U.S. Mail to the following this 3rd day of April, 1995.

Douglas S. Roberts
Hopping Green Sams & Smith
P.O. Box 6526
Tallahassee, FL 32314

David Jordan
Senior Attorney
Dept. of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Vernon Whittier
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwannee Street
Tallahassee, FL 32399

John Fumero
South Florida Water
Management District
P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL
33416-4680

Roger G. Saberson
Attorney for Treasure Coast
Regional Planning Council
70 SE 4th Ave.
Delray Beach, FL 33483-4514

Fred W. Van Vonno
Assistant County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, FL 34996

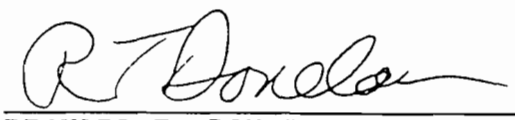
Michael Palecki
Division of Legal Services
Florida Public Service
Commission
101 East Gaines Street
Tallahassee, FL 32399-0850

Susan M. Coughanour
James Golden
South Florida Water
Management District
P.O. Box 24680
3301 Gun Club Road
West Palm Beach, FL
33416-4680

John D. Cassels, Jr.
Counsel for Okeechobee County
P.O. Box 968
400 Northwest Second Street
Okeechobee, FL 34972

James Antista
General Counsel
Florida Game and Fresh Water
Fish Commission
Bryant Bldg.
620 S. Meridian Street
Tallahassee, FL 32399-1600

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION



RICHARD T. DONELAN, JR.
Assistant General Counsel
2600 Blair Stone Road
Tallahassee, FL 32399-2400
(904) 488-9314

BEFORE THE STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION

In Re: INDIANTOWN COGENERATION L.P., MODIFICATION OF CERTIFICATION PA 90-31 MARTIN COUNTY, FLORIDA	)))))	DER CASE NO. PA 90-31

FINAL ORDER MODIFYING CONDITIONS OF CERTIFICATION

On February 6, 1992, the Governor and Cabinet, acting as the Siting Board, issued a final order approving certification for the Indiantown Cogeneration, L.P., (ICL) Project. That certification order approved the construction and operation of a 330 MW (net) cogeneration facility and associated facilities to be located in Martin and Okeechobee Counties, Florida.

On April 21, 1992, ICL filed a request to modify the conditions of certification pursuant to section 403.516(1)(b), F.S. ICL requested that the conditions be modified to approve several recently identified changes to the project design and operation. These proposed changes include alternate rail spur corridors to the project site, changes to or increases in the storage capacity of various onsite facilities, an additional nitrogen oxide control option, use of two auxiliary boilers one-half the size of the original auxiliary boiler, onsite fuel storage facilities, and alterations to the plant layout.

Copies of ICL's request were distributed to all parties to the certification proceeding and made available for public review. On May 1, 1992, a Notice of Proposed Modification of Power Plant Certification regarding the proposed modifications was published in the Florida Administrative Weekly. ICL published notice of the proposed modification in the Indiantown News on April 29, 1992. The notices specifies that a hearing would be held if requested on or before 45 days from receipt of the proposed modification by the parties or within 30 days of publication of the notice. No hearing was requested. No person has filed written objections to the proposed modifications.

Accordingly, in the absence of any dispute,

IT IS ORDERED:

The proposed changes to the Indiantown Cogeneration Project, described in the April 20, 1992, request for modification, are approved based on the absence of any request

for a hearing or written objections. The Department hereby approves the requested modifications. All modifications to the original certification as conceptually described in the request for modification, in and of themselves and as they impact the total infrastructure, shall be in conformance and in compliance with the following as appropriate:

- Domestic Waste Treatment and Disposal Facilities - Chapters 17-4, 17-28, 17-600, 17-602, 17-604, 17-610 and 17-640, F.A.C.

- Potable Water - Chapters 17-4, 17-531, 17-532, 17-550, 17-555, and 17-560, F.A.C.

- Industrial Waste - Chapters 17-4, and 17-660, F.A.C.

- Stormwater - Chapters 17-4, and 17-25, F.A.C.

Pursuant to Section 403.516(1)(b), F.S. the Department hereby modifies the conditions of certification for the Indiantown Cogeneration Project as follows:

Condition II(1), B.1. is revised to read as follows:

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 1000 hrs/yr on #2 Fuel Oil and the balance on natural gas or propane.

Condition II(1), B.2.b. is revised to read as follows:

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/year 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:

Condition Part II (2), Wetlands, create a new paragraph K. to read as follows:

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.

Condition II(3) - create a new paragraph D. to read as follows:

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 17-762, 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.

Conditions Part IV, C, 1. - create a new paragraph k. to read as follows:

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).

Condition Part VI - create a new paragraph 8 to read as follows:

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.

Any party to this Order has the right to seek judicial review of the Order pursuant to Section 120.68, Florida Statutes, by the filing of Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Regulation 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 that the Final Order is filed with the Department of Environmental Regulation.

DONE AND ENTERED this 20th day of July, 1992 in Tallahassee, Florida.

STATE OF FLORIDA, DEPARTMENT OF ENVIRONMENTAL REGULATION

Carol M. Browner
Secretary

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400
Telephone: (904) 488-9730

FILING AND ACKNOWLEDGEMENT

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

Kathy C Carter 7-21-92
Clerk Date

BEFORE THE GOVERNOR AND CABINET
OF THE STATE OF FLORIDA

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	DOAH CASE NO. 90-8072EPP DER CASE NO. PA 90-31

FINAL ORDER

FOR

INDIANTOWN COGENERATION PROJECT

ISSUED: February 7, 1992

BEFORE THE GOVERNOR AND CABINET
STATE OF FLORIDA
SITTING AS THE SITING BOARD

IN RE:
APPLICATION FOR POWER PLANT
SITE CERTIFICATION OF
INDIANTOWN COGENERATION
PROJECT, PA 90-31

DOAH CASE NO. 90-8072EPP

FINAL ORDER APPROVING CERTIFICATION

On February 4, 1992, this matter came before the Governor and Cabinet, sitting as the Siting Board, pursuant to the Florida Electrical Power Plant Siting Act (PPSA), Section 403.501, et seq., Florida Statutes (1991), for final agency action concerning a Recommended Order dated December 24, 1991, attached as Exhibit 1, which recommends site certification for the Indiantown Cogeneration Project Power Plant. On September 24, 1991, the Board adopted a previous Recommended Order in this case which concluded that the proposed project was consistent with all applicable zoning ordinances and land use plans. The Public Service Commission entered a Final Order certifying the need for the proposed project on March 21, 1991. No exceptions to the Recommended Order have been filed. Having reviewed the Recommended Order and having otherwise been fully advised, it is **ORDERED**:

1. Pursuant to Section 120.57(1)(b)10, Florida Statutes (1991), the Recommended Order dated December 24, 1991, (Exhibit 1) is **APPROVED** and **ADOPTED** by the Board.

2. The Board hereby **APPROVES** certification of the location, construction, and operation of the Indiantown Cogeneration Project at the proposed site, subject to the Conditions of Certification contained in Appendix A of Exhibit 1.

3. The Board hereby **DELEGATES** to the Department of Environmental Regulation the authority to assure and enforce compliance by Indiantown Cogeneration Partnership and its agents with all of the Conditions of Certification.

NOTICE OF RIGHTS

Any party to this certification proceeding has the right to seek judicial review of this 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 Siting Board in the Department of Environmental Regulation Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; and by filing a copy with the appropriate District Court of Appeal. The notice of appeal must be filed within 30 days from the date this Final Order is filed with the Clerk of the Siting Board.

DONE and ORDERED this 6th day of February, 1992, in Tallahassee, Florida, pursuant to the vote of the Governor and Cabinet sitting as the Siting Board, at a duly-noticed and constituted Cabinet meeting on February 4, 1992.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD

BY: Lawton Chiles
THE HONORABLE LAWTON CHILES

FILING AND ACKNOWLEDGEMENT
FILED, on this date, pursuant to S120.52 Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Kathy L. Carter 2.7.92
Clerk Date

I hereby certify that the attached order was provided by mail on this 13th day of February, 1992, to the following persons:

The Honorable Lawton Chiles
Governor
The Capitol, Room 210
Tallahassee, Florida 32399

The Honorable Jim Smith
Secretary of State
The Capitol, LL-10
Tallahassee, Florida 32399

The Honorable Robert A. Butterworth
Attorney General
The Capitol, Plaza Level
Tallahassee, Florida 32399

The Honorable Bob Crawford
Commissioner of Agriculture
The Capitol, Plaza level
Tallahassee, Florida 32399

The Honorable Gerald A. Lewis
State Comptroller
The Capitol, Room 2001
Tallahassee, Florida 32399

The Honorable Tom Gallagher
State Treasurer and Insurance Commissioner
The Capitol, LL-27
Tallahassee, Florida 32399

The Honorable Betty Castor
Commissioner of Education
The Capitol, Plaza Level
Tallahassee, Florida 32399

Hamilton S. Oven, Jr., P.E.
Florida Department of Environmental Regulation
2600 Blair Stone Road, Room 309L
Tallahassee, FL 32399-2400

Richard T. Donelan, Esquire
Assistant General Counsel
Florida Department of Environmental
Regulation
2600 Blair Stone Road, Room 654
Tallahassee, Florida 32399-2400

Kathryn Funchess
Stephen Pfeiffer
General Counsel
Florida Department of Community Affairs
2740 Centerview Drive
Tallahassee, Florida 32399-2100

Vernon Whittier
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwannee Street, M.S. #58
Tallahassee, Florida 32399

John Fumero
South Florida Water Management District
Post Office Box 24680
West Palm Beach, Florida 33416-4680

Eugene McClellan, Assistant General Counsel
Department of Natural Resources
3900 Commonwealth Boulevard
Tallahassee, Florida 32399

Roger G. Saberson
Attorney for Treasure Coast
Regional Planning Council
70 S.E. 4th Avenue
Delray Beach, FL 33482-4514

Fred W. Van Vonno
Assistant County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, Florida 34996

Brian Sodt
Central Florida Regional Planning Council
Post Office Box 2089
Bartow, Florida 33830-2089

John D. Cassels, Jr.
Counsel for Okeechobee County
Post Office Box 968
400 Northwest Second Street
Okeechobee, Florida 34972

James Antista, General Counsel
Kenneth McLaughlin, Assistant General Counsel
Florida Game and Fresh Water Fish Commission
Bryant Building
620 South Meridian Street
Tallahassee, FL 32399-1600

Doug Roberts
Carolyn S. Raepple
Gary Sams
Attorneys at Law
P.O. Box 6526
Tallahassee, FL 32314
(Counsel for Applicant)

R T Hamilton, Jr.
Environmental Counsel
Dept of Environmental
Regulation

State of Florida
Division of Administrative Hearings
The DeSoto Building, 1230 Apalachee Parkway
Tallahassee, FL 32399-1550
(904) 488-9675 • SunCom: 278-9675

December 24, 1991

Sharyn L. Smith
Director

Ann Cole
Clerk

Honorable Lawton Chiles
Governor
State of Florida
The Capitol
Tallahassee, FL 32399

Honorable Jim Smith
Secretary of State
State of Florida
The Capitol, PL-02
Tallahassee, FL 32399-0250

Honorable Robert A. Butterworth
Attorney General
State of Florida
The Capitol
Tallahassee, FL 32399-1050

Honorable Tom Gallagher
Treasurer and Insurance
Commissioner
State of Florida
The Capitol
Tallahassee, FL 32399-0300

Honorable Bob Crawford
Commissioner of Agriculture
State of Florida
The Capitol
Tallahassee, FL 32399-0810

Honorable Gerald A. Lewis
Comptroller
State of Florida
The Capitol, Plaza Level
Tallahassee, FL 32399-0350

Honorable Betty Castor
Commissioner of Education
State of Florida
The Capitol
Tallahassee, FL 32399

Re: Application for power plant site certification of Indiantown Cogeneration Project, DOAH Case No. 90-8072EPP

Dear Siting Board:

Enclosed is my Recommended Order in the site certification hearing of the referenced case. Exhibits received in evidence and the transcript of the certification hearing have been transmitted to Richard T. Donelan, Jr., at the Department of Environmental Regulation.

As required by Section 120.58(5), Florida Statutes, please provide the Division of Administrative Hearings a copy of your final order in this case within 15 days of rendition.

Sincerely,

DIANE K. KIESLING
Hearing Officer

DKK:dw
Enclosure

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. 90-31

RECOMMENDED ORDER

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

In Re: APPLICATION FOR POWER PLANT SITE CERTIFICATION OF INDIANTOWN COGENERATION PROJECT	)	DOAH CASE NO. 90-8072EPP DER CASE NO. 90-31

RECOMMENDED ORDER

Pursuant to proper public notice, a certification hearing as required by Section 403.508(3), Florida Statutes (Supp. 1990), was held in Indiantown, Florida on October 21, 1991, before the Division of Administrative Hearings, by its designated Hearing Officer, Diane K. Kiesling.

APPEARANCES

For Indiantown Cogeneration Project:	Douglas S. Roberts Carolyn S. Raepple Hopping Boyd Green & Sams 123 S. Calhoun Street Post Office Box 6526 Tallahassee, FL 32314
For Department of Environmental Regulation:	Richard T. Donelan, Jr. Assistant General Counsel 2600 Blair Stone Road Tallahassee, FL 32399-2400
For Martin County:	Fred W. Van Vonno Assistant County Attorney 2401 Southeast Monterey Road Stuart, FL 34996
For South Florida Water Management:	Cecile Ross Assistant Counsel 3301 Gun Club Road West Palm Beach, FL 33416-4680
For Treasure Coast Regional Planning Council:	Roger G. Saberson 70 S.E. 4th Avenue Delray Beach, FL 33482-4514

STATEMENT OF THE ISSUES

The general purpose of the hearing was to receive written and documentary evidence, including that presented by members of the public, concerning whether, through available and reasonable methods, the location and operation of the proposed cogeneration project will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life, in an effort to fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public. Section 403.502, Florida Statutes (Supp. 1990).

PRELIMINARY STATEMENT

This proceeding was held pursuant to the Florida Electrical Power Plant Siting Act, Chapter 403, Part II, Flo Statutes (Supp. 1990), and Chapter 17-17, Florida Administrative Code, to consider the application of Indiantown Cogeneration, L.P. (ICL) for site certification of a proposed 330 megawatt coal-fired cogeneration project at a site located in western Martin County, Florida. By order dated September 24, 1991, the Governor and Cabinet, sitting as the Siting Board, adopted the Hearing Officer's Recommended Order holding the proposed Indiantown Cogeneration Project (ICP) is consistent and in compliance with existing land use plans and zoning ordinances of Martin County and Okeechobee County, Florida. Pursuant to Section 403.519, Florida Statutes, the Florida Public Service Commission issued a determination of need for the proposed ICP March 21, 1991.

The Department of Community Affairs (DCA), the Florida Game and Fresh Water Fish Commission (FGFWFC), and the Department of Transportation (DOT) did not enter appearances at the hearing but did enter into settlement stipulations with ICL that were received into evidence. The Department of Natural Resources (DNR), the Central Florida Regional Planning Council (CFRPC), and Okeechobee County did not appear at the certification hearing.

ICL presented the oral or written testimony of twelve witnesses and their supporting exhibits, 1-63. Eleven witnesses were offered and accepted as expert witnesses in various fields. All written testimony and exhibits offered by ICL were received into evidence. Pursuant to a stipulation among the parties, the testimony and exhibits of three witnesses were admitted by sworn affidavit without those witnesses having to appear at the hearing. The revised DER written analysis and agency report was admitted. ICL exhibits 64-66 were admitted in evidence and ICL exhibits 67 through 72, constituting stipulations between ICL and various agency parties and containing agreed-upon conditions of certification, were also received into evidence. DER exhibit 1 was admitted. During the public hearing, two members of the general public offered comments and testimony on their own behalf. No other witnesses or exhibits were offered by any other parties. Attached to this Recommended Order as Appendix A are the Conditions of Certification to which the parties have all agreed.

The transcript of the proceedings was filed on December 4, 1991. The parties joint proposed recommended order was filed

on December 3, 1991. Because only one proposed recommended order was filed by the parties, it is unnecessary to make specific rulings on each proposed finding of fact. All proposed findings of fact are adopted in substance as modified herein, except for proposed finding of fact 73 which is unnecessary.

FINDINGS OF FACT

General Project Description

1. The Indiantown Cogeneration Project (ICP) will consist of a coal-fired cogeneration facility capable of generating 330 megawatts (net) of electricity for sale to Florida Power and Light Company. The plant will also supply up to 225,000 pounds per hour of process steam to the adjacent Caulkins Citrus Processing plant. Steam for electrical production citrus processing will be produced in a pulverized coal boiler.

2. Cogeneration facilities such as the ICP are energy generating facilities that produce more than one form of energy. In this project, the second form of energy is generated by capturing waste heat in the form of steam from the electrical generating process and using it in the citrus processing facility. A cogeneration facility, therefore, achieves efficiencies in fuel use, capital investment, and operating costs.

3. The 220-acre project site is located in southwestern Martin County, approximately nine miles east of Lake Okeechobee, 20 miles west of Stuart, and three miles northwest of

the unincorporated community of Indiantown, Florida. The site lies south of State Road 710 directly behind the existing Caulkins Citrus Processing Plant and the vacant Florida Steel Corporation site, both of which border on State Road 710. A CSX railroad line runs parallel to State Road 710.

4. Features of the project include a rail spur to connect the site to the existing CSX rail line, a new site access road that will ultimately be dedicated to public use, and a 19-mile water pipeline connecting the facility to a surface water source in neighboring Okeechobee County. This pipeline will be located within the existing CSX railroad right-of-way. The ICP will tie into an existing electrical transmission line crossing the site; no new transmission facilities will be required for the project. A rail loop will be constructed within the project site to accommodate coal deliveries by rail. Enclosed coal and lime handling and storage facilities will be constructed on the site. However, there will be no on-site ash disposal. The project site will also include a 25-acre cooling water storage pond. Within the site, 24 acres of wetlands will be preserved and buffered by minimum 50-foot upland buffers.

5. The main project site is currently unimproved and is zoned for industrial uses. The site is used on a limited basis for cattle grazing. Surrounding land uses consist of other industrial or agricultural uses, including pasture and citrus groves. There are no existing buildings at the site. The only structures on site are the existing electrical transmission towers within the FPL transmission line right-of-way.

6. Cooling and process water for the project will be obtained principally from Taylor Creek/Nubbin Slough also known as L-63N in Okeechobee County. The intake structure and pumphouse will be located on a one-half acre site, which is adjacent to the existing CSX railroad right-of-way. The cooling water pipeline will run from the intake structure southeast within the railroad right-of-way to the ICP site. During periods of drought when surface water is not available from Taylor Creek/Nubbin Slough, the ICP will withdraw groundwater from the upper Floridan aquifer, a zone of water containing high levels of dissolved solids.

Site Selection

7. The ICP site offers a number of advantages for the proposed cogeneration facility. First, the facility is situated close to the adjacent citrus processing plant, which minimizes heat loss in delivering steam to the citrus plant through a steam line. The site also provides direct access to an existing transmission line. Third, the site is close to State Road 710 and the CSX railroad, providing vehicular access and good rail access for delivery of coal and removal of ash. The railroad right-of-way also provides a corridor for the water supply pipeline within an already existing disturbed area. Additionally, the project will obtain water primarily from Taylor Creek/Nubbin Slough, which drains agricultural areas into Lake Okeechobee and carries a high nutrient load. Coal was selected as the primary fuel for the facility for several reasons,

including constraints on natural gas delivery, enhancement of fuel diversity on the FPL system, cost effectiveness, and the availability of high quality low sulfur coal in addition to the use of advanced air pollution control systems.

8. In selecting the site and designing the ICP, ICL discussed the project extensively with local residents and officials. The concerns and suggestions raised were addressed or incorporated into the ICP's final design. These features included use of low sulfur coal, avoidance of wetlands, use of low quality surface water, covering coal piles, and off-site disposal of ash. In addition, ICL has committed to establish a trust fund to support community improvements in Indiantown and to encourage Project employees to live in the Indiantown area.

PSC Need Determination

9. The determination of need for the Indiantown Cogeneration Project was entered by the Public Service Commission (PSC) in Order No. 24268 issued on March 21, 1991. The PSC reached the following conclusions in its order:

(a) The proposed power plant will contribute to electric system reliability and integrity. This conclusion was based on the fact the project is located close to Florida Power & Light Company's (FPL) load center, will not interfere with the ability to import power from other utilities, and would result in minimal transmission losses compared to other more distant sites. Further, FPL's ability to dispatch the facility, to obtain generation during times of peak demand, and to coordinate

maintenance of facilities contributed to this determination reliability and integrity.

(b) The ICP was also found to provide adequate electricity at reasonable cost based on the Project's proximity to the load center, contractual incentives to provide the most efficient delivery of power, and the easy integration of the plant into FPL's transmission grid. The ICP was concluded to be less expensive than the equivalent portion of FPL's own generating alternative.

(c) The Project was also determined to be the most cost-effective alternative available for meeting the need for additional generating capacity. It was found to be less expensive than FPL's own constructed units or the statewide avoided unit as determined by the PSC.

(d) The Commission concluded that FPL, as a purchaser of the electricity to be generated, had taken reasonable measures to conserve electricity. The Commission concluded that FPL had reduced its need for electrical generating capacity through demand-side management and cost effective conservation programs.

(e) Finally, the Commission determined that the Project would contribute to the larger statewide and Peninsular Florida need for power in 1996, the in-service year for this project.

Project Design and Site Layout

10. The steam production facility for the project will be an outdoor, natural circulation-type, pulverized coal boiler. Pulverized coal will be mixed with hot combustion air and ignited in the furnace section of the boiler. Advanced combustion burners will be used in the boiler to minimize the formation of nitrogen oxides. High pressure steam from the boiler will go to an extraction-condensing steam turbine/generator where electricity will be produced.

11. A low-pressure steam extraction is taken from the steam turbine and routed to the Caulkins Citrus plant via a steam line. The steam will be used in the Caulkins plant in evaporators to concentrate orange juice and in dryers to produce a cattle feed supplement from citrus peel and pulp. The condensed steam will be returned from the citrus facility for reuse in the ICP.

12. The plant will use a selective non-catalytic reduction (SNCR) process to reduce formation of nitrogen oxides. In this process ammonia is injected into the boiler to react with nitrogen oxides, forming elemental nitrogen and water. A computer-controlled system will be used to inject ammonia at preselected temperature zones to maximize the control of nitrogen oxide emissions with the least amount of ammonia injection. The exiting flue gas will then enter a spray dryer absorber system where a lime slurry is injected to reduce sulfur dioxide emissions through reactions of sulfur dioxide and other gases with the lime slurry. This produces gypsum particles which,

along with other particles, principally fly ash, are removed in the baghouse. In that facility, the particulate-laden gas st: enters the baghouse, passes through the bag filters where ash is removed, and discharges to the stack.

13. Bottom ash formed during coal combustion will drop into a water-impounded hopper. From there it will be removed by a submerged drag chain conveyor to a storage facility. The bottom ash as well as the fly ash will be removed from the site for disposal.

14. Coal will be delivered to the project site by rail and unloaded in a totally enclosed facility through bottom dump hoppers. Coal storage will be provided in both active and inactive piles. The active pile will be maintained in an enclosed building capable of containing seven days' supply of coal. Coal will be reclaimed from the active coal pile transported in enclosed galleries to the coal crusher. The active coal pile building will include a physical barrier, such as a liner, below the pile to protect groundwater. An outdoor inactive coal pile will contain thirty (30) days of compacted coal. The inactive pile will be grass covered and a liner will be used under it to protect groundwater.

15. Lime, which will be used in the control of sulfur dioxide emissions, will be delivered in bottom dump rail cars or self-unloading trucks. Rail unloading will take place in a separate unloading building with a dust collection system to prevent fugitive dust emissions. A liner will be installed in the area around the unloading building. Lime will be

mechanically transferred from the unloading building in enclosed conveyors to a lime storage silo.

16. The ICP will also include an auxiliary boiler which serves two functions. First, this boiler will provide start-up steam to the turbine cycle during start-up of the main boiler. The auxiliary boiler also is intended to supply steam to the citrus processing facility during those times when the main boiler is not in operation. This boiler is a package-type boiler capable of firing natural gas, propane or fuel oil.

17. The ICP's heat dissipation system will consist of a mechanical draft cooling tower, an on-site cooling water storage pond, and an intake structure and pipeline for providing water to the project site. Steam exiting the turbine generator will be condensed by cooling water flowing through a condenser. This heat will ultimately be transferred to the atmosphere in a cooling tower where hot water contacts cool air. In the tower, fans will force air up through falling hot water. The cooled water will be collected in a basin at the bottom of the tower and reused in the plant circulating water system. Mist eliminators will be used within the tower to reduce the escape of water droplets entrained in the air flowing out of the cooling tower. Such water droplets contain solids, including salts, that are present in the cooling water and which could impact vegetation upon which these solids fall. The potential for drift impacts to wetlands has been minimized through the use of mist eliminators that reduce drift to 1/1000th of the plant circulating water flow and by orientation of the cooling tower.

18. A lined 25-acre cooling water storage pond will be constructed on site to provide nine days of plant water nee This pond will store water from Taylor Creek/Nubbin Slough and is lined to prevent water loss due to seepage to the ground.

19. Water will be obtained from Taylor Creek/Nubbin Slough through a water intake structure excavated in the bank of the canal. Two wedge-wire screens, each with the capacity to provide 100 percent of the facility's water needs, will be placed in the intake forebay. The slots in the screen are narrowly spaced, at 1 millimeter, and design flow through the slots is less than one-half foot per second. This will minimize impingement or entrapment of fish or larvae on the intake screens. The intake screens will be connected to a pump house located behind the canal bank with three pumps, each capable of providing 50 percent of the plant's water needs.

20. From the pump house, water will be conveyed to the on-site cooling water storage pond via an 18 to 24-inch water pipeline to be located within the existing CSX Railroad right-of-way. The pipeline will be buried except where it crosses streams and wetlands. At such locations, the pipeline will be supported on existing bridge supports, be placed on precast pilings or span the wetland entirely.

21. The ICP is designed so that there will be no discharge of plant wastewaters, including process wastewaters, cooling tower blowdown, or contaminated stormwater. Instead, wastewater will be reused in the plant, further reducing the plant's water needs. The water treatment and recycling system

consists of several components. The plant's cooling water will be treated to remove solids that could cause scaling and corrosion problems. These solids will be removed as a sludge and the treated water will be recycled for cooling.

22. Raw water requires treatment before use as process water in the plant. Liquid waste from the water treatment system will be treated and cycled through the cooling tower water treatment system prior to being sent to a filter press where solids are removed. A portion of the effluent from the water treatment system will be used directly in the spray dryer for control of sulfur dioxide emissions and a portion of the effluent will be sent to an evaporator where it will be reprocessed, with clean water recycled to the plant and the evaporator brine also used in the spray dryer. During periods when the plant is relying on Floridan water, which is of lower quality, excess wastewater generated by the evaporator cannot be recycled as quickly into the plant process. A lined 8-acre wastewater storage pond will be used to store up to 75 days of wastewater production. When the plant water supply reverts to Taylor Creek/Nubbin Slough, the wastewater stored in this pond will be recycled into the plant for use in the spray dryer.

23. Sanitary wastewater will be collected and pumped to the Indiantown Water Company for treatment. Potable water needs of the facility will also be supplied by the Indiantown Water Company.

24. The site will contain several stormwater management basins. The basin around the cooling tower and power block area

and the basin serving the coal pile area will be lined. Stormwater in these basins, which could be contaminated by pl. activities, will be pumped to the on-site water treatment facilities for use in the plant. Other stormwater management basins are designed to collect and discharge stormwater to existing on-site wetlands to maintain pre-development rates of water flow.

25. The site contains seven wetlands, totalling approximately 24 acres. Each wetland will be surrounded by a minimum 50-foot upland buffer. Additional upland areas, totalling 59 acres, will also be preserved on site. No plant construction or operations will occur within these wetland or upland preserve areas.

Construction Activities and Schedule

26. Construction of the ICP will involve initial clearing and grubbing of the site, pile driving, site filling operations, foundation installation, and equipment erection activities. Erosion and sedimentation control measures will be taken in areas requiring land clearing. Appropriate measures will be taken to reduce fugitive dust emissions during construction, including water spraying of roadways, speed reductions, and covered or wetted truck beds to reduce material blown from trucks.

27. Construction of the water pipeline will require minimal clearing and grubbing, only to the extent required to dig the trench and store topsoil. Backhoes and draglines will be

used to install the pipe. Sedimentation and erosion measures will be used to minimize soil erosion and turbidity in streams. The cooling water intake structure at Taylor Creek/Nubbin Slough will be constructed by installing a cofferdam in the canal and excavating behind the cofferdam to install the intake pipes and screens. Local erosion and sedimentation control measures will be undertaken to prevent sediment from entering the canal during construction of the intake.

28. Investigations of the soil at the site indicate that adequate support for building foundations will be provided. Foundations for major buildings will require pile-type foundations. Other buildings can be constructed on support or spread footings. In the event large structures are relocated to areas where no soils data exist, further field investigations as needed will be undertaken to properly design foundations.

29. Construction of the ICP should take approximately 3 1/2 years, commencing in mid-1992. The estimated cost of the facility is between $600 million and $700 million. The construction work force will peak at 800 workers for several months in the third year of construction. The average for that third year, 1994, will be approximately 600 construction employees.

30. Approximately 80 permanent jobs will be created by the ICP. The plant will operate on a 7-day-per-week, around-the-clock basis. ICL has committed to an incentive program to encourage new plant employees to live in and become active in the Indiantown community. Additionally, ICL will undertake a local

recruitment program to enhance employment opportunities at the plant for Indiantown residents.

Fuel Use and Supply

31. The ICP's main boiler is designed to burn a low sulfur coal, containing less than 2% sulfur, as the primary fuel. Coal will be delivered by trains entering and leaving the site from the north, with no coal traffic passing through Indiantown. Three trains per week will be required to supply coal. Ash resulting from coal combustion will be removed from the site for disposal or to be reclaimed for beneficial uses.

32. Natural gas will be used as a start-up fuel in the main boiler and as the primary fuel in the auxiliary boiler. Propane will act as a backup fuel for natural gas in both boilers. Natural gas will be supplied by an existing pipeline which serves the adjacent citrus processing plant.

33. A very low sulfur fuel oil will be used as an alternate backup fuel when natural gas or propane is not available, such as during a natural gas curtailment. The infrequent deliveries of fuel oil will be by tank truck and pumped to an on-site storage tank which will be designed in accordance with FDER regulations.

Consumptive Water Use

34. The ICP will utilize surface water withdrawn from the Taylor Creek/Nubbin Slough as its principal source of water for cooling and process water needs. At a 100 percent operating

capacity factor, the plant's annual water withdrawal would be 5,430-acre feet. An analysis of the effects of these withdrawals on water levels in Taylor Creek/Nubbin Slough indicated that this source could supply the plant water requirements approximately 95 percent of the time. This conclusion was based on ceasing pumping when the water level in the canal reaches 17.5 feet. During the 16-year study period, the longest period in which the water level dropped below 17.5 feet was approximately 75 days.

35. The plant's maximum water withdrawals from Taylor Creek/Nubbin Slough represent 0.16 percent of the total annual inflow into Lake Okeechobee and about 5 percent of the flow of the Taylor Creek/Nubbin Slough system. However, Taylor Creek/Nubbin Slough water is high in nutrients, including phosphorous. The plant's water withdrawals can reduce the annual discharge of phosphorous to Lake Okeechobee by approximately 7.0 tons for a 1.0 percent annual reduction of total phosphorous to Lake Okeechobee. Further, investigations indicate that there will be no impacts to other surface water users in the area of the intake canal.

36. During periods when surface water is not available from Taylor Creek/Nubbin Slough, the ICP will obtain water from wells in the Floridan aquifer. This groundwater contains high concentrations of total dissolved solids which require treatment before use. Water will be obtained from both the upper production zone, beginning at about 685 feet below ground level, and the lower production zone, beginning at a depth of 1,485 feet below ground, within the Floridan aquifer.

37. The ICP will use the lowest quality water available in sufficient quantities to meet the Project's water ne Minimum adverse impacts to the water resource, other legal users, or land uses are anticipated.

Surface Water Management

38. Construction and operation of the project will involve treatment, storage and management of surface water runoff resulting from rainfall. Existing drainage consists of a ditch which traverses the site from north to south. The stormwater runoff currently has a low flow velocity and is ultimately conveyed to the St. Lucie Canal, approximately 2.5 miles to the south via an existing system of agricultural canals.

39. Construction drainage will consist of drainage ditches, swales, and culverts directing stormwater into sev sedimentation basins. Operations drainage will consist of a series of permanent basins that will collect, treat, and either recycle or discharge stormwater. The expected increase in peak stormwater runoff will be alleviated by two stormwater management basins which will store incremental runoff while releasing water to maintain pre-development discharge rates, including flows to on-site wetlands and ditches. The stormwater management system is also designed to provide water quality control for stormwater prior to discharge. Oil/water separators, trash racks, and emergency cutoff devices will be installed to provide additional water quality protection. A surface water quality monitoring program will be implemented during construction and operation t detect any impacts to surface waters.

40. Stormwater within three basins which have the potential to pick up contaminants will not be discharged but will be recycled to the plant for treatment and use. These basins include the area around the cooling tower and the west side of the power block, the outdoor covered coal pile, and the wastewater pond. The stormwater management system and the other impoundments are designed in accordance with SFWMD's regulations for such facilities.

Impacts to Surface Waters

41. Impacts on surface water hydrology from the Project construction and operation will be minimal. Because the plant will utilize a "zero discharge" wastewater treatment system, there will be no impact from plant wastewater discharges. The stormwater management system will collect, detain, possibly treat, and discharge stormwater using design features to remove potential contaminants and maintain acceptable water quality. That portion of the existing ditch traversing the site which will be relocated has been designed to minimize impacts of slightly higher peak stormwater runoff rates from developed areas during a design storm through removal and replacement of damaged culverts in that ditch.

42. Plant water withdrawals from Taylor Creek/Nubbin Slough will have minimal impacts on the flow in that water body. Water levels in the canal will not deviate significantly from historical water levels during a normal year as a result of surface water withdrawals. The quantity of water withdrawn will

have a negligible impact on Lake Okeechobee. However, these withdrawals will have a significant positive impact on wa quality by reducing nutrient inflows to the lake.

Impacts to Groundwater Resources

43. Construction and operation of the ICP will require short-term and long-term groundwater withdrawals. Temporary dewatering of groundwater near the surface will be required during construction of the coal unloading building and of the circulating water lines. Analyses show that these construction activities are not expected to adversely affect nearby wetlands or water wells. Mitigation measures, including installation of sheet piling and infiltration galleries (which direct water into the ground), will be used to insure no adverse impacts. No impact is expected to occur to the groundwater contaminant pl on the adjacent Florida Steel site.

44. During operation, the ICP will withdraw water from the Floridan aquifer as a backup water source. Geophysical and computer analyses of these withdrawals indicate that there will be minimal effects on other groundwater users. These analyses are subject to confirmation by an aquifer performance test (APT) to be conducted once the on-site storage pond has been constructed. In the event the APT results are not consistent with the modeling analyses and impacts to the nearby Caulkins wells are likely, mitigation for these impacts will be provided in accordance with an agreement between ICL and the Caulkins Citrus facility to mitigate any impacts to Caulkins' wells as result of the ICP withdrawals.

45. Use of impervious liners beneath the coal unloading and storage areas and the wastewater and stormwater basins will prevent adverse effects on groundwater due to the percolation of potentially contaminated water into the surficial aquifer. A groundwater monitoring plan will be implemented during construction and operation to detect any impacts to groundwater.

Waste Management

46. The ICP will generate solid wastes from the operation of the combustion system, the water and wastewater treatment system, and the flue gas cleaning system. Miscellaneous wastes such as general office refuse and maintenance wastes will also be produced. There will be no on-site disposal of solid wastes. Combustion ash and solids from the dry scrubber will be removed from the site for off site disposal or recycling. The filter cake from the water treatment, consisting of solids removed from raw water, will be disposed of off site. The filter cake is not expected to be hazardous and may have value as a fertilizer due to the high phosphorous content of the surface water. The spent resin beds in the water treatment demineralizer will be removed by their suppliers. Miscellaneous office wastes will be directed to a licensed, off-site disposal area.

47. The ICP may generate small quantities of wastes that may be classified as hazardous, including solvents, spent acids, caustics, and water treatment materials. The acids and caustics will be neutralized in a neutralization tank for pH

adjustment and will not require further handling as a hazardous wastes. Generation of other hazardous wastes will be minim by use of less hazardous or nonhazardous materials or systems. Hazardous wastes that are produced will be properly placed in a lined storage-for-disposal area and removed from the site within 90 days by a permitted hazardous waste transporter.

Air Pollution Controls and Impact Analysis

48. The Indiantown Cogeneration Project is located in Martin County, which has been designated by the U.S. Environmental Protection Agency and DER as an attainment area for all six criteria (or regulated) air pollutants.

49. Under federal and State of Florida Prevention of Significant Deterioration (PSD) regulations, the ICP is subject to "new source review." This review requires that the ICP n new source performance standards (NSPS) and that best available control technology (BACT) be applied to control emissions of PSD air pollutants emitted in excess of applicable significant emission rates. For the ICP, a BACT analysis must be conducted for the following pollutants: nitrogen oxides, sulfur dioxide, particulate matter, carbon monoxide, volatile organic compounds, acid gases, mercury, beryllium, arsenic, and radionuclides.

50. The term "BACT" is defined in Chapter 17-2.100(28), Florida Administrative Code, as

> An emission limitation, including a visible emission standard, based on the maximum degree of reduction of each pollutant emitted which the Department [of Environmental Regulation], 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 (including fuel cleaning or treatment or innovative fuel combustion techniques) for control of each such pollutant.

Such an analysis is conducted by identifying available and technically feasible emission control alternatives and evaluating their degree of emission reduction, costs, and adverse impacts. BACT for each pollutant is the most stringent degree of emission control that is not rejected on the basis of unreasonable economic, energy, environmental, or other technical grounds. The BACT requirements are intended to insure that a proposed facility such as the ICP incorporates emission controls reflecting the latest techniques used in a particular industry, while allowing for future growth in the vicinity of the proposed facility.

51. For nitrogen oxides, the BACT determination established an emission level of 0.17 pounds per million BTU's (lb/MMBTU) of fuel consumed. This emission level can be achieved by the use of low NO_x burners which minimize the formation of nitrogen oxides and the use of a selective non-catalytic reduction system. For control of sulfur dioxide and other acid gases, the BACT analysis determined that an emission level of 0.17 lb/MMBTU of SO_2 could be best achieved by use of a dry scrubber process.

52. The BACT analysis for control of particulate matter concluded that the level of emission control was best achieved using a fabric filter in a baghouse. Other trace metal

pollutants, including arsenic, beryllium, and mercury, which are emitted as particulate matter, were also concluded to be b controlled by a fabric filter. The fabric filter will also act as the appropriate control for radionuclides. For carbon monoxide and volatile organic compounds, BACT has been determined to be the design of the combustion control system to maximize combustion efficiency.

53. For the auxiliary boiler, the BACT analysis concluded that the appropriate emission levels could be achieved for sulfur dioxide by using fuel sulfur limitations; for nitrogen oxides, by using low NO_x burners; for particulate matter, by using low-ash, clean fuels; and for carbon monoxide and volatile organic compounds, by employing combustion controls which minimize the formation of these pollutants.

54. Fugitive dust emissions will be generated by delivery, storage, and handling of coal, lime, and ash. These emissions will be controlled by a variety of control technologies and techniques, which were determined to be BACT for the control of fugitive emissions. The active coal pile will be totally enclosed in a building ventilated through a fabric filter. Coal, lime, and ash will be conveyed and handled within enclosed conveyors, also equipped with fabric filters. Fly ash will be conveyed within pneumatic systems which exhaust through a fabric filter and will be stored within enclosed silos before being transported off site. These various control methods result in minimal emissions of fugitive dust from the ICP.

55. In addition to applying the "best available control technologies," air emissions from the project must also comply with federal and state ambient air quality standards (AAQS) for six criteria pollutants and must not exceed the PSD increments for sulfur dioxide, particulates, and nitrogen oxides. Martin County and the contiguous counties are in a Class II area for PSD purposes, areas where moderate increases in air pollutants are allowed. An air quality analysis, undertaken in accordance with monitoring and computer modeling procedures approved by DER, demonstrates that the ICP will not cause or contribute to any violations of state or national ambient air quality standards. The ICP's predicted impacts also comply with the allowable Class II PSD increments for sulfur dioxide, particulates, and nitrogen oxides.

56. An analysis of potential visibility impacts to the nearest PSD Class I area, the Everglades National Park, predicted that no significant visibility impairment will be observed in the Park. An analysis of potential air quality impacts from commercial, residential, and industrial growth that might result from the Project indicates that minimal associated growth is anticipated and therefore no air quality related impacts attributable to such growth are anticipated. No adverse impacts to area soils and vegetation are expected to occur as a result of Project emissions.

57. An impact analysis was also undertaken for non-criteria pollutants (or air toxins). Four trace elements, beryllium, fluorides, inorganic arsenic, and mercury, which were

shown to be emitted in significant amounts, were analyzed. While ambient air quality standards have not been established for th[illegible] pollutants, a DER draft list of "no threat" levels has been published. These "no threat" levels can be used for a health effects evaluation. They are based upon conservative assumptions to insure protection of public health and incorporate an ample margin of safety so that no impact to the public health is expected where predicted concentrations are below these levels. For the ICP, there are no exceedances of the "no threat" levels and it may be concluded that these trace element emissions will impose no significant health risks.

58. An analysis of the impacts of drift from the cooling tower indicated that there would be no impact to nearby vegetation, including wetlands, or to surface waters as a result of the ICP's operations. Orientation of the cooling tower, of advanced drift eliminators, and collection of stormwater within the area around the cooling tower will be implemented to minimize the effects of any salts contained in the drift. Additionally, a monitoring program will be undertaken to evaluate wetlands that may be potentially affected by cooling tower drift. A computer modeling analysis of the potential for ground fogging by the cooling tower plume indicates that there will be no fogging on nearby roadways as a result of the Plant's operations.

Noise Impacts

59. A field survey for ambient noise levels indicates that existing noise levels are very low, as one would expect in a

largely rural farming area. The dominant noise source in the area is road traffic from nearby State Road 710. An impact assessment of noise from project construction and operation indicates that, except for short term, sporadic site construction activities which will be perceptible at the nearest residence, noise levels from the Project will be insignificant. During construction the most significant noise sources will be pile driving, steam blowouts to clean pipes, and operation of diesel-powered equipment. However, these activities will be infrequent and the 3,500 foot distance to the nearest residence will buffer construction noise levels. Public notice will be given for any steam blowouts which are expected to occur over a two-week period. During plant construction and operation, noise reduction measures will be taken to maintain a relatively quiet noise environment for any existing residents who might be affected. These noise abatement measures are intended to insure land use compatibility with a substantial margin of assurance.

Wetlands, Vegetation, and Wildlife Impacts

60. The predominant natural vegetation on the project site consists of pine flatwoods with scattered shallow wet prairie wetlands. The land along the northern portion of the site within the existing transmission line corridor is described as ruderal. These vegetation communities are common throughout the region. No threatened or endangered plant species were found on the plant site. Three ferns found on the Project site are listed by the Florida Department of Agriculture and Consumer

Services as threatened so as to protect them from commercial exploitation. However, these ferns are common in peninsu Florida and any impacts will be negligible.

61. The ICP has been designed to avoid impacts to all wetlands located on the project site. These wetlands vary in quality from good to poor, with the poor quality wetlands having been impacted by cattle grazing, drainage, and drought conditions.

62. The land within the pipeline corridor has been previously altered by construction, operation, and maintenance of the existing railroad. The uplands and wetlands are of low ecological value. Most of the water crossings have been channelized and are dominated by weedy wetland species. Construction of the pipeline will result in no significant changes in upland vegetation. Use of aerial crossings, pilir or existing bridges to cross wetlands with the pipeline will produce negligible impact on previously disturbed wetland areas.

63. The project site, the pipeline corridor, and the site of the water intake structure were all surveyed for the presence of wildlife, including threatened and endangered species. No habitats of endangered or threatened species were found to exist in the vicinity of or on the proposed plant site. The biological resources of the site consisted of species common to the pine and wet prairie communities of southeast Florida. The fish and aquatic species at the site of the intake structure are common freshwater species for the Lake Okeechobee-Kissimmee River system. The clearing of up to 135 acres of on-site pine

flatwoods will have insignificant impacts on wildlife since this habitat is regionally common. Since construction of the pipeline will result in neither significant changes in upland vegetation nor any impacts to wetlands, there will be no permanent displacement of wildlife within the previously disturbed areas of the pipeline corridor.

Traffic Impacts

64. A highway traffic analysis conducted for the Project demonstrates that local roadways will not be significantly adversely affected. This analysis was undertaken in accordance with methodologies required by Martin County, Treasure Coast Regional Planning Council, and the Florida Department of Transportation. The analysis for up to 800 construction personnel and 80 operational employees using these methodologies indicates that all area roads will operate at acceptable levels of service.

65. ICL will construct a new plant access road that will connect State Road 710 to South West Farms Road to the southeast of the project site. This access road will provide direct access to the Caulkins Citrus facility from the citrus groves located west of the plant and reduce citrus truck traffic which currently must pass through downtown Indiantown to reach the Caulkins plant. This road is shown as a future improvement on the traffic element of the Martin County comprehensive plan.

66. Pursuant to a stipulation with DOT and other agencies, ICL has committed to construct a right turn lane into

the new plant access road from the southbound lane of State Road 710 to provide safe turning movements. ICL has also committed make improvements at the intersection of the new plant access road and State Road 710 to accommodate traffic turning right on to State Road 710 from the plant access road.

Land Use Compatibility and Socioeconomic Impacts

67. The site for the ICP is an appropriate location for a power plant from a land use perspective. The site is currently surrounded by agriculturally related manufacturing and processing plants and other agricultural activities, including pasture and citrus groves. Necessary infrastructure, including road and rail access, already exists or will be available concurrent with project development. Although the site is located in a rural area, the ICP site is within commuting distance of metropolitan areas, which have an ample supply of skilled labor to construct and operate the plant. Visually, the project facilities will be compatible with the other uses in the area. Further, the site is set back from State Road 710 and a vegetative buffer will screen the site from nearby roadways. Use of the railroad right-of-way for installation of the pipeline is compatible with railroad operations and will result in no disruption of existing land use patterns. The water intake structure in Okeechobee County will not have any land use impact.

68. The Indiantown Cogeneration Project is generally compatible with the goals and policies of the State Comprehensive Plan and the Treasure Coast Regional Comprehensive Policy Plan

69. The ICP will have a substantial beneficial impact on the local economy and tax revenues. The annual project construction payroll is estimated to peak at nearly $17.7 million. Permanent employment of 80 new operations employees will produce an estimated annual payroll of $2.3 million. Indirect employment in the local economy as a result of plant operations will create an additional 155 jobs with an estimated annual payroll of $3.0 million.

70. For Martin County government the net fiscal effect of the ICP will be positive, generating a surplus of tax revenues over public expenditures on the order of $3.7 million per year. For the Martin County taxing district that includes Indiantown, district tax revenues will increase by about 20-25% per year or approximately $210,000 at project buildout.

71. Okeechobee County will also realize economic benefits from the project with construction wages between $1.25 million and $3.75 million for construction employees living in Okeechobee County. An annual payroll of $442,000 for Okeechobee County residents is expected from permanent jobs during plant operation. Net revenues to Okeechobee County as a result of project operation are expected to increase by over $50,000 per year.

Archaeological, Cultural, and Historic Resources

72. A survey of the project site, including the pipeline corridor, revealed no archaeological or cultural sites. Two areas of possible historic interest were located but they are

outside the areas to be developed. In the event archaeological or cultural resources are discovered during project constructi adequate procedures to protect such finds have been accepted by ICL as a condition of certification.

CONCLUSIONS OF LAW

The Division of Administrative Hearings has jurisdiction of the parties to and the subject matter of this proceeding. Section 403.508(3), Florida Statutes (Supp. 1990).

This proceeding was held to implement the purpose and intent of the electrical power plant site certification process, which is to assure the citizens of Florida that construction and operation safeguards of the Indiantown Cogeneration Project are technically sufficient for their welfare and protection, and to effect a reasonable balance between the need for the propo project and the environmental impact resulting from its construction and operation, including air and water quality, fish and wildlife, and the water resources and other resources of the State. Subsections 403.502(1) and (2), Florida Statutes (Supp. 1990).

In accordance with Chapter 403, Part II, Florida Statutes (Supp. 1990), Chapter 120, Florida Statutes, and Chapter 17-17, Florida Administrative Code, proper notice of this hearing was given to all persons and parties entitled thereto as well as to the general public. All the necessary and required governmental agencies were parties to this proceeding. All required reports and studies were completed and presented.

The Florida Public Service Commission, by an order dated March 21, 1991, determined the need for the electrical generating capacity to be supplied by the Project, pursuant to Section 403.519, Florida Statutes (Supp. 1990).

The Governor and Cabinet of the State of Florida, sitting as the Siting Board, determined on September 24, 1991, that the proposed site of the ICP is in conformity with existing land use plans and zoning ordinances.

The Florida Department of Environmental Regulation and the other participating agencies either have recommended, do not object to, or take no position as to certification of the project for construction and operation, subject to this order and the attached conditions of certification.

ICL, the applicant, has entered into settlement stipulations with the Department of Environmental Regulation, the Department of Community Affairs, the Department of Transportation, the Game and Fresh Water Fish Commission, the South Florida Water Management District, the Treasure Coast Regional Planning Council, and Martin County. These stipulations contain conditions of certification that are acceptable to all parties and which are incorporated into the conditions of certification appended as Appendix A to this Recommended Order. As a result of these stipulations, none of the parties oppose certification. The South Florida Water Management District and the Florida Game and Fresh Water Fish Commission do not take any position as to issues outside their jurisdiction. The Treasure Coast Regional Planning Council takes no position as to the

granting of certification; however, any certification should be subject to the attached conditions.

Based on a preponderance of the evidence presented at the certification hearing, Indiantown Cogeneration, L.P., the applicant, has met its burden of proving that the Indiantown Cogeneration Project is entitled to certification. Competent, substantial evidence adduced at the hearing demonstrates that the construction and operational safeguards for the ICP are technically sufficient for the welfare and protection of the citizens of Florida and are reasonable and available methods to achieve that protection. The proposed project, if constructed, maintained and operated in accordance with this Recommended Order and the attached conditions of certification, will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of st waters and their aquatic life. Certification for construction and operation of this project is consistent with the premise of abundant, low-cost electrical energy and will effect a reasonable balance between those environmental impacts which will occur and the PSC-determined need for this Project.

RECOMMENDATION

Based upon the entire record of this proceeding and the above Findings of Fact and Conclusions of Law, it is hereby RECOMMENDED that Indiantown Cogeneration, L.P., be granted certification pursuant to Chapter 403, Part II, Florida Statutes (Supp. 1990), for the location, construction, and operation of the Indiantown Cogeneration Project as proposed in the S

Certification Application and the responses to agency sufficiency comments and in accordance with the Conditions of Certification, attached hereto and incorporated as Appendix A.

DONE and ENTERED this 24th day of December, 1991, at Tallahassee, Florida.

DIANE K. KIESLING, Hearing Officer
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
Tallahassee, Florida 32399-1550
(904) 488-9675 Suncom 278-9675

Filed with the Clerk of the Division of Administrative Hearings this 24th day of December, 1991.

Copies furnished to:

Douglas S. Roberts
Carolyn S. Raepple
Gary P. Sams
Attorneys at Law
Post Office Box 6526
Tallahassee, FL 32314
(Counsel for Applicant)

Richard T. Donelan, Jr.
Assistant General Counsel
Department of Environmental Regulation
Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Kathryn Funchess, Assistant General Counsel
David L. Jordan, Assistant General Counsel
G. Stephen Pfeiffer, General Counsel
Department of Community Affairs
2740 Centerview Drive
Tallahassee, FL 32399-2100

Vernon L. Whittier, Jr.
Assistant General Counsel
Department of Transportation
Haydon Burns Building
605 Suwannee Street
Tallahassee, FL 32399

John Fumero
Cecile I. Ross
Attorneys at Law
South Florida Water Management
District
3301 Gun Club Road
Post Office Box 24680
West Palm Beach, FL 33416-4680

Roger G. Saberson
Attorney at Law
70 S.E. 4th Avenue
Delray Beach, FL 33483-4514
(Treasure Coast Regional Planning Council)

Ken Plante, General Counsel
Department of Natural Resources
3900 Commonwealth Boulevard
Tallahassee, FL 32399

Fred W. Van Vonno
Assistant County Attorney
Martin County
2401 Southeast Monterey Road
Stuart, FL 34996

Robert V. Elias, Staff Counsel
Division of Legal Services
Florida Public Service Commission
101 East Gaines Street
Fletcher Building, Room 212
Tallahassee, FL 32399-0850

Brian Sodt
Ernie Caldwell, Interim Executive Director
Central Florida Regional Planning Council
Post Office Box 2089
Bartow, FL 33830-2089

John D. Cassels, Jr.
Attorney at Law
Post Office Box 968
400 Northwest Second Street
Okeechobee, FL 34973
(Counsel for Okeechobee County)

James Antista, General Counsel
Kenneth McLaughlin, Assistant General Counsel
Florida Game and Fresh Water Fish Commission
Bryant Building
620 South Meridian Street
Tallahassee, FL 32399-1600

Hamilton S. Oven, Jr., P.E., Administrator
Office of Siting Coordination
Department of Environmental Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400

Board of Trustees of the
Internal Improvement Trust Fund
3900 Commonwealth Boulevard, Room 153
Tallahassee, FL 32399-3000

Honorable Lawton Chiles
Governor
State of Florida
The Capitol
Tallahassee, Florida 32399

Honorable Robert A. Butterworth
Attorney General
State of Florida
The Capitol
Tallahassee, Florida 32399-1050

Honorable Bob Crawford
Commissioner of Agriculture
State of Florida
The Capitol
Tallahassee, Florida 32399-0810

Honorable Betty Castor
Commissioner of Education
State of Florida
The Capitol
Tallahassee, Florida 32399

Honorable Jim Smith
Secretary of State
State of Florida
The Capitol, PL-02
Tallahassee, Florida 32399-0250

Honorable Tom Gallagher
Treasurer and Insurance Commissioner
State of Florida
The Capitol
Tallahassee, Florida 32399-0300

Honorable Gerald A. Lewis
Comptroller
State of Florida
The Capitol, Plaza Level
Tallahassee, Florida 32399-0350

Case No. 90-8072EPP

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP

CONDITIONS OF CERTIFICATION

TABLE OF CONTENTS

TABLE OF CONTENTS (continued)

Indiantown Cogeneration Project
DER Case No. PA 90-31
DOAH Case No. 90-8072EPP

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 Water 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 Ch. 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 definitions 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 eletric 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 non-compliance 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 in 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 or 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 Statues, 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 condition 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 propose 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 fe 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 SO_2 and NOx during startup, shutdown, and malfunciton, 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 auxilliary 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 of disturbed soils. Control techniques shall be sufficient to prevent nuisance conditions on adjoining property.

5. Open Burning

Open burning in connection with initial land clearin shall be in accordance with Chapter 17-256, F.A.C., Chapter 5I-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 has an auxiliary boiler rated at up to 342 MMBtu/hr (#2 Fuel Oil) and 358 MMBtu/hr (Natural Gas or propane) which operates a maximum of 5,000 hours with up to 1000 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 imput of 3422 MMBTU/h. 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
NOx	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_2SO_4	0.0004	1.450	6.350
Beryllium	0.00000273	0.0093	0.041

Mercury	0.0000114	0.039	0.172
Lead	0.0000187	0.064	0.280
Fluorides	0.002	7.26	22.26
Arsenic	0.0000511	0.175	0.765

*24 hour daily block average (midnight to midnight)

ii. NH_3 (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. Auxilliary Boiler

The auxilliary boiler, rated at up to 358 MMBtu/hr (Natural Gas and propane) and 342 MMBtu/hr (#2 Fuel Oil), shall be limited to a maximum of 5000 hours/year 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 annual emissions will be as follows when firing #2 fuel oil:

MAXIMUM EMISSIONS

Pollutant	lbs/hr	tons/year
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	4.1×10^{-5}	2.0×10^{-5}
Hg	5.1×10^{-4}	2.6×10^{-4}
Pb	3.6×10^{-2}	1.8×10^{-2}
As	6.8×10^{-3}	3.4×10^{-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 (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 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 0.010 gr/acf emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stacktest, 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 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).

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 pollutions 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, SO_2, NO_x, and visible emissions during normal operations near (±10%) 3422 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.

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 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	Fugative 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 PM_{10}), NO_x and SO_2 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 maintai 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 O_2 and/or CO_2 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 analyse 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 Regulation, 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 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.

(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 stormwwater to ensure against spillage or discharge of excavated material that my cause turbidity in excess of 29 Nephelometric Turbidity Units above background in Waters of the State. Control measures may consist of sediment traps, barriers, berms, 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 results 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 affect 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 wastewaters from the site to waters of the state.

(4) GROUNDWATER

1. Discharges to Groundwaters

Any accidental discharges to groundwaters 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 ground water 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 ground water monitoring plan shall be signed, sealed, and dated by a professional engineer or professional geologist demonstrating competency in the field of ground water 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. Hydrogeological, physical, and chemical data for the site including: direction and rate of ground water flow; background water quality; porosity, horizontal and vertical permeability for the surficial 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 ground water 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
Elevation at top of pipe	permit numbers
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 ground water 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 ground water 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 ground water monitoring wells shall be sampled and analyzed on a quarterly basis for the following parameters:

Volatile Organics:

Benzene
Toluene
Ethylbenzene
Xylenes

Acid Extractable Organics

Phenol
Methyl phenols
Dimethyl phenols

Inorganics

Ammonia
Cyanide
pH
Specific conductance
Fluoride
Chloride
Sulfate
Sulfide
Gross Alpha

Base/Neutral Extractable Organics

Acenaphthene
Acenaphthylene
Anthracene
Napthalene
Fluorene
Phenanthrene
1,2-Benzofluorene
1-Methylnaphthalene
2-Methylnaphthalene
Fluoranthene

Metals

Iron
Manganese
Arsenic
Lead
Selenium
Cadmium
Chromium

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 downgradient 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:

Parameters	Storet Codes	Units
Acrolein	034210	ug/l
Acrylonitrile	034215	ug/l
Benzene	034030	ug/l
Bromodichloromethane	032101	ug/l
Bromoform	032104	ug/l
Bromothane	034413	ug/l
Carbon Tetrachloride	032102	ug/l

Chlorobenzene	034301	ug/l
Chloroethane	034311	ug/l
Chloroform	032106	ug/l
2-Chloroethylvinylehter	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-Dichloropropene	034704	ug/l
trans-1,2-Dichloropropene	034699	ug/l
Ethylbenzene	034371	ug/l
Methylene chloride	034423	ug/l
1,1,2,2-Tetrachloroethane	034516	ug/l
Tetrachloroethane	034475	ug/l
Toluene	034010	ug/l
1,1,1-Trichloroethane	034506	ug/l
1,1,2-Trichloroethane	034511	ug/l
Trichloroethene	039180	ug/l
Trichlorofluoromethane	034488	ug/l
Vinyl chloride	039175	ug/l
Acenaphtene	034205	ug/l
Acenaphthylene	034200	ug/l
Anthracene	034220	ug/l
Aldrin	039330	ug/l
Benzo (a)anthracene	034034	ug/l
Benzo (b)fluoranthene	034230	ug/l
Benzo (k)fluoranthene	034242	ug/l
Benzo (a)pyrene	034247	ug/l
Benzo (g,h,i)perylene	034521	ug/l
Benzyl Butyl Phthalate	034292	ug/l
beta-BHC	039338	ug/l
delta-BHC	034259	ug/l
Bis (2-chloroethyl) ether	034273	ug/l
Bis (2-chloroethoxy) methane	034278	ug/l
Bis (2-ethylhexyl) phthalate	039100	ug/l
Bis (2-chloroisopropyl) ether	034283	ug/l
4-Bromophenyl phenyl ether	034636	ug/l
Chlordane	039350	ug/l
2-Chloronaphthalene	034581	ug/l
4-Chlorophenyl phenyl ether	034641	ug/l
Chrysene	034420	ug/l
4,4'-DDD	039310	ug/l
4,4'-DDE	039320	ug/l
4,4'-DDT	039300	ug/l
Dibenzo(a,h,)anthracene	034556	ug/l
Di-n-butylphthalate	039110	ug/l
1,2-Dichlorobenzene	034536	ug/l
1,3-Dichlorobenzene	034566	ug/l

1,4-Dichlorobenzene	034571	ug/1
3,3'-Dichlorobenzidine	034631	ug/1
Dieldrin	039380	ug/1
Diethyl phthalate	034336	ug/1
Dimethyl phthalate	034341	ug/1
2,4-Dinitrotoluene	034611	ug/1
2,6-Dinitrotoluene	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
Hexachlorobutadience	034391	ug/1
Hexachloroethane	034396	ug/1
Indeno(1,2,3-cd)pyrene	034403	ug/1
Isophorone	034408	ug/1
Napthanene	034696	ug/1
Nitrobenzene	034447	ug/1
N-Nitrosodi-n-Propylamine	034428	ug/1
PCB-1016	034671	ug/1
PCB-1221	039488	ug/1
PCB-1232	039492	ug/1
PCB-1242	039496	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-methylphenol	034452	ug/1
2-Chlorophenol	034586	ug/1
2,4-Dichlorophenol	034601	ug/1
2,4-Dimethylphenol	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/l
Cadmium	001027	ug/l
Chromium	001034	ug/l
Copper	001042	ug/l
Cyanide	000720	mg/l
Lead	001051	ug/l
Mercury	071900	ug/l
Nickel	001067	ug/l
Selenium	001147	ug/l
Silver	001077	ug/l
Thallium	001059	ug/l
Zinc	001092	ug/l
2,3,7,8-tetrachlorodibenzo-p-dioxin	034675	ug/l

Water elevations for all wells shall be measured on a quarterly schedule, and submitted to the Department along with the quartrly 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 ground water 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 S.E. 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 c 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 landfilled 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 solidwaste 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 sludges, 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.

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 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 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 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) 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 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 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 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. Minimum Standards

This Certification is based on the Permittee's submitted information to the SFWMD which reasonably demonstrates that adverse off-site water resource 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 Chapters 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 resource 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 Condition 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 Permit 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 condition 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 that 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 Chapters 40E-2, 40E-3, 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 quantity and/or quality of waters discharged 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 Chapters 40E-2, 40E-3, 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 or 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 an 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.

c. Impacts 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 withdrawal rates pursuant to the enforcement provisions of Condition IV.a.1.1 of these conditions.

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 Operation

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 40E-3 (Water Wells), F.A.C.

2. SITE SPECIFIC DESIGN AUTHORIZATIONS

a. Authorized Withdrawals

Source	Maximum Annual Allocation (MGY)	Maximum Daily Allocation (MGD)
L-63N Canal	1484.00	4.69
Upper Production Zone- Upper Floridan Aquifer	38.70	0.1
Lower Production Zone- Upper Floridan Aquifer	336.60	4.46

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.
(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 NGVD.
(3) Withdrawals from the L-63N Canal shall be used for cooling, plant processing and irrigation purposes. Withdrawals from the Upper and Lower Production Zones of the Upper Floridan aquifer shall be used for cooling and plant processing 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 Floridan aquifer is predicated on the successful completion of the Aquifer Performance Test reuired 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 te-

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 Floridan 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.

c. Authorized Withdrawal Facilities

3 - 1,700 GPM Surface Water Pumps in L-63N
1 - 10" X 1340' Flowing Well cased to 500' (existing well)
1 - 10" X 1300' Flowing Well cased to 600'
4 - 14" X 1600' Flowing Wells cased to 1400'

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' NGVD (See also Condition E.3.a(5)).

e. Artesian Floridan Wells

The maximum installed capacity of any authorized Floridan 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 regain 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 remain 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 Sections 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 on 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 and SFWMD. The test shall be designed to determine the transmissivity and storage of the Upper and Lower production z of the Upper Floridan aquifer and the leakance between the zon 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 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 Caulkins 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 operation;
(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 water(s);
(6) The duration of each dewatering operation;
(7) An analysis of the impacts 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 Withdrawal Monthly Reporting Requirements

The Permittee shall submit daily surface water and groundwater withdrawal 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 Program

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 Floridan 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 withdrawal.

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 (adjacent to the pump station on a daily basis. Water levels s... be referenced 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 (referenced 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 well locations are different from those originally 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 pumpage from the proposed well location(s) on adjacer. 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 Engineering 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. Reference: Sections 373.413(1) and 373.416(1) F.S.; Rules 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 construction, 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 incidential 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 accepted 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 de dimensions for a 25 year, 72 but not less than two feet nor mo than three feet.

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:

BASIN No.	ALLOWABLE DISCHARGE (CFS)	RECEIVING BODY OR USE
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 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

BASIN NO.	CONTROL ELEVATION	MINIMUM ROAD CROWN ELEVATION	MINIMUM FINISHED FLOOR ELEVATION
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. Revisions 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 Chapters 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 Chapters 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 26.4 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 Chapters 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 failure 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 condition of all dikes, which addresses 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 design and/or operation of the dike and/or its structures.

d. Water Pipeline

Prior to the commencement of construction of any portion of 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 Chapters 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 access/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 other agencies, at a minimum, it shall include the following parameters and timeframes.

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. ORGANICS (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 Co-Generation 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 other information demonstrates that adverse impacts to protected, restored, incorporated, and/or mitigated wetlands have occurred as a result of project-related activities.

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 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 condition 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 macroinvertebrate 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 an 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 hydrologic regime, cross-sections showing 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 macroinvertebrate 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-... 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 endwall of the withdrawal facilit...

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'a ROW is later found to be

contrary to SFWMD policies, operational, 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 o. culvert;

(7) The design of any concrete endwalls, 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 any 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 araeological 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 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 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 of 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.

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 between the Permittee and Martin County, Florida, dated July 24, 1991. 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.
2. In constructing the new site access road, the Permittee shall comply with the standards of Martin County as set forth in Chapter 30 1/2, 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 econmically 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 developmental uses; and the entity responsible for management.

PART IX

OKEECHOBEE COUNTY

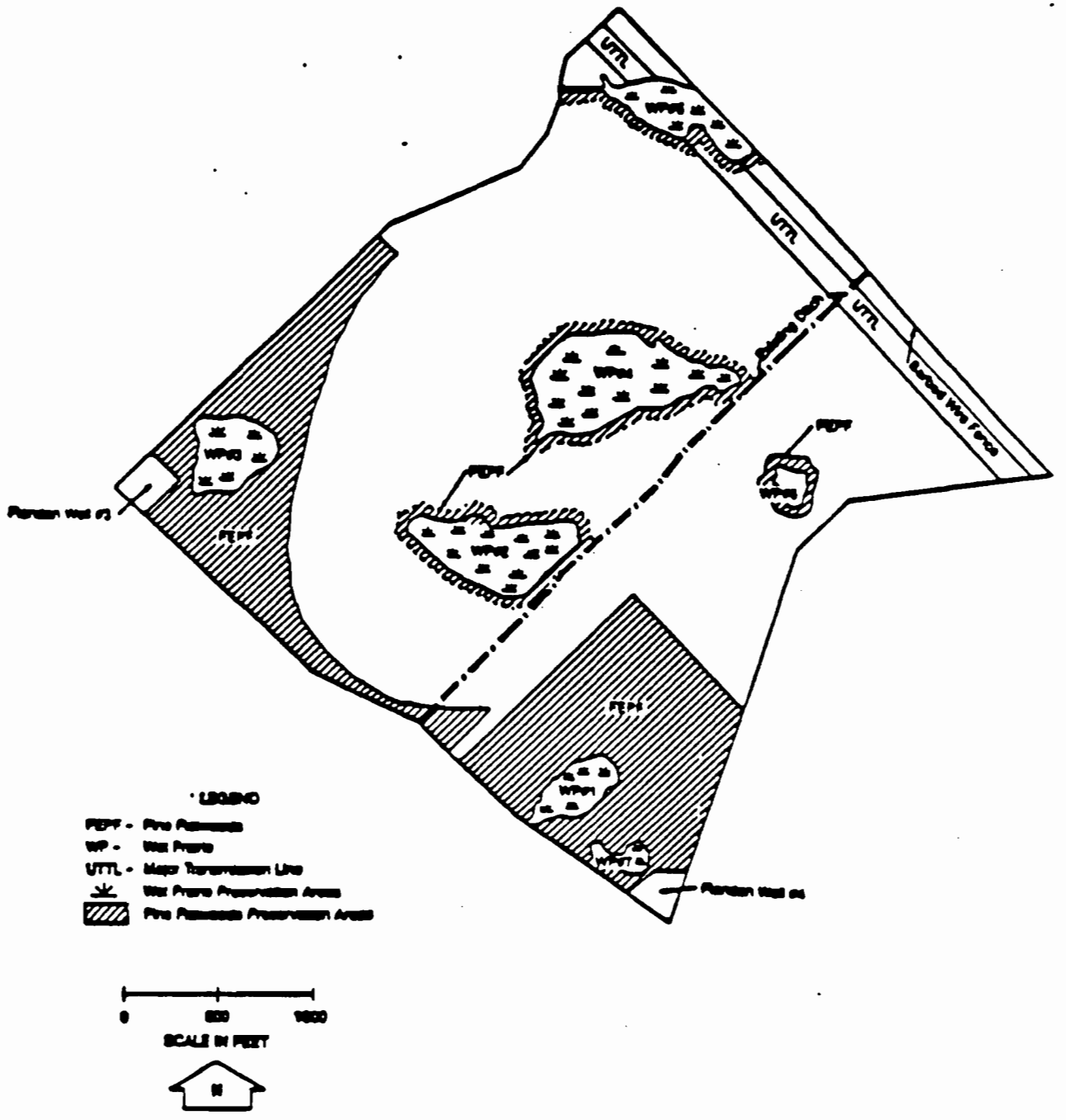
1. In construction the water pipeline across roads under the jurisdiction of Okeechobee county, the permittee shall comply with the standards of Okeechobee County as set forth in Okeechobee County ordinance 86-1, for crossing of county roads. Okeechobee County shall issue a permit for the crossing of 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.

Figure 1. Upland and wetland preserve areas on the project site.



Attachment B

FDEP 9/10/99 Correspondence on Groundwater Monitoring

Department of Environmental Protection

Port St. Lucie Branch Office
1801 SE Hillmoor Drive, Suite C-204
Port St. Lucie, FL 34952
(561)871-7662 (561)335-4310

Jeb Bush
Governor

David B. Struhs
Secretary

SEP 10 1999

Mr. Stephen Sorrentino
General Manager
Indiantown Cogeneration, L.P.
Post Office Box 1799
Indiantown, FL 34956

Martin County
IW - Indiantown Cogeneration

Re: Inspection of the industrial wastewater treatment/disposal system

Dear Mr. Sorrentino:

On 29 July, 1999 Terry Davis of the Florida Department of Environmental Protection (DEP) Port St. Lucie Branch Office conducted a Compliance Evaluation Inspection (CEI) at your facility. The purpose of the CEI was to determine compliance with Site Certification number PA 90-31. The certification allows the operation of a zero discharge electrical power generating plant and requires groundwater monitoring. A copy of the inspection report form is attached. Please review this report/letter.

The following individuals were present during all or a part of the inspection:

NAME	ORGANIZATION	TELEPHONE
Terry Davis	DEP - PSL Branch Office	(561)871-7662
David Burrage	Indiantown Cogen	(561)597-6500 X19
Keith Yegerlehner	Indiantown Cogen	(561)597-6500

SUMMARY

The facility was rated "satisfactory" for all the compliance areas evaluated during the inspection. There is a suggestion in the Records & Reports compliance area that should be addressed. The major focus of the inspection was the review and evaluation of the quarterly self monitoring groundwater data. The data showed that the groundwater in the area has not met the state's standards for pH and iron as evidenced by the water quality in the upgradient, background wells. There were also some instances of suspicious occurrences of spurious contaminants due their appearance at a majority of the wells for one quarter only. A policy procedure needs to be adopted to address these occurrences.

FIELD EVALUATION

The areas evaluated under "Facility Compliance Areas Evaluated" on the attached Wastewater Compliance Inspection Report form are discussed below.

1. **Permit:** The facility was issued a site certification in February, 1992, DER Case No. PA 90-31, for a 330 megawatt cogeneration facility with wastewater recycling and no discharge to surface or ground waters. In 1994 a modification of the conditions of certification was issued which allowed the use of treated domestic wastewater as makeup water for the cooling system, changed the allocations of ground and surface waters approved by the South Florida Water Management District, and amended the planned unit development (industrial) agreement with Martin County. A copy of the certification and the modification were on file and readily available to the appropriate personnel.

   In August, 1998 an application for an NPDES permit to allow for emergency discharges of wastewater due to extended heavy rains was submitted to the Tallahassee office. The application has been transferred to the Southeast District and additional information and application fees were submitted in May, 1999. A request for information was issued by the DEP in June, 1999. The Conditions of Certification will have to be modified to allow for the emergency discharges.

   Deficiencies: None observed

   Rating: Satisfactory

2. **Compliance Schedule**

   Not applicable

3. **Laboratory:** The facility has contracted with US Biosystems (formerly V.O.C. Analytical Laboratories), 3231 NW 7th Avenue, Boca Raton, FL 33431 to perform the self monitoring sample analyses. The laboratory has a DEP approved quality assurance plan, number 900376, and Department of Health environmental health certification number ES6240.

   Rating: Not rated

4. **Sampling:** The sampling activities for the self monitoring program is carried out by US Biosystems which has a DEP approved quality assurance plan, number 900376, which covers these activities.

   Rating: Not rated

5. **Records and Reports:** The facility is required to carry out a quarterly groundwater monitoring program consisting of the sampling and analyses of ten wells and the submission of the data within sixty days of the sampling. The data has been received on time and the supporting documentation, sampling records, sample chain of custody sheets, etc., were on file at the facility. Also on file were copies of the data going back more than three years.

   Suggestion: The data has been submitted to the DEP as it has been received from the analytical laboratory. Recently the order of the data groups for each monitoring well appears to be in random order from quarter to quarter, making it difficult to transfer the data to a computer spreadsheet. Part II, Section 4.2.1 of the Conditions of Certification requires that "All ground water analysis shall be submitted in quarterly sets of sampling [illegible] with a summary of all exceedances of the [illegible]." The data has been submitted in the form specified but the

format had previously been satisfactory, see the suggestion above. Initially the majority of the data from the quarterly analyses were tabulated at the beginning of each report, making it relatively easy to scan, enter, and analyze the data. This was discontinued after the second quarter of 1996. The data tabulation also listed the state's water quality standards for the appropriate parameters and highlighted the values which were in violation of the applicable standard. This tabulation and highlighting of MCL exceedances should be resumed.

Rating: Satisfactory

6. **Facility Site Review:** The general housekeeping at the facility is very good.

   Deficiencies: None observed

   Rating: Satisfactory

7. **Flow Measurement:** No flow measurement is required for DEP related activities

   Rating: Not rated

8. **Operation and Maintenance:** The facility appears to be properly operated and maintained. The liner around the periphery of the inactive coal storage area and the coal pile runoff basin was being replaced with a heavier material. The liner under these areas does not require replacement as it is well protected. The facility has a Y2K compliance plan, is actively addressing the situation, and has upgraded computers, etc.

   Deficiencies: None observed

   Rating: Satisfactory

9. **Effluent:** At this time there is no effluent from the facility as all wastewaters are recycled.

   Rating: Not rated

10. **Disposal:** All wastewaters are recycled and any loss is through evaporation or drift from the cooling tower.

    Rating: Not rated

11. **Residuals Management:** All solid materials generated by the power producing activities are disposed of off site. Some are beneficially used as concrete additives and in soil manufacturing when combined with domestic wastewater residuals. Others are returned to Kennecky for land disposal and a relative small amount is transported to the local sanitary landfill.

    Deficiencies: None observed

    Rating: Satisfactory

12. **Groundwater:** The facility is required by the Conditions of Certification to carry out a groundwater monitoring program. Since the start-up of the facility, quarterly sampling and analyses of network of monitoring wells is required. Data from records and reports starting in January, 1994 and extending through the second quarter of 1999 have been compiled using a Microsoft Excel spreadsheet computer program.

The self monitoring network consists of nine wells, of which three are upgradient of the on-site activities and provide background data as they monitor the quality of the water coming onto the property. These wells are MW #1, MW #4A, and MW #12. Upgradient, north, of the facility lies Caulkins Indiantown Citrus, a citrus processing plant, and the Florida Steel site, an EPA superfund site with groundwater contamination by metals, etc. The remainder of the wells; MW #7, MW #9, MW #10, MW #11, MW #12, MW #13, and MW #14; are considered compliance wells and are located primarily down gradient of storage ponds and activities on site. The quarterly groundwater monitoring started in June, 1994, approximately sixteen months before the facility started producing electricity commercially. The samples are analyzed for 72 semivolatile compounds, 5 BTEX compounds, 7 metals, 8 general chemistry compounds, 3 field water quality measurements, and 3 field observations of the water quality. Data for the parameters which are normally found above the detection limits were tabulated. The compounds which were normally reported as "BDL" (below detection limit), but were found occasionally in measurable quantities, were noted in the tabulation. The average, minimum, and maximum values for the tabulated parameters for each well were determined and the data examined for trends. Some parameters such as ammonia, hydrogen sulfide, and sulfate data posed a problem for calculating averages due to the reporting of values as "less than" (<) the detection limit, or "BDL", which will not compute. When there were only two or three of the "less than" values in a set of data for a well, the average was calculated by converting the "less than" values to one half the detection limit, e.g. <.5 mg/L became .25 mg/L.

The data will be discussed in two formats. First, each water quality parameter, or group of parameters, will be discussed for the entire site, and second, the water quality at each well will be discussed.

FIELD PARAMETERS "Field Services" included observations such as water color, turbidity, and odor and measurements such as depth to water and gallons of water removed during purging of the well. The field water quality parameters measured were conductivity, pH, and temperature. Conductivity and pH are parameters which help define the basic character and quality of the groundwater.

Conductivity: The average conductivity values for the stations ranged between 394 umhos at MW #7 to 968 umhos at MW #4A and the six of the nine wells had averages below 500 umhos. There does not appear to be any obvious correlations between the depth or location of the well and the average values. Approximately one half of the stations had conductivity values that may have fluctuated from quarter to quarter. The other half had values that may have changed from quarter to quarter, but did not vary substantially above and below "the norm"

pH: The state's standard for pH is a minimum of 6.5 standard units (s.u.) and a maximum of 8.5 s.u. Only one pH value was reported above the low standard, 6.5 s.u., and that value is suspicious. In November 1995 a pH of 6.6 s.u. was reported at MW #7 and it was preceded by 5.7's in August, 1995 and succeeded by 5.43 s.u. in January, 1996. All the remaining values for the well, except for one,

are in the 5 s.u. range. All the other monitoring wells did not have a single value above the state's minimum standard. The overall range was from 3.77 to 6.4 s.u. and the majority of the values were in the 5 s.u. range. The areal distribution of the average pH values did not reveal a pattern.

GENERAL CHEMISTRY The elements and compounds analyzed in this category include ammonia, chloride, cyanide, fluoride, hydrogen sulfide, and sulfate. All are measured in milligrams per liter, mg/L.

Ammonia: The ammonia values at each well fluctuated from quarter to quarter and the overall range was from .03 to 3.5 mg/L. The average values did not show any correlation with depth or location of the well and ranged from .17 mg/L at MW #7 to 1.69 mg/L at MW #12.

Chloride: The range of average chloride values for the stations was between 14 and 262 mg/L. MW #4A had the 262 mg/L average and the remainder of the wells' averages were 52 mg/L or less. As with conductivity, the chloride values did not show obvious correlations with well depth or location and some of the wells exhibited more fluctuation from quarter to quarter than others.

Cyanide: The detection limit for cyanide was listed as .01 mg/L and there were no reported values above the detection limit in any well.

Fluoride: This element has been reported with two detection limits - .05 and .2 mg/L. The state's standard is a maximum of 2.0 mg/L. It was reported in each well from two to five times during the monitoring period and frequently discontinuous, i.e. at one well it would be reported for several successive quarters and then it would not be reported for two or more quarters. And, it would appear in anywhere from 2 to 8 of the wells during a quarter, or it would not found above the detection limit in any well during a quarter. The values have ranged between .04 and .84 mg/L and the highest values for all but one well were measured in February, 1997.

Hydrogen Sulfide: Approximately fifty percent of the reported values at each well were listed as "less than" the detection limit of 1.0 mg/L. Thus the average values for the wells are not meaningful. The values ranged from <1 to 10 mg/L and they fluctuated at most of the wells. The high values ranged from 2.1 at MW #11 to 10 mg/L at MW #14. Seven of the nine wells had high values of 5.0 mg/L or better and there did not appear to be any spatial or areal trends in the data.

Sulfate: The state's standard is a maximum of 250 mg/L and the reported detection limit for this parameter was .5 mg/L. The range of values for all the wells was from <.5 to 310 mg/L. The 310 mg/L value was from MW #10 in May, 1999 and was the only exceedance of the state's standard. This well had five values above 100 mg/L and an average of 87 mg/L. MW #14's two highest values were 109 and 110 mg/L. The high values at five of the seven remaining wells were 6 or less mg/L. Two of the wells, MW #4A and MW #11, had over half of their values as "less than" the detection limit. The trend at all the wells can best be described as fluctuating from quarter to quarter.

METALS The metals analyzed during the quarterly monitoring include arsenic, cadmium, chromium, iron, lead, manganese, and selenium and are discussed below. There has been an annual sampling in 1996, 1997, and 1999 at MW #13 of a more extensive list which also includes antimony, beryllium, copper, mercury, nickel, silver, thallium, and zinc. Of the latter metals, zinc has been measured during

all three samplings with values of .064, .024, and .015 mg/L chronologically. Mercury was detected at .011 mg/L in 1996, which is above the state's standard of a maximum of .002 mg/L. None of the other annual metals have been reported above the detection limits.

Iron: This metal was found above the state's standard, a maximum of .30 mg/L, at all the wells with almost every measurement. Wells 1 and 14 have dropped, and remained below, the standard starting in 1998 and MW #10 was below the standard from November, 1995 through August, 1996. Since then it has registered values as high as 7.2 mg/L. With the exception of wells 7, 11, and 13 the iron data can best be described as fluctuating. MW #4A had the highest average concentration at 5.25 mg/L and has shown an increase since the plant went into operation in December, 1995. This well is the closest to the Florida Steel superfund site and may be under some influence from the contamination there.

Lead: Lead was found at detectable concentrations from one to five times in each of the wells. Most of these were prior to August, 1996 when detection limits lower than .005 mg/L were used. MW #13 had two values above .005 mg/L (.011 and .007 mg/L) and MW #14 had three (.006, .034 and .007 mg/L). The highest values found were .034 and .032 mg/L at wells 14 and 7, respectively. Only one well has had a value above .005 mg/L since November, 1996 - .006 mg/L at MW #10 in August, 1998. None of the concentrations approached the state's standard of a maximum of .05 mg/L.

Chromium: Chromium has appeared a total of thirteen times in seven of the nine wells, and seven of these were in August 1995 when it occurred in concentrations of .022 to .025 mg/L. This appears to be a sample or analyses contamination problem. Other than this, the highest concentration reported was .013 mg/L in MW #10 in August, 1998. None of the values approached the state's standard of a maximum of .05 mg/L and there does not appear to be areal or spatial distribution patterns.

Cadmium: Cadmium was not found at detectable levels, i.e. above .005 mg/L, in any of the samples.

Arsenic: The detection limit is listed as .01 mg/L and the state's standard is a maximum of .05 mg/L. This metal was detected a total of ten times in four of the wells - 10, 12, 13 and 14. In February, 1996 it was found in these four wells in concentrations between .012 and .018 mg/L. Since then it has been detected only in MW #10. It appeared again in August, 1998 at .013 mg/L and then starting in May, 1998 and continuing through May, 1999 it has been measured with a concentration of .012 mg/L four times and .031 mg/L once.

Manganese: Starting in May, 1998 and continuing to date, this metal has been found in wells 9, 10, and 12 within a range of .011 to .22 mg/L. The highest concentrations have been in MW #12, the center background well, with a range of .031 to .22 mg/L and an average of .098 mg/L. Four of the values exceeded the state's standard of a maximum of .05 mg/L. MW #10 had an average of .025 mg/L, the second highest, a range of .011 to .075 mg/L, and one exceedance of the standard. MW #9 had the lowest average with .014 mg/L and a range of .011 to .019 mg/L. These wells have one thing in common - a depth of approximately 16'. However, MW #11 is also approximately 16' deep but it has not had one value above the .01 mg/L detection limit. The areal distribution of the wells and the concentrations do not illustrate a classical groundwater contamination plume as MW #10 with the second highest average concentration is further downgradient than MW #9 with a lower average. However, these wells are not in a nice straight line in the reported direction of groundwater flow.

Selenium: Selenium has appeared only in three wells (12, 13, and 14) and for only a total of five times during February and May, 1997. The range of values was from .012 to .037 mg/L and thus all values were above the state's standard of a maximum of .01 mg/L. Selenium was found at .028 mg/L in the surficial aquifer monitoring well MW-2 in June, 1991 during construction monitoring.

BTEX COMPOUNDS The compounds monitored in this group are benzene, toluene, ethylbenzene, total xylenes, and MTBE (Methyl-tert-Butyl-Ether). During May and August, 1996 three of the compounds (MTBE, ethylbenzene, and xylene) were detected in five wells a total of seven times. MTBE was reported in May at 22 ug/L in wells MW #1, MW #12, and MW #7; total xylene was reported in MW #10 (10 ug/L) and MW #13 (4.3 ug/L) in August; and ethylbenzene was reported in the same wells at 6.8 and 1.5 ug/L, respectively, in August. Since then, only total xylene has been reported in MW #12 in November, 1997 at 1.6 ug/L. The data does not show any spatial or areal patterns.

VOLATILE COMPOUNDS These compounds have been sampled and analyzed for once per year; in February, 1996, 1997, and 1999; at MW #13. In 1996 thirty eight compounds were analyzed for and in 1999 the number was up to sixty eight. They included the BTEX compounds above and others such as acetone, carbon tetrachloride, chloroform, chlorinated benzenes and propenes, MEK, etc. No compounds have been reported above the detection limits, most of which are 1.0 ug/L.

SEMIVOLATILE COMPOUNDS The seventy two compounds monitored in this group include phenols, benzenes, anilines, phthalates, toluenes, pyrenes, etc. The detection limit for most of them is 10 ug/L, a few at 50 ug/L, and one (benzidine) at 80 ug/l. The reported occurrences of these compounds at times seems to be suspicious, i.e. a compound appeared in nearly all the wells during one sampling and was not found during the following sampling. Such was the case in February, 1996 when phenol was reported at six of the nine wells with concentrations up to 5.1 ug L, with a detection limit of 2.5 ug/L. It was not reported the following quarter in any of the wells. It was reported in two wells in August, 1996 with a high value of 4.4 ug/L. After that, there was one phenol value reported at 3.9 ug/L. In November, 1996 total naphthalene was reported in every well within the range of 3.3 to 104 ug/L. It was not reported in any well during the following quarter, or ever since.

Review of data shows that it is not uncommon for water quality values to vary considerably from quarter to quarter in any one well. At one well it may be one or two parameters and at another well it may be several others. As stated above in the discussion of the semivolatile compounds, there has been the spurious appearance and subsequent disappearance of some elements and compounds from quarter to quarter. They usually appear in low concentrations and they may appear in a majority of the wells at one time.

The water quality at each of the monitoring wells will be briefly discussed below. Elements and compounds will be discussed only if they were reported at least twice at concentrations above the detection limit. The individual values will be compared to the state's standard for groundwater quality to determine compliance. The tabulated data was visually reviewed to determine if there were any obvious trends. The average, maximum, and minimum values for the tabulated data are presented below.

Indiantown Cogeneration, L.P.
Groundwater Monitoring Data - 1994-99

	Iron	Conductivity	Chloride	pH	Ammonia	Sulfate
Units	Mg/L	umhos	mg/L	su	mg/L	mg/L
State's Standard	0.30		250	6.5/8.5		250
MW #1 (32.8') – Background - Upgradient - Between Indiantown Cogen and FEC						
Average value	0.52	270	52	5.60	0.71	1.57
Maximum value	1.30	620	86	6.60	1.20	6.00
Minimum value	0.16	168	28	5.10	0.23	<.05
MW #4A (31.6') Background - Upgradient - Between Indiantown Cogen and Florida Steel						
Average value	5.25	968	262	4.73	0.99	0.59
Maximum value	8.50	1380	520	5.20	1.60	3.00
Minimum value	0.96	244	66	4.40	0.22	<.05
MW # 7 (24.9') Compliance - Downgradient of coal unloading building						
Average value	1.17	103	24	4.97	0.17	1.72
Maximum value	1.60	120	58	5.60	0.63	5.70
Minimum value	0.73	73	9	4.70	<.05	<.05
MW # 9 (15.8') Compliance - Upgradient of waste storage pond						
Average value	0.79	260	15	5.93	0.44	3.92
Maximum value	1.70	389	64	6.32	1.70	20.00
Minimum value	0.27	129	2	4.50	<.05	0.14
MW # 10 (16.6') Compliance - Upgradient of inactive coal storage area						
Average value	2.80	342	16	5.79	1.23	86.88
Maximum value	7.64	640	93	6.26	2.30	310.00
Minimum value	0.14	148	3	4.30	0.37	14.00
MW # 11 (16.8') Compliance - Downgradient of wastewater storage pond						
Average value	0.80	112	27	4.66	0.42	0.47
Maximum value	1.47	128	48	5.14	3.50	2.30
Minimum value	0.52	102	18	4.10	<.05	<.05
MW # 12 (16.0') Background - Upgradient - between Indiantown Cogen and Caulkins						
Average value	1.56	178	15	5.30	1.69	6.63
Maximum value	4.90	332	62	6.40	3.50	22.00
Minimum value	0.76	125	4	4.94	0.23	1.70
MW # 13 (10.2') Compliance - Downgradient of coal pile runoff basin						
Average value	0.68	176	36	4.23	1.46	1.74
Maximum value	1.58	219	66	5.40	3.40	10.00
Minimum value	0.50	122	18	3.77	0.25	<.05
MW # 14 (10.8') Compliance - Downgradient of cooling water storage pond						
Average value	0.74	401	14	5.55	1.40	42.10
Maximum value	19.20	690	30	6.10	2.60	110.00
Minimum value	<.05	210	4	4.82	0.34	< 1

Monitoring Well # 1. A 32.8' deep background monitoring well located at the northwest corner of the property. Up gradient of the well is primarily undeveloped land except for the railroad and the highway.

Field Parameters: The conductivity values ranged between 168 and 620 umhos, but the 1997 and later values have been mostly in the low 200's. All but one of the pH values have been below the state's standard of a minimum of 6.5 standard units (s.u.), ranged from 5.1 to 6.6 s.u., and there were no prevailing values in the data.
General Chemistry: The chloride values fluctuated but the 1998 and 99 values have been approximately 30 mg/L. The ammonia and sulfate values fluctuated during the review period and showed no trends. There were three "less than" sulfate values. Fluoride was found four times between November, 1995 and February, 1997 in a range from .06 to .34 mg/L.
Metals: The values for iron showed considerable fluctuation from 1994 through 1995, but have settled down since then and have exhibited a decreasing trend, from approximately .6 mg/L to .2 mg/L. Almost all iron the values through 1997 were above the state's standard of a maximum of .3 mg/L. Chromium has been found three times from 1995 to 1999 and ranged from .005 to .025 mg/L. All except two lead values have been reported as "less than" values (most as <.005 mg/L), and the two reported values were less than .005 mg/L.

Monitoring Well #4A. A 31.6' deep background monitoring well located east of the storm water management basin #2. It could be down gradient of the Florida Steel site.

Field Parameters: The first two conductivity measurements in 1995 were 244 and 330 umhos. Since then all but one of the values have been above 800 umhos, and the last two have been above 1300 umhos. All the pH values were below the state's standard and were usually fairly consistent from quarter to quarter.
General Chemistry: The chloride data shows some, but not always consistent, correlation with the conductivity data. The majority of the values were approximately 200 mg/L or better. The ammonia values were not consistent and the majority of them were above 1.0 mg/L. Eleven of the sixteen sulfate values were "less than" values and further discussion is not warranted. Fluoride appeared twice - May, 1996 (.21 mg/L) and November, 1996 (.15 mg/L).
Metals: All the iron values exceeded the state's standard and ranged from .96 to 8.5 mg/L, but the values for 1996 through 1999 have been 4.9 mg/L or better and fluctuate from quarter to quarter.

The values for iron, conductivity, and chloride all exhibited at least a two fold or greater step increase between November, 1995 and February, 1996.

Monitoring Well # 7. A 24.9' deep compliance well downgradient of the coal unloading building

Field Parameters: The conductivity values were in a fairly narrow range but no trend is evident. All the pH values were below the state's minimum standard, in a fairly narrow range, and did not show an obvious trend.
General Chemistry: The chloride values were variable and have shown a decreasing trend since November, 1997. The ammonia values ranged from [illegible] to .63 mg/L with two "less than" values. They fluctuated and showed no obvious trend. The sulfate values had five of the fifteen values as "less than", fluctuated, and showed no obvious trend. [illegible] was found four times in a range of .13 to .64 mg/L between May, [illegible] and November, [illegible]
Metals: [illegible] in a fairly narrow range [illegible] there has been a general increasing trend in

the iron concentration. All except two of the lead values have been reported as "less than" (most as <.005 mg/L), and the two reported values were less than .005 mg/L.

Monitoring Well # 9. A 15.8' deep compliance well upgradient of the wastewater storage basin.

Field Parameters: The conductivity values fluctuated within their range and did not exhibit a long term trend. All of the pH values were below the state's minimum standard and fluctuated through the second quarter of 1997. Since then the values have ranged between 6.0 and 6.3 s.u.
General Chemistry: The chloride data fluctuated and did not exhibit an obvious trend. The ammonia data had two out of fifteen values which were "less than" values and most have been in the .3 to .5 mg/L range. There were no obvious trends except for a decrease during the last four quarters. The sulfate data had one "less than" value and the data fluctuated throughout the period. Fluoride appeared in August and November, 1996 at .09 and .31 mg/l, respectively.
Metals: All of the iron values except that for the second quarter of 1999 exceeded the state's standard. The values fluctuated and most were in the range of .60 to .69 mg/L. Manganese has been in detectable quantities during the last five quarters; May, 1998 through May, 1999. The range was from .11 to .19 mg/L and there was no trend. All except four lead values have been reported as "less than" values (most as <.005 mg/L), and only one of the reported values was above .005 mg/L - .007 mg/L in May, 1996.

Monitoring Well # 10. A 16.6' deep compliance well upgradient of the coal storage area.

Field Parameters: The conductivity values have shown periods of relative stability followed by substantial fluctuation. All of the pH values were below the state's minimum standard and ranged between 5.5 and 6.3 s.u. until the second quarter of 1999 when 4.3 s.u. was reported.
General Chemistry: The average chloride value was affected substantially by two values, i.e. 90 mg/L in June, 1994 and 93 mg/L in February, 1997. The remainder of the values were 15 mg/L or less and without the two high values the average dropped from 16.4 to 6.42 mg/L. Overall, there appears to be a decreasing trend in the chloride values. The ammonia values were in a fairly narrow range and they fluctuated. Sulfates had a wide range and fluctuated. Fluoride was found five times in a range of .04 to .68 mg/L between November, 1995 and November, 1997.
Metals: The iron values at this site have varied considerably. From June, 1994 through August, 1995 they ranged from 1.68 to 7.64 mg/L and exceeded the state's standard. From November, 1995 through August, 1996 they were below the standard. After that, they have exceeded the standard, ranged from .35 to 7.2 mg/L, and fluctuated substantially. Besides the ubiquitous iron, other metals; arsenic, chromium, and manganese; have been measured at this well. Arsenic first appeared in August, 1995 at .018 mg/L, reappeared in August, 1997 at .013 mg/L, and then has been found from May, 1998 to the present in a range from .012 to .031 mg/L. Chromium first appeared in November, 1995 at .025 mg/L and appeared again in August, 1998 (.013 mg/L) and November, 1998 (.008 mg/L). Manganese has been measured from May, 1998 to the present in a range of .011 to .075 mg/L. All except two lead values have been reported as "less than" values (most as <.005 mg/L), and only one of the reported values was higher than .005 mg/L - .006 mg/L in August, 1998.

Monitoring Well # 11. A 16.5' deep compliance well downgradient of the wastewater storage basin.

Field Parameters: The conductivity values have been in a fairly narrow range, 102 to 125 umhos, and have not fluctuated very much. The same can be said of the pH values and all have been below the state's minimum standard.

General Chemistry: The ammonia data had two "less than" values and fluctuated. Over one half of the values were in a range of .23 to .31 mg/L. Eleven of the sixteen values for sulfate were "less than" values, most were <.5 mg/L, and further discussion is not warranted. Fluoride appeared for four consecutive quarters from November, 1996 through August, 1997 in a range from .12 to .84 mg/L. There was no trend in the values.
Metals: The vast majority of the iron values were in a range from .50 to .80 mg/L and all exceeded the state's standard. Since the third quarter of 1995 the values have not fluctuated widely. All except three of the lead values have been reported as "less than" values (most as <.005 mg/L), and only one of the reported values was higher than .005 mg/L - .012 mg/L in August, 1995.

Monitoring Well # 12. A 16.0' deep background well located at the north property line near the center of the property. It is down gradient of Caulkins Indiantown Citrus processing plant.

Field Parameters: The conductivity data shows some correlation with the trends of the iron data and has registered the highest values since 1995 during the last half of 1998 and the first half of 1999. Again, all the pH values were below the state's minimum standard and the majority were in the 5.0 to 5.2 s.u. range. The values usually did not fluctuate much from quarter to quarter.
General Chemistry: The chloride data has shown a decreasing trend from 1995 to the present. The ammonia data did fluctuate and did not show an obvious trend. The range of sulfate values was fairly wide, from 1.7 to 22 mg/L, but most values were between 6.0 and 9.0 mg/L. Fluoride was found three times from February, 1997 to February, 1998 in a range of .12 to .27 mg/L.
Metals: All the iron values exceeded the state's standard. The values started off in 1994 above 2.0 mg/L and decreased to a little under 1.0 mg/L in 1996, where they stayed until the second quarter of 1998. Then they increased to as high as 4.9 mg/L and have been just over 2.0 mg/L for the last two quarters. All except four of the lead values have been reported as "less than" values (most as <.005 mg/L), and the four reported values were less than .005 mg/L. Manganese has been found during the last five quarters with values ranging from .031 to .22 mg/L and four of the values were .1 mg/L or less.

Monitoring Well # 13. A 10.2' deep compliance well downgradient of the coal runoff basin.

Field Parameters: The conductivity data was in a fairly narrow range and did not fluctuate widely. The pH values were the lowest at the facility with a range from 3.77 to 5.4 s.u. All but one of the nineteen values were below 5.0 s.u. and six values were below 4.0 s.u. The more recent values have been above 4.5 s.u.
General Chemistry: The chloride values showed some fluctuation and a moderate range. The ammonia values varied but did not fluctuate highly. Four of the fifteen sulfate values were "less than" values and there was one value (10 mg/L) that was considered high. The majority of the values were 3.0 mg/L or less. Fluoride appeared five times in nine quarters, February, 1997 through February, 1999, with a range of .20 to .31 mg/L.
Metals: All of the iron values exceeded the state's standard, were within a fairly narrow range, and did not fluctuate widely. Selenium was found twice in 1996 with values of .012 and .037 mg/L, both exceedances of the state's standard of a maximum of .01 mg/L. All except two lead values have been reported as "less than" values (most as <.005 mg/L). The reported values were .011 mg/L in June, 1994 and .007 mg/L in May, 1996.

Monitoring Well # 14. [illegible] compliance well downgradient of the existing water storage pond.

Field Parameters: The conductivity values fluctuated and the majority of them were in the 300 to 400 umhos range. All the pH values were below the state's minimum standard and there appears to be increasing trend. The initial values were just under 5.0 s.u. and the more recent values have been approximately 6.0 s.u.
General Chemistry: The chloride values fluctuated but did not correlate well with the conductivity values. The ammonia and sulfate values have fluctuated and there doesn't appear to be any obvious trends. Fluoride was found only twice; November, 1995 and February, 1997; at .06 and .22 mg/L, respectively.
Metals: The iron values at this well have shown a decreasing trend from the beginning of the sampling in June, 1994. The initial value was 19.2 mg/L, the next value was 2.06 mg/L, and a general decreasing trend has continued to date. The values dropped and remained below the state's standard since February, 1998. All except five of the lead values have been reported as "less than" values (most as <.005 mg/L), and only three of the reported values were higher than .005 mg/L - .034 mg/L in June, 1995, .007 mg/L in May, 1996, and .006 mg/L in November, 1996. Chromium has been found at this site three times in 1995 and 1996 with values ranging from .005 to .023 mg/L. Selenium was also found twice during that period with values of .013 and .027 mg/L, both exceedances of the standard.
Semivolatile Compounds: Phenol was found three times during 1996 and 1997 with values ranging from 2.8 to 3.9 ug/L.

The areal distribution of the self monitoring groundwater data was examined to determine if there were patterns in the occurrence and/or concentrations of the parameters. No one well over all the others had predominantly high average values, or low pH values. MW #4A, a background well, came the closest with the highest averages for iron, chloride, and conductivity. The well may be under the influence of the contamination from the Florida Steel superfund site which appears to be up gradient of the well. MW #12, also a background well, had the highest averages for ammonia and manganese. MW #10, a compliance well down gradient of the cooling water basin, had low averages for chloride, ammonia, manganese, and fluoride. It also had one of the highest pH averages, but the sulfate average was over ten times higher than the next highest average, which was at MW #12.

Exceedances of the state's groundwater quality standards have been documented in the above discussions. Ubiquitous iron exceeded the state's standard in the background wells, except for MW #1 since February, 1998. The pH of groundwater in the area does not meet the state's standard, as documented by low values in the background wells. Manganese and selenium have also appeared above the standards in the background well MW #12 and in several compliance wells down gradient.

Deficiencies: None observed due to the quality of the background water

Rating: Satisfactory

Thank you for your time and the courtesy extended to me during the inspection. If there are any questions you can reach me at (561)871-7662. Your continued cooperation is appreciated.

Sincerely,

Terry Davis
Environmental Specialist

cc: [illegible]

COMET ENTRY DATE
__/__/__

FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

WASTEWATER COMPLIANCE INSPECTION REPORT

FACILITY AND INSPECTION INFORMATION

@ = Optional

Name and Physical Location of Facility	WAFR ID:	County	Entry Date/Time
Indiantown Cogeneration L.P.	COMET # 202570	Martin	29 July, 1999/1000
19140 SW Warfield Blvd.		Phone	@ Exit Date/Time
Indiantown, Fla		(561)597-6500	29 July, 1999/1400

Name(s) of Field Representatives(s)	Title	Phone
David Burrage	Environmental Coordinator	(561)597-6500

Name and Address of Permittee or Designated Representative	Title	Phone	@ Operator Certification #
Stephen Sorrentino	General Manager	(561)597-6500	
P.O. Box 1799			
Indiantown, FL 34956			

Inspection Type	C	E	I	Samples Taken(Y/N): N	@ Sample ID#:	Samples Split (Y/N):

☐ Domestic ☒ Industrial | Were Photos Taken(Y/N): N | @ Log book Volume : | @ Page

FACILITY COMPLIANCE AREAS EVALUATED

S=Satisfactory; M=Minor; U=Unsatisfactory; Blank=Not Evaluated

Unsatisfactory Ratings in Areas Marked by a "Diamond (♦)" Will Always put the Facility Status in Significant Non-Compliance

S	1. ♦ Permit		3. Laboratory	S	6. Facility Site Review		9. ♦ Effluent
	2. ♦ Compliance Schedules		4. Sampling		7. Flow Measurement		10. ♦ Disposal
		S	5. ♦ Records & Reports	S	8 ♦ Operation & Maintenance	S	11. Residuals Management
	13. Other:					S	12. Groundwater

Facility and/or Order Compliance Status: ☒ In-Compliance ☐ Minor-Out-Of-Compliance ☐ Significant-Out-Of-Compliance

Recommended Actions

Name(s) and Signature(s) of Inspector(s)	District Office/Phone Number	Date
Terry L. Davis	(561)871-7662	29 July, 1999
@ Signature of Reviewer	District Office/Phone Number	Date
	(561)681-6600	

Fill Out This Section For All Surface Water Discharger Inspections (CEI, CSI, CBI, PAI, XSI, RI)

Transaction Code	NPDES Number	FR MO/DA	Insp Type	Inspector	Fac Type
N			1	2	3

ADDITIONAL NPDES COMMENTS

Every other field is self explanatory

FACILITY DIAGRAM @

Revised 8/98

INSPECTION COMMENTS

Facility has a Site Certification but is applying for an NPDES emergency discharge permit. Laboratory is U.S. Biosystems, also does sampling. Self monitoring reports current and on time. Copies and supporting documentation on file. General housekeeping is very good. No discharge of process water, water lost through evaporation and drift. All solids generated are combined with ash from combustion of coal and are disposed of by beneficial use (concrete additive or soil creation) or disposed of at a landfill, the majority in Kentucky and some at Chamber's in Okeechobee County. Liner being replaced around the inactive coal storage area and the coal pile runoff basin with heavier material. Liner underneath the area does not need replacement as it is well protected. The facility has a Y2K compliance plan and is actively addressing the situation

Attachment C

Correspondence Regarding Address Change

MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
2401 S.E. MONTEREY ROAD • STUART, FLORIDA 34996

MARSHAL L. WILCOX
Commissioner, District 1

DENNIS H. ARMSTRONG
Commissioner, District 2

JANET K. GETTIG
Commissioner, District 3

ELMIRA R. GAINEY
Commissioner, District 4

DONNA SUTTER MELZER
Commissioner, District 5

RUSS BLACKBURN
County Administrator

GARY OLDEHOFF
County Attorney

TELEPHONE
561-288-5400

WEB ADDRESS
http://www.martin.fl.us

Indiantown Cogeneration, LP
PO Box 1620
Indiantown, FL 34956

File: gmz001.249
Date: August 25, 2000
Certified Mail: 70000 0520 001401355 6441

Subject: Verification of New Site Address: 13303 SW Silver Fox Lane f/k/a 19140 SW Warfield Boulevard

Re: Parcel Control Number: 23-39-38-001-000-0001.0-40000
Indiantown Cogeneration Project PUD, Tract "A"

Dear Sir:

This correspondence is to confirm the correct site address for the Indiantown Cogeneration Plant. The temporary site address of 19140 SW Warfield Boulevard was assigned until such time that SW Silver Fox Lane was completed.

Once SW Silver Fox Lane was completed the address of **13303 SW Silver Fox Lane** was assigned to the Co-generation Plant. The temporary address has been withdrawn and is now null and void.

It will be your responsibility to notify everyone of your address change. Please call the Indiantown Telephone Systems and provide them with the telephone numbers of the telephones located on the premises. This is the method to update the 911 data base. Emergency Services, the Sheriff's Department and other agencies have been notified of SW Silver Fox Lane

The new sign will require the address be posted. The numeral shall be at least six (6") inches in height and visible from the street.

If you have any questions concerning the site address, please feel free to call me at (561) 288 - 5500.

Sincerely,

Bette Jane Wegler
Addresses / Logistics Coordinator
Growth Management

Indiantown Telephone Systems
United States Postal Service - Indiantown

MARTIN COUNTY
BOARD OF COUNTY COMMISSIONERS
2401 S.E. MONTEREY ROAD • STUART, FLORIDA 34996

MARSHAL L. WILCOX
Commissioner, District 1

ENNIS H. ARMSTRONG
Commissioner, District 2

JANET K. GETTIG
Commissioner, District 3

ELMIRA R. GAINEY
Commissioner, District 4

DONNA SUTTER MELZER
Commissioner, District 5

RUSS BLACKBURN
County Administrator

GARY OLDEHOFF
County Attorney

TELEPHONE
561-288-5400

WEB ADDRESS
http://www.martin.fl.us

United States Postal Service
15300 SW Adams Street
Indiantown, FL 34956

File: gmz001.177
Date: April 21, 2000

Subject: **NEW STREET: SW SILVER FOX LANE**

Dear Sir:

This correspondence is to inform you of a new street in the County. SW Silver Fox Lane is located North of Indiantown and connects SW Warfield Boulevard to SW Farm Road.

The new site address assigned to the Indiantown Cogeneration Plant is: 13303 SW Silver Fox Lane.

Attached is a map of the area with SW Silver Fox Lane delineated. If you have any questions please, feel free to call me at (561) 288-5500.

Sincerely,

Bette Jane Wegler
Addresses / Logistics Coordinator
Growth Management

Attachment

Andrea Hietfeld, Florida Power & Light
Bob Moyano, Bell South
Scott Beck, Nichols Sanitation
Bob Sanborn, Martin County School Board
Developer
File

MARTIN COUNTY, FLORIDA
INTER-OFFICE MEMORANDUM

TO: Steve Wolfberg, Director
Emergency Services

DATE: April 21, 2000

FROM: Bette Jane Wegler
Addresses/Logistics Coordinator
Zoning Division
Growth Management Department

MEMO: gmz00m.176

SUBJECT: NEW STREET - SW SILVER FOX LANE

This correspondence is to inform you of a new street in the County. SW Silver Fox Lane is located North of Indiantown and connects SW Warfield Boulevard to SW Farm Road.

A new site address assigned to the Indiantown Cogeneration Plant is: 13303 SW Silver Fox Lane.

Attached is a map of the area with SW Silver Fox Lane delineated. If you have any questions please, feel free to call me at (561) 288- 5500.

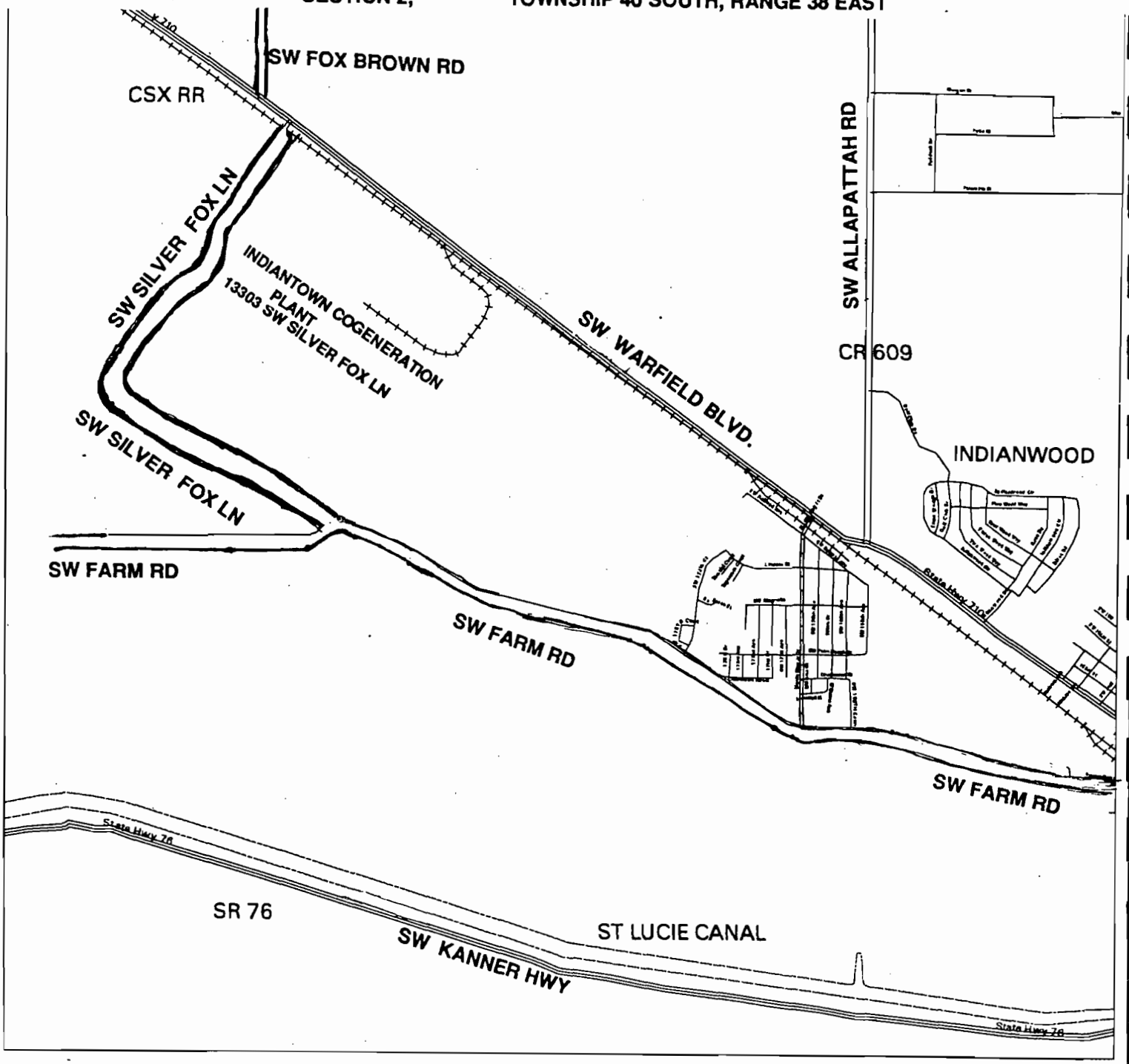
Attachment
Henry Johnson, Deputy Chief Operations, Fire Rescue
Jon Pasqualone, Chief Fire Prevention
Joseph Laviano, 911 Manager Sheriff's Department
Judy Bentel, Property Appraiser's Office
Tax Collector's Office
Peggy Robbins, Supervisor of Elections
Scott Nelson, Public Services
Debbie Jordan, Public Services
John Polley, Environmental Services
Martin County Library - Stuart
Joseph Banfi, Administrator Development Review/ Zoning
Doug Overton, GIS Technician Information Systems
File

NEW STREET

SW SILVER FOX LANE

CONNECTING SW WARFIELD BLVD TO SW FARM ROAD

SECTIONS 26, 34,35, TOWNSHIP 39 SOUTH, RANGE 38 EAST
SECTION 2, TOWNSHIP 40 SOUTH, RANGE 38 EAST



LOCATION MAP

APRIL 21, 2000

2500
Feet

EARTH TECH™

A tyco INTERNATIONAL LTD. COMPANY

Printed on recycled paper.