

Department of Environmental Protection

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

David B. Struhs Secretary

March 24, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

Re: DEP File No. PA 90--31, PSD-FL-168 Indiantown Cogeneration Facility CO₂ Recovery Project

Dear Mr. Sorrentino:

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

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

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

Sincerely.

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

CHF/mph

Enclosures

In the Matter of an Application for Permit by:

Stephen Sorrentino, General Manager Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, Florida 34956 DEP File No. PA-90-31, PSD-FL-168 Indiantown Cogeneration Plant CO₂ Plant and Permit Modifications Martin County

INTENT TO ISSUE PSD PERMIT MODIFICATION

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

The applicant, Stephen Sorrentino, General Manager, Indiantown Cogeneration, L.P., applied on December 30, 1999, to the Department for a PSD Permit Modification for its Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. The permit is to install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. The Department has determined that a PSD Permit Modification is required to install a slipstream CO₂ recovery plant and to clarify allowable operation rates of auxiliary boilers.

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

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

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

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of <u>Public Notice of Intent to Issue PSD Permit Modification</u>. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

Indiantown Cogeneration, L.P. DEP File No. PA 90-31 (PSD-FL-168) Page 2 of 3

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

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

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

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

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

Mediation is not available in this proceeding.

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

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

Indiantown Cogeneration, L.P. DEP File No. PA 90-31 (PSD-FL-168) Page 3 of 3

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

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

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

Executed in Tallahassee, Florida.

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

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this <u>Intent to Issue PSD Permit Modification</u> (including the <u>Public Notice of Intent to Issue PSD Permit Modification</u> and the Draft permit) was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on <u>3-23-00</u> to the person(s) listed:

Mr. Stephen Sorrentino, General Manager *

Mr. Isidore Goldman, SED

Mr. Hamilton S. Oven

Mr. David S. Dee

Mr. A.J. Jablonski, Earthtech

Mr. Gregg Worley, EPA

Mr. John Bunyak, NPS

Clerk Stamp

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

(Clerk)

John 3-23-00 (Date)

PUBLIC NOTICE OF INTENT TO ISSUE PSD PERMIT MODIFICATION

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

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

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

The Department of Environmental Protection (Department) gives notice of its intent to issue a modification of the permit for the Prevention of Significant Deterioration of Air Quality (PSD permit) to Indiantown Cogeneration, L.P. The permit modification is to install a slipstream carbon dioxide recovery plant and to clarify allowable operation rates of auxiliary boilers at the Indiantown Cogeneration Plant located at 19140 Southwest Warfield Blvd., Indiantown, Martin County. A Best Available Control Technology (BACT) determination was not required pursuant to Rule 62-212.400, F.A.C. and 40 CFR 52.21, Prevention of Significant Deterioration. The applicant's mailing address is: Stephen Sorrentino, General Manager, Indiantown Cogeneration Plant, Post Office Box 1799, Indiantown, Florida 34956.

The existing facility is a coal-fired electrical and steam co-generation plant. Emissions are controlled by baghouses, spray driers and selective catalytic reduction. The slipstream plant will sequester carbon dioxide (CO₂), a combustion product, and convert it to bottled (liquid) CO₂ for resale purposes. Other changes are minor and are for the purposes of clarifying permit conditions.

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

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

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

The Department will accept written comments concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue PSD Permit Modification. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, FL 32399-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significant change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

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

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

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

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

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

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

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

Department of Environmental Protection Bureau of Air Regulation Suite 4, 111 S. Magnolia Drive Tallahassee, Florida, 32301

Telephone: 850/488-0114

Fax: 850/922-6979

Department of Environmental Protection

Southeast District

400 North Congress Avenue West Palm Beach, Florida 33401

Telephone: 561/681-6600

Fax: 561/681-6755

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

March xx, 2000

4.00

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

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

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

Project Description:

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

Specific Condition No. 4.:

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

Specific Condition No. 9:

The auxiliary boiler or auxiliary boilers rated at a combined total of up to 358 MMBtu/hr (Natural gas and propane) and 342 MMBtu/hr (No.2 fuel oil), shall be limited to a maximum of 5000 hours/year at the combined total heat input rates with up to 1000 hrs/yr firing No. 2 fuel oil with 0.05% sulfur, by weight, and the balance firing natural gas or propane. a combined total of less than 1.79 x 10¹² British Thermal Units per year. The auxiliary boilers are each permitted to operate 5000 full load equivalent hours per calendar year, with no more than 1000 hours of that period using fuel oil with 0.05% sulfur, by weight, as the primary fuel. The maximum total annual emissions from the auxiliary boiler or boilers will be as follows when firing No.2 fuel oil for 1000 hrs/yr:

EMISSION LIMITATION

POLLUTANT	LBS/HR	TONS/YEAR
NOX	68.0	34
SO2	18.0	9
PM	1.4	0.70
PM10	1.4	0.70
CO	48.0	24
VOC	0.620	0.31
Be	4.0 E-5	2.0 E-5
Hg	5.2 E-4	2.6 E-4
Pb	3.6 E-2	1.8 E-2
As	6.8 E-3	3.4 E-3

Specific Condition No. 15.:

- A. No fraction of flue gas shall be allowed to bypass the air pollution control devices (PCD) system to reheat the gases exiting from the PCD system, if the bypass will cause emissions above the limits specified. The percentage and amount of flue gas bypassing the PCD system shall be documented and records kept for a minimum of two years and must be available for FDER's inspection.
- B. A slipstream, consisting of between 5% to 10% of the main boiler (stack) flue gas shall be routed to the CO₂ recovery plant. The flue gas will be cooled and scrubbed with a monoethanolamine (MEA) solution, which captures CO₂. The CO₂ will then be stripped out of the MEA solution, cleaned, compressed and shipped in liquid form. The CO₂ plant will be designed to produce 400 tons per day (TPD) of liquid CO₂. Note: The production is limited in order to ensure that secondary pollutants are within the ranges provided in the application. Any increase in capacity shall be accompanied by an appropriate review for PSD or MACT applicability.
 - 1. The CO₂ absorber column shall emit no more than 5 lb./hr VOC in addition to the products of combustion from the PC boiler. If any batches of CO₂ do not meet product specifications, the off-spec product may also be vented to atmosphere.
 - 2. Prior to the operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of
 Air Regulation a plan or procedure demonstrating that the system used to measure the PC boiler emissions
 accurately accounts for the exhaust gasses ducted to the CO₂ plant.
 - 3. Within 90 days of initial operation of the CO₂ Recovery Plant, the permittee shall submit to the Department's Bureau of Air Regulation a summary of the actual emissions of the Recovery Plant. This shall include (at a minimum) emissions of all regulated pollutants, MEA, ammonia and methanol based upon a net CO₂ recovery level of 400 TPD of liquid CO₂ as well as the estimated maximum daily throughput of the Recovery Plant (if greater than 400 TPD). An O&M plan shall be submitted to the District Office, detailing best practices for the minimization of secondary pollutant emissions.

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

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

Executed in Tallahassee, Florida.

Howard L. Rhodes, Director Division of Air Resources Management

CERTIFICATE OF SERVICE

mail (*) and copies were mailed by U.S. Mail before t		•
Mr. Stephen Sorrentino, General Manager * Mr. Isidore Goldman, SED Mr. Hamilton S. Oven Mr. David S. Dee Mr. A.J. Jablonski, Earthtech Mr. Gregg Worley, EPA Mr. John Bunyak, NPS		
	Clerk Stamp	
	FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.	
	(Clerk)	(Date)