Indiantown Cogeneration, L.P.

April 7, 1997

Mr. Tom Tittle
Department of Environmental Protection
PO Box 15425
400 South Congress Avenue
West Palm Beach, FL 33416

APR 16 1997

BUREAU OF AIR REGULATION

RE:

Indiantown Generating Plant

Permit Nos.: PSD-FL-168 & PA 90-31

Dear Tom:

We appreciated the opportunity to discuss the incident of January 18, 1997 with you along with the issues which led up to the incident. ICLP believes this event was a short term malfunction of newly installed bag clamps in multiple compartments over a short period. We now understand better the failure mechanism, and have taken action to minimize the exposure for potential failure by the following:

- Replace bag clamps in a single compartment, with a multi-day test period.
- Use of a bag and clamp model as a training tool to improve the skill level of the employees tasked with the work.
- Develop specific procedures with defined actions to follow. This will assure the nature of the problem is determined in the most efficient manner.

The following responses are to the specific questions you asked:

1. What methods did ICLP use to assure that the clamps were installed properly and that workmanship did not contribute to the failure?

Response: During the outage ICLP used approximately 20 different individuals from the Maintenance and Operating departments to accomplish the work. These employees were directly supervised by one of the plant's Shift Supervisors assigned to mange that particular job. All the supervisors had reviewed the ABB instructions on the proper installation of the bag clamp and the tensioning of the bag. Most of the individuals installing the bag clamps were involved during the plant's October outage when all 12 compartments were individually re-tensioned with no subsequent failures of the clamp. Therefore, we felt these individuals were very familiar with the process of removing, setting and re-tensioning the bag and clamp assembly. (See attachment 1-ABB installation instructions). ICLP personnel used the following procedure to complete the clamp replacement process.









From:

Harvey, Mary

Sent:

Wednesday, June 20, 2007 1:52 PM

To:

'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Hoefert, Lee; 'David A. Buff:'; 'Katy Forney, EPA

Region 4:'; 'James Little, EPA Region 4:'

Cc:

Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject:

Indiantown Cogeneration Plant

Attachments: 0850102.009.AC.F pdf.zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

From:

Harvey, Mary

Sent:

Wednesday, June 20, 2007 1:55 PM

To:

'Katy Forney, EPA Region 4:'; 'little.james@epamail.epa.gov'

Cc:

Cascio, Tom; Adams, Patty

Subject:

FW: Indiantown Cogeneration Plant

Attachments: Appendix C 2007 - Facility #0850102-009-AC-FINAL PDF; Appendix GC 2007 - Facility #0850102-009-AC-FINAL.PDF; Final AC Cover Page 2007 - Facility #0850102-009-AC-FINAL.PDF; Final AC Section 1 2007 - Facility #0850102-009-AC-FINAL.PDF; Final AC Section 2 2007 - FAcility #0850102-009-AC-FINAL.PDF; Final AC Section 3 2007 - Facility #0850102-009-AC-FINAL.PDF; Final Determination 2007 - Facility #0850102-009-AC-FINAL.PDF; Notice of Final AC Permit 2007 - FAcility #0850102-009-AC-FINAL.PDF; Signed

Documents - Facility #0850102-009-AC-FINAL.pdf

From: Harvey, Mary

Sent: Wednesday, June 20, 2007 1:52 PM

To: 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Hoefert, Lee; 'David A. Buff:'; 'Katy Forney, EPA Region 4:'; 'James

Little, EPA Region 4:'

Cc: Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject: Indiantown Cogeneration Plant

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Thank you,

From: Harvey, Mary

Sent: Wednesday, June 20, 2007 2:34 PM

To: Adams, Patty

Subject: FW: Indiantown Cogeneration Plant

From: NicholasLaryea@cogentrix.com [mailto:NicholasLaryea@cogentrix.com]

Sent: Wednesday, June 20, 2007 2:34 PM

To: Harvey, Mary

Subject: RE: Indiantown Cogeneration Plant

Thanks

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Wednesday, June 20, 2007 1:52 PM

To: Willer, Gary; Laryea, Nicholas; Hoefert, Lee; David A. Buff:; Katy Forney, EPA Region 4:; James Little, EPA

Region 4:

Cc: Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject: Indiantown Cogeneration Plant

Dear Sir/Madam:

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Thank you,

<u> Fri®ay,</u> Barbara

From:

Harvey, Mary

Sent:

Wednesday, June 20, 2007 2:12 PM

To:

Adams, Patty; Cascio, Tom

Subject:

FW: FW: Indiantown Cogeneration Plant

----Original Message-----

From: Little.James@epamail.epa.gov [mailto:Little.James@epamail.epa.gov]

Sent: Wednesday, June 20, 2007 1:58 PM

To: Harvey, Mary

Cc: Forney.Kathleen@epamail.epa.gov

Subject: Re: FW: Indiantown Cogeneration Plant

We received.

Jim Little - U.S. EPA Region 4

"Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

06/20/2007 01:55 РM

Kathleen Forney/R4/USEPA/US@EPA, James Little/R4/USEPA/US@EPA CC

То

"Cascio, Tom"

<Tom.Cascio@dep.state.fl.us>,

"Adams, Patty"

<Patty.Adams@dep.state.fl.us>

Subject

FW: Indiantown Cogeneration Plant

From: Harvey, Mary

Sent: Wednesday, June 20, 2007 1:52 PM

To: 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Hoefert, Lee; 'David A. Buff:'; 'Katy Forney, EPA Region 4:'; 'James Little, EPA Region 4:'

Cc: Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject: Indiantown Cogeneration Plant

Dear Sir/Madam:

1

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Thank you, DEP, Bureau of Air Regulation

[attachment "Appendix C 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Appendix GC 2007 - Facility # 0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Final AC Cover Page 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Final AC Section 1 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Final AC Section 2 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Final AC Section 3 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Final Determination 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Notice of Final AC Permit 2007 - Facility #0850102-009-AC-FINAL.PDF" deleted by James Little/R4/USEPA/US] [attachment "Signed Documents - Facility #0850102-009-AC-FINAL.PDf" deleted by James Little/R4/USEPA/US]

From:

Harvey, Mary

Sent:

Wednesday, June 20, 2007 2:11 PM

To:

Adams, Patty; Cascio, Tom

Subject:

FW: Indiantown Cogeneration Plant

From: Hoefert, Lee

Sent: Wednesday, June 20, 2007 1:58 PM

To: Harvey, Mary

Subject: Read: Indiantown Cogeneration Plant

Your message

To:

'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Hoefert, Lee; 'David A. Buff:'; 'Katy Forney, EPA Region 4:'; 'James Little, EPA Region 4:'

Cc:

Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject:

Indiantown Cogeneration Plant

Sent:

6/20/2007 1:52 PM

was read on 6/20/2007 1:58 PM.

From: Sent:

Harvey, Mary

Wednesday, June 20, 2007 3:06 PM

To:

Adams, Patty

Subject:

FW: Indiantown Cogeneration Plant

From: Buff, Dave [mailto:DBuff@GOLDER.com] **Sent:** Wednesday, June 20, 2007 2:37 PM

To: undisclosed-recipients

Subject: Read: Indiantown Cogeneration Plant

Your message

To: DBuff@GOLDER.com

Subject:

was read on 6/20/2007 2:37 PM.

From:

Sent: To:

Harvey, Mary Wednesday, June 20, 2007 2:35 PM

Adams, Patty

Subject:

FW: Indiantown Cogeneration Plant

From: NicholasLaryea@cogentrix.com [mailto:NicholasLaryea@cogentrix.com]

Sent: Wednesday, June 20, 2007 2:29 PM

To: Harvey, Mary

Subject: Read: Indiantown Cogeneration Plant

Your message

To: NicholasLaryea@Cogentrix.com

Subject:

was read on 6/20/2007 2:29 PM.

From:

Sent:

Harvey, Mary Wednesday, June 20, 2007 2:35 PM

To:

Adams, Patty

Subject:

FW: Indiantown Cogeneration Plant

From: GaryWiller@Cogentrix.com [mailto:GaryWiller@Cogentrix.com]

Sent: Wednesday, June 20, 2007 2:33 PM

To: Harvey, Mary

Subject: Read: Indiantown Cogeneration Plant

Your message

To: GaryWiller@cogentrix.com

Subject:

was read on 6/20/2007 2:33 PM.

MEMORANDUM

To:

Joseph Kahn

From:

Trina L. Vielhauer

Subject:

Indiantown Cogeneration Plant

Air Construction Permit No. 0850102-009-AC

Date:

June 18, 2007

Attached is the final air construction permit for the subject facility. This permit modifies the lime unloading system, originally permitted under PSD-FL-168, by authorizing the installation of a railcar lime unloading sub-system as an integral part of the total system.

The Department distributed an "Intent to Issue Permit" package on May 23, 2007. The applicant published the "Public Notice of Intent to Issue" in the Stuart News on May 29, 2007. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. No comments were received from the applicant, EPA Region 4, or the public at large on the Intent to Issue the Air Construction Permit package.

I recommend your signature.

may I foe - towhich this is the permit "Mony is holding signature page. The questions you had not proposely of testing have been clarified. on proposely of testing have been clarified. There was an attempt to carryover language there was an attempt to carryover language there was an attempt to mesh into this me. from mun PSD permets of mesh into this me. we don't need to do that (a shouldn't we don't need to do that (a shouldn't need).



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PERMITTEE

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane
Indiantown, Florida 34956
Authorized Representative:

Mr. Gary Willer, General Manager

Air Permit No. 0850102-009-AC Facility ID No. 0850102 SIC No. 4931 Railcar Lime Unloading System

Permit Expires: December 31, 2008

PROJECT AND LOCATION

This permit authorizes the installation of a railcar lime unloading system as an integral part of the Lime Handling System at the Indiantown Cogeneration Plant (the facility). The facility is located in Martin County at 13303 SW Silver Fox Lane, Indiantown, Florida 34956.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Parts 60 and 63 of the Code of Federal Regulations (CFR). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

Section 1. General Information

Section 2. Administrative Requirements

Section 3. Emissions Units Specific Conditions

Section 4. Appendices

Joseph Kalar, Director

Division of Air Resource Management

JK/tlv/sms/tbc

STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION

NOTICE OF FINAL PERMIT

Electronically Sent - Received Receipt Requested

In the Matter of an Application for Permit by:

Indiantown Cogeneration, L.P. P.O. Box 1799 13303 SW Silver Fox Lane Indiantown, Florida 34956 DEP File No. 0850102-009-AC Indiantown Cogeneration Plant Railcar Lime Unloading System

Authorized Representative:

Mr. Gary Willer, General Manager: GaryWiller@Cogentrix.com

Enclosed is Final Air Construction Permit No. 0850102-009-AC that modifies the lime unloading system at the Indiantown Cogeneration Plant in Indiantown, Martin County. It also establishes these changes as applicable Title V Air Operation Permit conditions. The facility is located at 13303 SW Silver Fox Lane, Indiantown, Florida 34956. This permit is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.

Legar & Vilhaus

Trina L. Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the "Final Permit") was sent by electronic mail (with received receipt requested) before the close of business on to the person(s) listed:

Gary Willer, ICLP: <u>GaryWiller@Cogentrix.com</u>
Nick Laryea, ICLP: NicholasLaryea@Cogentrix.com

Lee Hoefert, P.E., Southeast District Office: lee.hoefert@dep.state.fl.us

David A. Buff: dbuff@golder.com

Katy Forney, EPA Region 4: forney.kathleen@epa.gov
James Little, EPA Region 4: little.james@epa.gov

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department

Clerk, receipt of which is hereby acknowledged.

(Date)

FINAL DETERMINATION

PERMITTEE

Indiantown Cogeneration, L.P. P.O. Box 1799 13303 SW Silver Fox Lane Indiantown, Florida 34956

PERMITTING AUTHORITY

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

PROJECT

Air Permit No. 0850102-009-AC

Indiantown Cogeneration Plant

This air construction permit modifies the lime unloading system, originally permitted under PSD-FL-168, at the Indiantown Cogeneration Plant in Indiantown, Martin County. Specifically, the permit authorizes installation of a railcar lime unloading sub-system as an integral part of the total system. It also establishes these changes as applicable Title V air operation permit conditions.

NOTICE AND PUBLICATION

The Department distributed an "Intent to Issue Permit" package on May 23, 2007. The applicant published the "Public Notice of Intent to Issue" in the Stuart News on May 29, 2007. No petitions for administrative hearings or extensions of time to petition for an administrative hearing were filed. No comments were received from the applicant, EPA Region 4, or the public at large on the Intent to Issue the Air Construction Permit package.

CONCLUSION

The final action of the Department is to issue the permit with minor corrections to Specific Conditions 3, 7, 10, and 11 as noted below (underline indicates additions and strikethrough indicates deletions to the original text):

3. <u>Visible Emissions (VE):</u> Visible emissions from each of the three lime handling system baghouses shall not exceed 5% opacity.

[PSD-FL-168, Specific Condition No. 8. Rule 62-297.620(4), F.A.C.]

Comment: Department Rule 62-297.620(4), F.A.C., allows the use of a visible emissions (VE) surrogate test with a 5% opacity limit in lieu of annual PM emissions testing. Reference to a prior PSD permit condition is not necessary.

7. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the VE and PM emissions standards specified in this permit. [Rule 62-297.310(7)(a)4, F.A.C.]

Comment: See comment above.

10. Opacity: Tests must be conducted with a lime railcar unloading into the lime handling system, from start to finish. Emissions shall not be visible more than two minutes in any fifteen minute period. Compliance with

FINAL DETERMINATION

fugitive emissions limitations from all transfer points will be determined by EPA/DEP reference Method 22 and opacity Method 9.

[PSD-FL-168, Specific Conditions No. 12. and 19.; and Rule 62-4.070(3), F.A.C.]

Comment: The deleted text is duplicative of language already existing in an applicable PSD permit condition.

11. <u>Particulate Matter:</u> EPA Method 5 shall be used to determine <u>initial</u> compliance with the particulate matter emissions limitation specified in Specific Condition 4. <u>Thereafter, the annual VE test shall serve as a surrogate for the PM emissions test.</u>

[PSD-FL-168, Specific Condition No. 19.; and Rule 62-297.620(4), F.A.C.]

Comment: Department Rule 62-297.620(4), F.A.C., allows the use of a visible emissions (VE) surrogate test with a 5% opacity limit in lieu of annual PM emissions testing.

FACILITY AND PROJECT DESCRIPTION

Indiantown Cogeneration, L.P. (Indiantown Cogeneration) owns and operates the Indiantown Cogeneration Plant, a facility that generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant. The facility includes one high-pressure pulverized coal main boiler (PC boiler), rated at 3,422 million British thermal units (MMBtu)/hour heat input, and has a nominal net electrical power output of approximately 330 megawatts (MW). It is designated as emissions unit 1 (EU 001) in the Department's Air Resource Management System (ARMS). It is permitted to fire natural gas, propane, or No. 2 fuel oil for startup, shutdown, or load changes. It commenced commercial operation in July, 1995. The unit is equipped with low nitrogen oxides (NO_x) burners, overfire air, a steam coil air heater and air preheater, dual register burners and windbox design, a selective catalytic reduction system, a spray dryer absorber, and a fabric filter baghouse.

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

The Indiantown facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD) system. Lime in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo. Lime from the trucks is transported to the silo via pneumatic discharge at the rate of 25 tons per hour (TPH) (i.e., it requires one hour to unload a 25-ton truck) by using the on-board blowers to transfer the lime to the top of the silo. The stored lime is then slaked into a slurry for use in the PC boiler spray dryer absorber. The lime silo has a bin felt fabric filter baghouse. This Lime Handling System (EU 006) is enclosed to the extent practical. Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year (TPY) based on 365 days per year operation.

Indiantown Cogeneration is proposing to add the capability to receive lime by railcar. Unloading of the gravity flow-type railcars will be accomplished through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 TPH. It is estimated that it will take approximately 4 hours to unload a 100-ton railcar.

ID	Emission Unit I	Description
006	Lime Handling System	

REGULATORY CLASSIFICATION

<u>NESHAP</u>: The facility is a potential major source of hazardous air pollutants. The facility does not operate units subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63.

<u>Title IV</u>: The facility does not operate existing units subject to the Acid Rain provisions of the Clean Air Act (CAA).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

<u>PSD</u>: The facility is a PSD-major stationary source in accordance with Rule 62-212.400, F.A.C.

<u>NSPS</u>: The facility operates units subject to New Source Performance Standards (NSPS) in 40 CFR 60 including:

• 40 CFR 60, Subpart A - General Provisions.

• 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978).

<u>CAIR</u>: The facility is subject to the Clean Air Interstate Rule (CAIR).

<u>CAMR</u>: The facility is subject to the Clean Air Mercury Rule (CAMR).

<u>Siting</u>: The facility is a steam electrical generating plant and is subject to the power plant siting provisions of Chapter 62-17, F.A.C.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; the draft permit package including the Department's Technical Evaluation and Preliminary Determination; and the Department's Final Determination.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

- 1. <u>Permitting Authority</u>: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southeast District Office. The mailing address and phone number of the Southeast District Office is: 400 North Congress Avenue, West Palm Beach, Florida 33416-5425, Telephone: 407/681-6600, Fax: 407/681-6755.
- 3. <u>Appendices</u>: The following Appendices are attached as part of this permit: Appendix GC (General Conditions); and Appendix C (Common State Regulatory Requirements).
- 4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Bureau of Air Regulation with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

This section of the permit addresses the following emissions unit.

AIR RESOURCE MANAGEMENT SYSTEM (ARMS) Emissions Unit 006

The Lime Handling System is comprised of different conveying and storage units. Currently, lime arrives at the facility in powdered form via truck. Lime is slaked into a slurry for use in the pulverized coal (PC) boiler spray dryer absorber. The lime silo has a bin vent fabric filter baghouse. The lime handling system is enclosed to the extent practical. The overall capacity is 25 tons per hour. Because the potential to emit particulate matter (PM) is below the major source threshold, this emissions unit is not subject to CAM.

{Permitting Note: The unit remains subject to the applicable requirements of current Title V Air Operation Permit No. 0850102-007-AV.}

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND PERFORMANCE RESTRICTIONS

2. <u>Railcar Lime Unloading System</u>: This permit authorizes the construction activities necessary to add a railcar lime unloading system to ARMS Emissions Unit 006. In general, the equipment consists of a system that allows the unloading of the gravity flow-type railcars through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 tons per hour (TPH) of lime. It is estimated that it will take approximately 4 hours to unload a 100-ton railcar.

The modified Lime Handling System includes an existing lime silo bin vent filter baghouse, a new filter receiver baghouse, and a new surge hopper baghouse. [Applicant request.]

{Permitting Note: This permit does not alter any previous requirements for other methods of operation or allowable hours of operation.}

EMISSIONS STANDARDS

- 3. <u>Visible Emissions (VE):</u> Visible emissions from each of the three lime handling system baghouses shall not exceed 5% opacity. [Rule 62-297.620(4), F.A.C.]
- Particulate Matter (PM): Particulate matter emissions from each bag filter exhaust of the lime handling system shall be limited to 0.010 grains per actual cubic foot. [PSD-FL-168, Specific Condition No. 11; and Applicant request.]
- 5. <u>Visible Emissions</u>: A visible emission reading of 5% opacity or less may be used to establish compliance with the emission limit in Specific Condition 4. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 grains per actual cubic foot emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test.

[PSD-FL-168, Specific Condition No. 11.]

EMISSIONS PERFORMANCE TESTING

- 6. <u>Initial Compliance Tests</u>: Each unit shall be tested to demonstrate initial compliance with the VE and PM emissions standards specified in this permit. The initial tests shall be conducted within 60 days after completing construction of the project and achieving maximum production capacity, but not later than 180 days after initial operation of the unit with the railcar lime unloading system. [Rule 62-297.310(7)(a)1., F.A.C.]
- 7. <u>Annual Compliance Tests</u>: During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the VE standards specified in this permit. [Rule 62-297.310(7)(a)4, F.A.C.]
- 8. <u>Test Notifications</u>: At least 15 days prior to the date on which each required test is to begin, the permittee shall notify the Compliance Authority of the date, time, and place of each test. The notification shall also include the name and phone number of the contact person who will be responsible for coordinating and having the tests conducted. [Rule 62-297.310(7)(a)9, F.A.C.]
- Visible Emissions: EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C. [PSD-FL-168, Specific Condition No. 19.]
- 10. Opacity: Tests must be conducted with a lime railcar unloading into the lime handling system, from start to finish.

 [Rule 62-4.070(3), F.A.C.]
- 11. <u>Particulate Matter:</u> EPA Method 5 shall be used to determine initial compliance with the particulate matter emissions limitation specified in Specific Condition 4. Thereafter, the annual VE test shall serve as a surrogate for the PM emissions test.

 [PSD-FL-168, Specific Condition No. 19.; and Rule 62-297.620(4), F.A.C.]

NOTIFICATIONS, RECORDS AND REPORTS

- 12. <u>Construction Notifications</u>: Within 15 days of beginning construction, the permittee shall notify the Compliance Authority that construction has commenced. Within 15 days of completing construction, the permittee shall notify the Compliance Authority that construction has concluded. Each notification shall include an updated proposed schedule of activities through the initial shakedown period and initial testing. [Rule 62-4.070(3), F.A.C.]
- 13. <u>Test Reports</u>: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in the facility's current Title V Air Operation Permit. [Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX C

COMMON STATE REGULATORY REQUIREMENTS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at the facility.}

EMISSIONS AND CONTROLS

- 1. Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 4. Excess Emissions Prohibited: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(217), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

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

SECTION 4. APPENDIX C

COMMON STATE REGULATORY REQUIREMENTS

- 11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
- 12. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. <u>Test Procedures</u>: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. *Minimum Sample Volume*. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

14. Determination of Process Variables:

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

- 15. <u>Sampling Facilities</u>: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
- 16. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
- 17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 18. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to

SECTION 4. APPENDIX C

COMMON STATE REGULATORY REQUIREMENTS

determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- 1. The type, location, and designation of the emissions unit tested.
- 2. The facility at which the emissions unit is located.
- 3. The owner or operator of the emissions unit.
- 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

- 19. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 20. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

General Permit Conditions

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

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source

General Permit Conditions

- arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- 10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- 11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- 12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
- 13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (not applicable to project);
 - b. Determination of Prevention of Significant Deterioration (not applicable to project); and
 - c. Compliance with New Source Performance Standards (not applicable to project).
- 14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - Records of monitoring information shall include:
 - 1) The date, exact place, and time of sampling or measurements;
 - 2) The person responsible for performing the sampling or measurements;
 - 3) The dates analyses were performed;
 - 4) The person responsible for performing the analyses;
 - 5) The analytical techniques or methods used; and
 - 6) The results of such analyses.
- 15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

Indiantown Cogeneration, L.P. P.O. Box 1799 13303 SW Silver Fox Lane Indiantown, FL 34956

772.597.6500 Fax: 772.597.6210

May 31, 2007

RECEIVED

JUN 01 2007

BUREAU OF AIR REGULATION

Barbara Friday
Department of Environmental Protection
Bureau of Air Regulations
2600 Blair Stone Road, Mail Station # 5505
Tallahassee, FL 32399-2400

VIA FEDERAL EXPRESS

Re: INTENT TO ISSUE AIR CONSTRUCTION PERMIT

PERMIT # 0850102-009-A (INDIANTOWN COGENERATION PLANT)

Dear Barbara:

Pursuant to the requirement of Chapter 50, Florida Statutes, attached please find proof of publication, i.e., newspaper affidavit for "Public Notice of Intent to Issue Air Construction Permit" in the Stuart News on May 29^{th} , 2007.

If you have any questions, please contact Nick Laryea at 772-597-6500, extension 19.

Sincerely,

Gary E. Willer General Manager

Enclosure

cc:

N Laryea

Lay & Wille

M. Halpin

T. Cascio

L. Billheimer File

BEST AVAILABLE COPY



SCRIPPS TREASURE COAST **NEWSPAPERS**

The Stuart News The Port St. Lucie News

1939 S. Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF FLORIDA

COUNTY OF MARTIN; COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, S. Darlene Broeg, who on oath says that she is Classified Inside Sales Manager of the Stuart News and the Port St. Lucie News, a daily newspaper published at Stuart in Martin County, Florida: that the attached copy of advertisement was published in the Stuart/Port St. Lucie News in the following issues below. Affiant further says that the said Stuart/Port St. Lucie News is a newspaper published in Stuart in said Martin County, Florida, with offices and paid circulation in Martin County and St. Lucie County, Florida, and that said newspapers have heretofore been continuously published in said Martin County, Florida, daily and distributed in Martin and St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Stuart News has been entered as Periodical Matter at the Post Offices in Stuart, Martin County, Florida and Ft. Pierce, St. Lucie County. Florida and has been for a period of one year next proceding the first publication of the attached copy of advertiscment,

Pub Customer Number Date Copyline INDIANTOWN COGENERATIC 1637983 5/29/2007 NOTICE OF INTENT

> RECEIVED JIIN 01 2007

BUREAU OF AIR REGULATION

Subscribed and sworn to me before this date:

May 29, 2007

S. Darline Bring

Notary Public

ST-A MARY T. BYRNE Notary Public - State of Florida My Commission Expires Aug 2, 2010 Commission # DD 544327 Bonded By National Notary Assn.

PUBLIC NOTICE OF INTENT
TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL

PROTECTION DEP File No. 0850102-009-AC Indiantown Cogeneration Facility Modification of Lime Handling System Martin County,

The Department of Environmental Protection (D epartment) gives notice of its intentito issue an air construction permit to Indiantown Cogenera tion, L.P., to modify the lime handling system to cated at its facility in Martin County. A review der the rules for the Prevention of Significant, De terioration of Air Quality (PSD) and a determine nation of best available control technology (BACT) were not required. The applicant's name and address are Indiantown Cogeneration, L.P., 13303 SW Silver Fox Lane, Indiantown, Florida

The facility includes one high-pressure pulverized coal (PC) main boiler with electrical power output of approximately 330 megawatts, and two identifications. cal auxiliary boilers used for supplying steam to the steam host during times when the PC boiler is offline, as well as during PC boiler startup and omine, as well as builing robotel startle and shutdown periods. In addition, the facility has a variety of ancillary equipment needed to support operations as a coal-fired cogeneration plant. The facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD)

time in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo." Total throughput of lime into the system is approxi mately 100 tons per day, or 36,500 tons per yea

mately 100 tons per day, or 36,500 tons per year based on 365 days per year operation. This per mit adds the capability for the facility, to receive lime by railcar.

The new railcar lime unloading system with have, a minimal effect on particulate matter (PM) emis sions, and no effect on the emissions of any other air pollutants. Specifically, PM emission increases directly caused by the project would be only on the order of 1 ton per year (TPY). Further, the the order of 1 ton per year (TPY), Further, the project will not cause or contribute to a violation of the ambient air quality standards and incre

ment.
The Department will issue the Final Air Constru tion Permit 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 an requests for a public meeting concerning the proposed permit issuance action for a period of 14 days from the date of publication of this Public days from the date of publication of time; such Notice of Intent to Issue Air Construction Permit. Written comments should be provided to the De partmen's Bureau of Air Regulation at 2500 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 3239-2400. Any written comments filed shall be made available for public inspection. If written comments received result in a significan change in the proposed agency action, the De partment shall revise the proposed permit and re quire, if applicable, another Public Notice.

quire, if applicable, another Public Notice. The Department will issue the permit with the at lached conditions unless a timely petition for an administrative hearing is filed pursuant to sections 120.599 and 120.57 of the Florida Statutes (F.S.), before the deadline for filling a petition. The procedures for petitioning for a hearing are set forth below. Mediation is not available in this proceeding.

ceeding.

A person whose substantial interests are affected A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.59s and 120.57; F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Common wealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of

Petitions filed by any persons other than those er titled to written notice under section 120.60(3), titled to written notice under section 120.00(3), F.S., must be filed within 4d days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), F.S., however, any person who asked the Department for (Public Notice to be Published in the Newspaper) notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publications 14 petitioner shall mail a cony of the petition tion. 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 re quest 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 in a pro-



SCRIPPS TREASURE COAST **NEWSPAPERS**

The Stuart News The Port St. Lucie News

1939 S. Federal Highway, Stuart, FL 34994

AFFIDAVIT OF PUBLICATION

STATE OF ELORIDA

COUNTY OF MARTIN; COUNTY OF ST. LUCIE

Before the undersigned authority personally appeared, S. Darlene Broeg, who on oath says that she is Classified Inside Sales Manager of the Stuart News and the Port St, Lucie News, a daily newspaper published at Stuart in Martin County, Florida; that the attached copy of advertisement was published in the Stuart/Port St. Lucio News in the following issues below. Affiant furthe says that the said Stuart/Port St. Lucie Nows is a newspaper published in Stuart in said Martin County, Florida, with offices and paid circulation in Martin County and St. Lucie County, Florida, and that said newspapers have heretofore been continuously published in said Martin County, Florida, daily and distributed in Martin and St. Lucie County, Florida, for a period of one year next preceding the first publication of the attached copy of advertisement; and affiant further says that she has neither paid or promised any person, firm or corporation any discount, rebate, commission or refund for the purpose of securing this advertisement for publication in the said newspaper. The Stuart News has been entered as Periodical Matter at the Post Offices in Stuart, Martin County, Florida and Ft. Pierco, St. Lucio County, Florida and has been for a period of onn year next proceeding the first publication of the attached copy of advertisement.

Customer

Number

<u>Date</u>

Copyline

INDIANTOWN COGENERATIC 1637983

5/29/2007

NOTICE OF INTENT

RECEIVED

JUN 0 1 2007

BUREAU OF AIR REGULATION

Subscribed and sworn to me before this date:

S. Darline Bragg

May 29, 2007

ST A MARY T. BYRNE Notary Public - State of Florida My Commission Expires Aug 2, 2010 Commission # DD 544327 Bonded By National Notary Assn.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT STATE OF FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION DEP File No. 0850102-009-AC Indiantown Cogeneration Facility
Modification of Lime Handling System
** Martin County

The Department of Environmental Protection (C The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction-permit to Indiantown Cogeneral tion, LP, to modify the lime handling system to cated at its facility in Martin County, A review under the rules for the Prevention of Significant, Deterioration of Air Quality (PSD) and a determination of best available control technology (BACT) were not required. The applicant's name and address re Indiantown Cogeneration, LP, 13303 SW Silver Fox Lane, Indiantown, Florida 3596.

13303 SW Silver Fox Lans, Indiantown, Florida 34596.
The facility includes one-high-pressure pulverized coal PCC main boiler with electricel power output of approximately 330 megawatts, and two ideans of a auxiliary boilers used for supplying steam to the steam host during times when the PC boiler is addition, as well as during PC boiler start and shutdown periods. In addition, the facility has a variety of ancillary equipment needed to supproporporations as a coal-fired cogeneration plant. The facility uses lime (calcium oxide) as a reactant in the PC hoiler flue gas desulfut/zation (FGD) system.

in the PC holler flug gas desulful/action (FGG)
ysstam.
Lime in powdered form is currently delivered to
the facility by truck. The time is then off-loaded
into an existing 300-ton sucrease site
has been as the second of the se

ment.
The Department will issue the Final Air Construction Permit unless a response received in accord ance with the following procedures results in a different decision or significant change of terms or conditions.

The Department will accopt written comments and the Department will accopt written comments and

The Department will accept written commants and requests for a public meeting concerning the proposed permit issuence action for a period of 14 days from the date of publication of this Public Notice of Intent to Issue Air Construction Permit. Written commants should be provided to the Department's Bureau of Air Regulation at 2600 Bits. Stone Road, Mail Station #5505, Tallahassee, Florida 2339-2400. Any written comments filled shall be made a variable for public inspection. If written commants received result in a significant change in the promosed searcy action, the De

written comments received result in a significant change in the proposed genery action, the De partment shall revise the proposed permit and require, if applicable, another Public Notice." The Department will issue the permit with the at tached conditions unless a timely patition for an administrative hearing is filled pursuant to set itoms 120.558 and 120.57 of the Florida Statutes (F.S.), before the deadline for filing a petition. The procedures for petitioning for a hearing are set with below. Medigation is, not, available in the procedures have a substantial violents are affected

caeding. A person whose substantial interests are affecte 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, F.S. The petition must contain the information set forth below and must be filled (received) in the Office of General Counsel of the Department at 3900 Common wealth Boulevard, Mail Station #35, Tellahassee, Florida 32399-3000. Petitions filled by the permit be filled within 14 days of raceipt of this notice of intent.

applicant or any of the parties listed below must be filed within 14 days of receipt of this notice of intent.

Be filed within 14 days of receipt of this notice of intent.

Be filed the partition notice ander section 12.06(3), 15 S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 12.06(3), 15 S., however, any person who asked the Department for (Public Notice to be Published in the Newspaperh notice of generating the partition of the part of the partition of the partition of the partition of the parti

· A petition that disputes the material facts on which the Department's action is based must contain the following information: (a) The name and ad dress of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the pe ititioner, the name, address, and telephone num ber of the petitioner's representative, if any, which shall, be the address for service purposes during the course of the proceeding, and an ex planation of how the petitioner's substantial in terests will be affected by the agency determi nation; (c) A statement of how and when petition er received notice of the agency decision; (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 con tends 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, including an explanation of how the alleged facts relate to the specific rules or statutes; and (g) A statement of the relief sought by the petitioner; stating precisely the action peti-tioner 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 de signed 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 in terests 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 in spection 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: 850/921-9533

Department of Environmental Protection Southeast District Office 400 North Congress Avenue

From:

Harvey, Mary

Sent:

Wednesday, May 23, 2007 3:38 PM

To:

'Gary.Willer@cogentrix.com'; 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Graziani, Darrel; 'David

A. Buff:'; 'Katy Forney, EPA Region 4:'; 'James Little, EPA Region 4:'

Cc:

Cascio, Tom; Adams, Patty; Gibson, Victoria

Subject:

DEP File No. 0850102-009-AC - DRAFT

Attachments: 0850102.009.AC.D_pdf.zip

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

From:

Harvey, Mary

Adams, Patty

Sent:

Wednesday, May 23, 2007 4:33 PM

To:

Subject:

FW: FW: DEP File No. 0850102-009-AC - DRAFT

Attachments:

Appendix C 2007 - DEP File No. 0850102-009-AC-DRAFT.PDF; Appendix GC 2007 -0850102-009-AC-DRAFT.PDF; Draft AC Cover Page 2007 - 0850102-009-AC-DRAFT.PDF; Draft AC Section 1 2007 - 0850102-009-AC-DRAFT.PDF; Draft AC Section 2 2007 -.0850102-009-AC-DRAFT.PDF; Draft AC Section 3 2007 - 0850102-009-AC-DRAFT.PDF; Draft Technical Evaluation 2007 - 0850102-009-AC-DRAFT.PDF; Intent to Issue Permit 2007 - 0850102-009-AC-DRAFT.PDF; Letter 2007 - 0850102-009-AC-DRAFT.PDF; Public Notice 2007 - 0850102-009-AC-DRAFT.PDF; Signed Documents - DEP File No. 0850102-009-AC-

DRAFT.pdf















DEP File No....

Appendix C 2007 - Appendix GC 2007 - Draft AC Cover Draft AC Section 1 Draft AC Section 2 Draft AC Section 3

0850102-009... Page 2007 - 085... 2007 - 0850...

2007. - 0850...

2007 - 0850...

Evaluation 200...









Letter 2007 - Public Notice 2007 -Signed Documents -

Permit 2007 - ... 1850102-009-AC-D.. 0850102-0...

DEP File No...

----Original Message----

From: Forney.Kathleen@epamail.epa.gov [mailto:Forney.Kathleen@epamail.epa.gov]

Sent: Wednesday, May 23, 2007 4:29 PM

To: Harvey, Mary

Subject: Re: FW: DEP File No. 0850102-009-AC - DRAFT

THanks... KT

Katy R. Forney Air Permits Section EPA - Region 4 61 Forsyth St., SW Atlanta, GA 30024

Phone: 404-562-9130 Fax: 404-562-9019

> "Harvey, Mary" <Mary.Harvey@dep .state.fl.us>

> 05/23/2007 04:16 PM

Kathleen Forney/R4/USEPA/US@EPA

 T_{0}

Subject FW: DEP File No. 0850102-009-AC -DRAFT

1

From: Harvey, Mary

Sent: Wednesday, May 23, 2007 3:38 PM

To: 'Gary.Willer@cogentrix.com'; 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Graziani, Darrel; 'David A. Buff:'; 'Katy Forney, EPA Region 4:'; 'James Little, EPA Region 4:'

Cc: Cascio, Tom; Adams, Patty; Gibson, Victoria Subject: DEP File No. 0850102-009-AC - DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

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Thank you, DEP, Bureau of Air Regulation

(See attached file: Appendix C 2007 - DEP File No. 0850102-009-AC-DRAFT.PDF) (See attached file: Appendix GC 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft AC Cover Page 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft AC Section 1 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft AC Section 2 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft AC Section 3 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft Technical Evaluation 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Intent to Issue Permit 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Letter 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Public Notice 2007 - 0850102-009-AC-DRAFT.PDF) (See attached file: Draft Documents - DEP File No. 0850102-009-AC-DRAFT.PDF)

From:

Harvey, Mary

Sent:

Thursday, May 24, 2007 8:49 AM

To:

Adams, Patty

Subject:

FW: FW: DEP File No. 0850102-009-AC - DRAFT

From: Laryea, Nicholas [mailto:NicholasLaryea@Cogentrix.com]

Sent: Wednesday, May 23, 2007 5:06 PM

To: Harvey, Mary

Subject: Read: FW: DEP File No. 0850102-009-AC - DRAFT

Your message

To: NicholasLaryea@Cogentrix.com

Subject:

was read on 5/23/2007 5:06 PM.

From:

Harvey, Mary

Sent:

Wednesday, May 23, 2007 4:45 PM

To:

Adams, Patty

Subject:

FW: DEP File No. 0850102-009-AC - DRAFT

From: Graziani, Darrel

Sent: Wednesday, May 23, 2007 4:41 PM

To: Harvey, Mary

Subject: Read: DEP File No. 0850102-009-AC - DRAFT

Your message

To:

'Gary.Willer@cogentrix.com'; 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Graziani, Darrel; 'David A. Buff:'; 'Katy Forney, EPA Region

4:'; 'James Little, EPA Region 4:'

Cc: Subject: Cascio, Tom; Adams, Patty; Gibson, Victoria DEP File No. 0850102-009-AC - DRAFT

Sent:

5/23/2007 3:38 PM

was read on 5/23/2007 4:41 PM.

From:

Harvey, Mary

Sent:

Wednesday, May 23, 2007 4:11 PM

To:

Adams, Patty

Subject:

FW: FW: DEP File No. 0850102-009-AC - DRAFT

From: Willer, Gary [mailto:GaryWiller@cogentrix.com]

Sent: Wednesday, May 23, 2007 4:11 PM

To: Harvey, Mary

Subject: Read: FW: DEP File No. 0850102-009-AC - DRAFT

Your message

To: GaryWiller@cogentrix.com

Subject:

was read on 5/23/2007 4:11 PM.

From: Harvey, Mary

Sent: Wednesday, May 23, 2007 4:18 PM

To: Adams, Patty

Subject: FW: DEP File No. 0850102-009-AC - DRAFT

From: Willer, Gary [mailto:GaryWiller@cogentrix.com]

Sent: Wednesday, May 23, 2007 4:15 PM

To: Harvey, Mary

Subject: RE: DEP File No. 0850102-009-AC - DRAFT

Thanks!

Gary E. Willer General Manager Indiantown Cogeneration L.P. (772) 597-6500 Ext.25 Fax (772) 597-6210 garywiller@cogentrix.com

----Original Message-----

From: Harvey, Mary [mailto:Mary.Harvey@dep.state.fl.us]

Sent: Wednesday, May 23, 2007 4:09 PM

To: Laryea, Nicholas; Willer, Gary

Subject: FW: DEP File No. 0850102-009-AC - DRAFT

From: Harvey, Mary

Sent: Wednesday, May 23, 2007 3:38 PM

To: 'Gary.Willer@cogentrix.com'; 'Gary Willer, ICLP:'; 'Nick Laryea, ICLP:'; Graziani, Darrel; 'David A.

Buff:'; 'Katy Forney, EPA Region 4:'; 'James Little, EPA Region 4:'

Cc: Cascio, Tom; Adams, Patty; Gibson, Victoria **Subject:** DEP File No. 0850102-009-AC - DRAFT

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

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http://www.adobe.com/products/acrobat/readstep.html.

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Thank you,

DEP, Bureau of Air Regulation

Friday, Barbara

From:

Sent:

Harvey, Mary Wednesday, May 23, 2007 3:46 PM

To:

Adams, Patty

Subject:

FW: DEP File No. 0850102-009-AC - DRAFT

From: Buff, Dave [mailto:DBuff@GOLDER.com] **Sent:** Wednesday, May 23, 2007 3:45 PM

To: undisclosed-recipients

Subject: Read: DEP File No. 0850102-009-AC - DRAFT

Your message

To: DBuff@GOLDER.com

Subject:

was read on 5/23/2007 3:45 PM.

MEMORANDUM

To:

Trina Vielhauer

Through:

Scott Sheplak

From:

Tom Cascio

Date:

May 18, 2007

Subject:

Draft Air Construction Permit No. 0850102-009-AC

Indiantown Cogeneration Plant

Indiantown Cogeneration, L.P. owns and operates the Indiantown Cogeneration Plant, a facility that generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant. The facility includes one high-pressure pulverized coal main boiler (PC boiler).

The Indiantown facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD) system. Lime in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo. *Indiantown Cogeneration is proposing to add the capability to receive lime by railcar*.

This facility is an existing major PSD source. The new railcar lime unloading system will have a minimal effect on particulate matter (PM) emissions, and no effect on the emissions of any other air pollutants. Specifically, PM emission increases directly caused by the project would be only on the order of 1 ton per year (TPY).

The application was deemed complete on April 18, 2007. Day 90 is July 17, 2007.

I recommend your signature and forwarding to Patty for clerking.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

May 23, 2007

Electronically sent - Received Receipt requested.

Mr. Gary Willer, General Manager: <u>Gary.Willer@cogentrix.com</u> Indiantown Cogeneration, L.P. P.O. Box 1799
13303 SW Silver Fox Lane Indiantown, Florida 34596

Re: DEP File No. 0850102-009-AC Indiantown Cogeneration Plant

Dear Mr. Willer:

Enclosed is one copy of the Draft Air Construction Permit to modify the lime unloading system at the Indiantown Cogeneration Plant in Indiantown, Martin County. The Department's Intent to Issue Air Construction Permit, the Technical Evaluation and Preliminary Determination, and the Public Notice of Intent to Issue Air Construction Permit are also included.

The Public Notice must be published one time only as soon as possible in a newspaper of general circulation in the area affected, pursuant to the requirements of Chapter 50, Florida Statutes. Proof of publication, such as a 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 within the allotted time may result in denial of the permit.

Please submit any written comments you wish to have considered concerning the Department's proposed action to A.A. Linero, Program Administrator, at the letterhead address. If you have any questions regarding this matter, please contact Tom Cascio at (850) 921-9526 or Mr. Linero at (850) 921-9523.

Sincerely,

Trina L. Vielhauer, Chief Bureau of Air Regulation

TLV/aal/tbc

Enclosures

In the Matter of an Application for Permit by:

Indiantown Cogeneration, L.P. P.O. Box 1799 13303 SW Silver Fox Lane Indiantown, Florida 34596

Authorized Representative:

Mr. Gary Willer, General Manager

DEP File No. 0850102-009-AC Indiantown Cogeneration Facility Modification of Emissions Unit 006 Railcar Lime Unloading System Martin County, Florida

INTENT TO ISSUE AIR CONSTRUCTION PERMIT

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit, copy of Draft Air Construction Permit attached, for the proposed project as detailed in the application specified above and the enclosed Technical Evaluation and Preliminary Determination for the reasons stated below.

Indiantown Cogeneration, L.P. applied on March 13, 2007, to the Department for a permit to modify the lime handling system at its facility in Indiantown, Martin County.

The Department has permitting jurisdiction under the provisions of Chapter 403, Florida Statutes (F.S.), Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-212. The above actions are not exempt from permitting procedures. Department has determined that an air construction permit is required.

The Department intends to issue this air construction permit 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 Air Construction Permit. 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 850/921-9533). You must provide proof of publication within seven days of publication, pursuant to Rule 62-110.106(5) & (9), 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 the enclosed Public Notice. Written comments should

DEP File No. 0850102-009-AC Indiantown Cogeneration, L.P. Page 2 of 3

be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 32399-2400. Any written comments filed shall be made available for public inspection. If comments received result in a change in the proposed agency action, the Department shall revise the proposed permit and require, if applicable, another Public Notice.

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

A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative proceeding (hearing) under sections 120.569 and 120.57 of the Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000. Petitions filed by the permit applicant or any of the parties listed below must be filed within fourteen days of receipt of this notice of intent. Petitions filed by any persons other than those entitled to written notice under section 120.60(3), F.S., must be filed within 14 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 (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

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 when and how the petitioner received notice of the agency decision; (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, including an explanation of how the alleged facts relate to the specific rules or statutes; 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, F.A.C.

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.

DEP File No. 0850102-009-AC Indiantown Cogeneration, L.P. Page 3 of 3

Executed in Tallahassee, Florida.

Trina L. Vielhauer, Chief Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Intent to Issue Air Construction Permit (including the Public Notice, Technical Evaluation, and the Draft permit) and all copies were sent electronically (with Received Receipt) before the close of business on 5/20/57 to the persons listed:

Gary Willer, ICLP: <u>Gary.Willer@cogentrix.com</u>
Nick Laryea, ICLP: <u>Nicholas.Laryea@cogentrix.com</u>
Darrel Graziani, SED: <u>Darrel.Graziani@dep.state.fl.us</u>

David A. Buff: dbuff@golder.com

Katy Forney, EPA Region 4: <u>forney.kathleen@epa.gov</u> James Little, EPA Region 4: <u>little.james@epa.gov</u>

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.

PUBLIC NOTICE OF INTENT TO ISSUE AIR CONSTRUCTION PERMIT

STATE OF FLORIDA

DEPARTMENT OF ENVIRONMENTAL PROTECTION

DEP File No. 0850102-009-AC

Indiantown Cogeneration Facility
Modification of Lime Handling System
Martin County

The Department of Environmental Protection (Department) gives notice of its intent to issue an air construction permit to Indiantown Cogeneration, L.P., to modify the lime handling system located at its facility in Martin County. A review under the rules for the Prevention of Significant Deterioration of Air Quality (PSD) and a determination of best available control technology (BACT) were not required. The applicant's name and address are Indiantown Cogeneration, L.P., 13303 SW Silver Fox Lane, Indiantown, Florida 34596.

The facility includes one high-pressure pulverized coal (PC) main boiler with electrical power output of approximately 330 megawatts, and two identical auxiliary boilers used for supplying steam to the steam host during times when the PC boiler is offline, as well as during PC boiler startup and shutdown periods. In addition, the facility has a variety of ancillary equipment needed to support operations as a coal-fired cogeneration plant.

The facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD) system. Lime in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo. Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year based on 365 days per year operation. This permit adds the capability for the facility to receive lime by railcar.

The new railcar lime unloading system will have a minimal effect on particulate matter (PM) emissions, and no effect on the emissions of any other air pollutants. Specifically, PM emission increases directly caused by the project would be only on the order of 1 ton per year (TPY). Further, the project will not cause or contribute to a violation of the ambient air quality standards and increment.

The Department will issue the Final Air Construction Permit 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 and requests for a public meeting 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 Air Construction Permit. Written comments should be provided to the Department's Bureau of Air Regulation at 2600 Blair Stone Road, Mail Station #5505, Tallahassee, Florida 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 of the Florida Statutes (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, F.S. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 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 14 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), F.S., must be filed within 14 days of publication of the public notice or within 14 days of receipt of this notice of intent, whichever occurs first. Under section 120.60(3), F.S., however, any person who asked the Department for

notice of agency action may file a petition within 14 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 in a proceeding initiated by another party 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 (F.A.C.).

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'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 decision; (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, including an explanation of how the alleged facts relate to the specific rules or statutes; 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, F.A.C.

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: 850/921-9533

Department of Environmental Protection Southeast District Office 400 North Congress Avenue West Palm Beach, Florida 33416-5425 Telephone: 407/681-6600

Fax: 407/681-6755

The complete project file includes the permit application, draft air construction permit, technical evaluation, and the information submitted by the responsible official, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Department's reviewing engineer for this project, Tom Cascio at MS 5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, or Tom.Cascio@dep.state.fl.us, or call 850/921-9526 for additional information. Key documents may also be viewed at: www.dep.state.fl.us/Air/permitting/construction.htm and clicking on Indiantown Cogeneration Plant in the power plant category.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

P.E. Certification Statement

Applicant:

Indiantown Cogeneration, L.P. Indiantown Cogeneration Plant

Project No.: 0850102-009-AC

Project Type: Air Construction Permit, Addition of Lime Railcar Unloading System

I HEREBY CERTIFY that the engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify aspects of the proposal of my area of expertise (including but not limited to the electrical, mechanical, structural, hydrological, and geological features).

Scott M. Sheplak

Professional Engineer (P.E.) License Number 48866

Permitting Authority:

Department of Environmental Protection Bureau of Air Regulation 111 South Magnolia Drive, Suite 4 Tallahassee, Florida 32301 Telephone: 850/921-9532

Fax: 850/921-9533

SMS/tbc

Indiantown Cogeneration, L.P.
Indiantown Cogeneration Plant
Railcar Lime Unloading System
Martin County

DEP File No. 0850102-009-AC



Florida Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Permitting South Section

May 23, 2007

1. GENERAL PROJECT INFORMATION

Applicant Name and Address

Indiantown Cogeneration, L.P. P.O. Box 1799
13303 S.W. Silver Fox Lane Indiantown, Florida 34956

Authorized Representative:

Mr. Gary E. Willer, General Manager

Processing Schedule

03/13/07: Received application to construct.
04/02/07: Requested additional information.
04/18/07: Received additional information.
##/##/##: Distributed Intent to Issue Permit.

Facility Description and Location

Indiantown Cogeneration, L.P. (Indiantown Cogeneration) owns and operates the Indiantown Cogeneration Plant; a facility that generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant. The facility includes one high-pressure pulverized coal main boiler (PC boiler), rated at 3,422 million British thermal units (MMBtu)/hour heat input, and has a nominal net electrical power output of approximately 330 megawatts (MW). It is designated emissions unit 1 (EU 001) in the Department's Air Resource Management System (ARMS). It is permitted to fire natural gas, propane, or No. 2 fuel oil for startup, shutdown, or load changes. It commenced commercial operation in July, 1995. The unit is equipped with low nitrogen oxides (NO_x) burners, overfire air, a steam coil air heater and air preheater, dual register burners and windbox design, a selective catalytic reduction system, a spray dryer absorber, and a fabric filter baghouse.

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

This facility is located 9 miles east of Lake Okeechobee, and 3 miles northwest of Indiantown, Martin County; Universal Transverse Mercator (UTM) Coordinates are: Zone 17, 422.3 km East and 2952.9 km North; Latitude: 27° 02' 20" North and Longitude: 80° 30' 45" West.

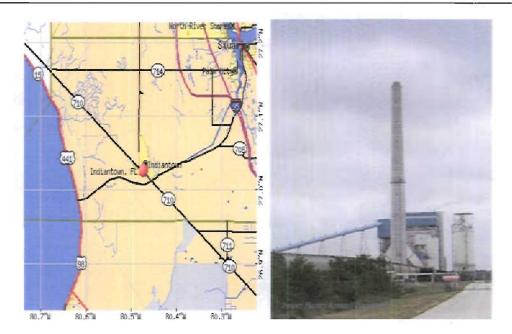


Figure 1. Map of Indiantown Site Location and Photograph of Indiantown Cogeneration Plant. Major Regulatory Categories

The key regulatory provisions applicable to the facility are:

Title I, Part C, Clean Air Act (CAA): The facility is located in an area that is designated as "attainment", "maintenance", or "unclassifiable" for each pollutant subject to a National Ambient Air Quality Standard (NAAQS). It is classified as a "fossil fuel-fired steam electric plant of more than 250 million BTU per hour of heat input", which is one of the 28 Prevention of Significant Deterioration (PSD) Major Facility Categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year, therefore the facility is classified as a "major stationary source" of air pollution with respect to Rule 62-212.400 F.A.C., Prevention of Significant Deterioration of Air Quality.

Title I, Section 111, CAA: The PC boiler is subject to Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978) of the New Source Performance Standards in 40 CFR 60.

Title I, Section 112, CAA: The facility is a "Major Source" of hazardous air pollutants (HAPs).

Title V, CAA: The facility is a Title V or "Major Source of Air Pollution" in accordance with Chapter 62-213, F.A.C., because the potential emissions of at least one regulated pollutant exceed 100 tons per year. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_X), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and volatile organic compounds (VOC). The plant currently operates under Title V Air Operations Permit No. 0850102-007-AV.

CAIR: The facility is subject to the Federal Clean Air Interstate Rule (CAIR) in accordance with the Final Department Rules issued pursuant to CAIR as implemented by FDEP in Rule 62-296.470, Florida Administrative Code (FAC).

CAMR: The facility is subject to the Federal Clean Air Mercury Rule (CAMR) implemented by the Department in Rule 62-296.480, F.A.C.

Siting: The facility is a steam electrical generating plant and is subject to the power plant siting provisions of Chapter 62-17, F.A.C.

Proposed Project

The Indiantown facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD) system. Lime in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo. Lime from the trucks is transported to the silo via pneumatic discharge at the rate of 25 tons per hour (TPH) (i.e., it requires one hour to unload a 25-ton truck) by using the on-board blowers to transfer the lime to the top of the silo. The stored lime is then slaked into a slurry for use in the PC boiler spray dryer absorber. The lime silo has a bin felt fabric filter baghouse. This Lime Handling System is enclosed to the extent practical. Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year (TPY) based on 365 days per year operation.

Indiantown Cogeneration is proposing to add the capability to receive lime by railcar. Unloading of the gravity flow-type railcars will be accomplished through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 TPH. It is estimated that it will take approximately 4 hours to unload a 100-ton railcar.

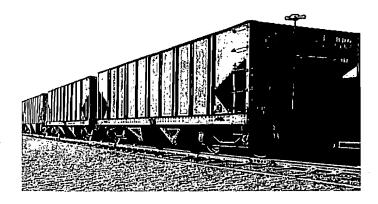


Figure 2. Photograph of a typical bottom dump railcar.

The lime will be unloaded directly from gravity-fed, bottom dump railcars through a receiving pan and bin clamped onto the flange at the bottom of the railcar. The bin will be located below ground level, and unloading will occur inside a building (open on either end to allow railcars to pass through). This procedure will keep the process material flowing from the railcar into the transport system and will minimize fugitive particulate matter (PM) dust emissions from the unloading process.

The lime will then enter a vacuum-type unloading system that transports the lime from the railcar to a filter receiver. The filter receiver acts as both a collection bin and a mechanism to clean the transport air of PM, since it has an integral baghouse (new control device, MAC Equipment, Inc., Air Vent Filter, Model 39AVR32, Style III). A rotary air lock will then feed the lime into the air lock surge hopper, which will have a vent to control the pressure differential across the airlock. A baghouse (new control device, MAC Equipment, Inc., 39RTC, Style II) will control the PM emissions from the surge hopper vent. The lime will then enter a secondary rotary air lock, which will feed into the air stream created from a transporter blower, which transports the lime pneumatically to the existing lime silo. The lime silo currently has a dust collector (existing baghouse), and this will continue to be used in the future.

As described above, a baghouse is integral to the filter receiver on the railcar unloading system, which reduces PM emissions associated with unloading the railcars. The existing bin vent filter baghouse (BHA

Model JP-H14) on the lime silo will continue to serve to reduce the PM emissions associated with loading the silo.

Interface with Existing Lime Handling Equipment

As noted above, lime is currently delivered to the facility by pressurized discharge from trucks and vented through the lime vent filter. The new railcar lime unloading system will use a vacuum exhauster to provide negative pressure into the filter receiver. The new lime transport system will then interface with the existing transport piping to the lime silo. The lime will be conveyed to the lime silo from the filter receiver by a blower through a rotary air lock. The exhaust from the lime silo will continue to be vented through the existing lime silo vent filter.

The existing 4-inch transport piping up the side of the lime silo will remain, and a new 6-inch line will be added. This new line will terminate at a 90-degree elbow that will direct the new lime stream through a new penetration in the roof of the lime silo. This new penetration will be near the penetration for the existing supply line. The existing supply line will be kept in place in order to account for possible railcar supply interruptions, which would make it necessary to receive lime deliveries by trucks.

2. EFFECTS ON EMISSIONS

Applicant's basic analysis

It is expected that implementing the proposed project will have a minimal effect on the PM emissions from the Lime Handling System, designated as emission unit 6 (EU 006) in the ARMS data base. No effect on other pollutant emissions is expected. As described above, the new railcar lime unloading system includes one existing and two new baghouse vents. The railcar lime unloading system will become an integral part of the overall system design. PM emissions from the Lime Handling System are currently limited by Title V Air Operation Permit No. 0850102-007-AV, which contains the following specific condition:

E.5. <u>Particulate Matter</u>. Particulate matter emissions from bag filter exhausts from the lime handling system shall be limited to 0.010 grains per actual cubic foot. [PSD-FL-168, Specific Condition No. 11]

The Applicant reports that Indiantown Cogeneration, L.P. has obtained a manufacturer's guarantee that the outlet loading for the new two baghouse vents (bag filter exhausts) will not exceed 0.010 grains per actual cubic foot. Note that this limit is equal to the existing PM outlet loading limit specified in Specific Condition **E.5.** of the facility's current Title V Air Operation Permit.

Using appropriate volumetric flow data, estimates of the potential to emit (PTE) PM in pounds per hour (lb/hr) and tons per year (TPY) from the three baghouse vents in the modified lime handling system are calculated and noted in the table below:

Source	Control Equipment	Exhaust Flow (acfm)	Permitted Exhaust Grain Loading (gr/acf)	Operating Hours (hr/yr)		Emit (PTE) mission Rate (TPY)
Lime Silo (existing system)	Baghouse	2,000	0.010	8,760	0.17	0.75
Railcar Unloading Filter Receiver (new system)	Baghouse	1,570	0.010	8,760	0.13	0.59
Surge Hopper (new system)	Baghouse	86	0.010	8,760	0.01	0.03
			·	Totals (new system with 2 additional baghouses)	0.31	1.37

Note: acfm = actual cubic feet per minute; gr/acf = grains per actual cubic foot; hr/yr = hours per year; lb/hr = pounds per hour; and TPY = tons per year.

The Applicant indicated that although the design airflow for the blower is 1,500 internal cubic per minute (icfm) when the system is operating at 25 TPH of lime being transported, using 2,000 acfm as the exhaust flow rate through the lime silo baghouse provides for a margin of error when computing PTE estimates. Analysis of this tabular data shows that the total PTE of the new system is only 1.37 tons per year.

3. REGULATIONS THAT APPLY TO THE PROJECT

State Regulations

This project is subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The Florida Statutes authorize the Department of Environmental Protection to establish rules and regulations regarding air quality as part of the Florida Administrative Code (F.A.C.). This project is subject to the applicable rules and regulations defined in the following Chapters of the Florida Administrative Code. These include: 62-4 (Permitting Requirements); 62-204 (Ambient Air Quality Requirements, PSD Increments, and Federal Regulations Adopted by Reference); 62-210 (Permits Required, Public Notice, Reports, Stack Height Policy, Circumvention, Excess Emissions, and Forms); 62-212 (Preconstruction Review, PSD Review and BACT); 62-213 (Title V Air Operation Permits for Major Sources of Air Pollution); 62-296 (Emission Limiting Standards); and 62-297 (Test Methods and Procedures, Continuous Monitoring Specifications, and Alternate Sampling Procedures).

4. DETERMINATION WHETHER PROJECT IS A (NON-MAJOR) MODIFICATION

Per Rule 62-210.200(203), F.A.C., a modification is defined as follows:

"Modification" – Any physical change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any air pollutant subject to regulation under the Act, including any not previously emitted, from any emissions unit or facility.

- (a) A physical change or change in the method of operation shall not include:
 - 1. Routine maintenance, repair, or replacement of component parts of an emissions unit; or
 - 2. A change in ownership of an emissions unit or facility.
- (b) & (c) (Not relevant in this analysis)

The installation of the railcar lime unloading system is a physical change that involves additional components. It is not <u>routine</u> maintenance, repair or replacement of component parts of an emissions unit. If increases in actual emissions accompany the physical change, then the project constitutes a modification.

Per Rule 62-210.200(11), F.A.C., actual emissions are defined as follows:

"Actual Emissions" – The actual rate of emission of a pollutant from an emissions unit as determined in accordance with the following provisions:

(a) In general, actual emissions as of a particular date shall equal the average rate, in tons per year, at which the emissions unit actually emitted the pollutant during a consecutive 24-month period which precedes the particular date and which is representative of the normal operation of the emissions unit. The Department shall allow the use of a different time period upon a determination that it is more representative of the normal operation of the emissions unit. Actual emissions shall be calculated using the emissions unit's actual operating hours, production rates and types of materials processed, stored, or combusted during the selected time period.

Actual emissions are calculated as reported in Annual Operating Reports in tons per year (TPY) as noted below:

Year	PM	PM ₁₀
	TPY	TPY
2001	.0009	.0004
2002	.0009	.0005
2003	.1	N/A
2004	.001	.001
2005	.002	.001

The following table is a comparison of past actual emissions from the Lime Handling System preceding the planned Railcar Lime Unloading System project, and the potential emissions of the new system.

Pollutant	Actual Emissions 2004-2005 tons per year	Potential Emissions tons per year (new system)	Calculated Increase tons per year
PM/PM ₁₀	.001	1.37	1.369

Based on the foregoing analysis, the Railcar Lime Unloading System project constitutes a (non-major) modification with respect to the Department's rules and requires a construction permit.

5. OTHER APPLICABLE REGULATIONS

The requirements already listed in the facility's existing Title V Air Operation Permit No. 0850102-007-AV are comprehensive and sufficient for the future operation of the facility. The main additional requirement is for an air construction permit pursuant to Rules 62-4, 62-210 and 62-212.300, F.A.C., to proceed with the project. The permit will include testing and recordkeeping conditions demonstrating that the project complies with the specified emissions standards.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

PERMITTEE

Indiantown Cogeneration, L.P.
P.O. Box 1799
13303 SW Silver Fox Lane
Indiantown, Florida 34596
Authorized Representative:
Mr. Gary Willer, General Manager

Air Permit No. 0850102-009-AC Facility ID No. 0850102 SIC No. 4931 Railcar Lime Unloading System

Permit Expires: December 31, 2008

PROJECT AND LOCATION

This permit authorizes installation of a railcar lime unloading system as an integral part of the Lime Handling System, designated as EU 006 by the Department of Environmental Protection (Department) Air Resource Management System, located at the Indiantown Cogeneration Plant (the facility). The facility is located in Martin County at 13303 SW Silver Fox Lane, Indiantown, Florida 34596.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.) and Title 40, Parts 60 and 63 of the Code of Federal Regulations (CFR). The permittee is authorized to install the proposed equipment in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department.

CONTENTS

Section 1. General Information

Section 2. Administrative Requirements.

Section 3. Emissions Units Specific Conditions

Section 4. Appendices

	_
Joseph Kahn, Director Division of Air Resource Management	(Date)

FACILITY AND PROJECT DESCRIPTION

Indiantown Cogeneration, L.P. (Indiantown Cogeneration) owns and operates the Indiantown Cogeneration Plant, a facility that generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant. The facility includes one high-pressure pulverized coal main boiler (PC boiler), rated at 3,422 million British thermal units (MMBtu)/hour heat input, and has a nominal net electrical power output of approximately 330 megawatts (MW). It is designated as emissions unit 1 (EU 001) in the Department's Air Resource Management System (ARMS). It is permitted to fire natural gas, propane, or No. 2 fuel oil for startup, shutdown, or load changes. It commenced commercial operation in July, 1995. The unit is equipped with low nitrogen oxides (NO_x) burners, overfire air, a steam coil air heater and air preheater, dual register burners and windbox design, a selective catalytic reduction system, a spray dryer absorber, and a fabric filter baghouse.

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

The Indiantown facility uses lime (calcium oxide) as a reactant in the PC boiler flue gas desulfurization (FGD) system. Lime in powdered form is currently delivered to the facility by truck. The lime is then off-loaded into an existing 900-ton storage silo. Lime from the trucks is transported to the silo via pneumatic discharge at the rate of 25 tons per hour (TPH) (i.e., it requires one hour to unload a 25-ton truck) by using the on-board blowers to transfer the lime to the top of the silo. The stored lime is then slaked into a slurry for use in the PC boiler spray dryer absorber. The lime silo has a bin felt fabric filter baghouse. This Lime Handling System (EU 006) is enclosed to the extent practical. Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year (TPY) based on 365 days per year operation.

Indiantown Cogeneration is proposing to add the capability to receive lime by railcar. Unloading of the gravity flow-type railcars will be accomplished through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 TPH. It is estimated that it will take approximately 4 hours to unload a 100-ton railcar.

ID		Emission Unit Description	
006	Lime Handling System		•

REGULATORY CLASSIFICATION

<u>NESHAP</u>: The facility is a potential major source of hazardous air pollutants. The facility does not operate units subject to the National Emission Standards for Hazardous Air Pollutants (NESHAP) in 40 CFR 63.

<u>Title IV</u>: The facility does not operate existing units subject to the Acid Rain provisions of the Clean Air Act (CAA).

Title V: The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.

PSD: The facility is a PSD-major stationary source in accordance with Rule 62-212.400, F.A.C.

NSPS: The facility operates units subject to New Source Performance Standards (NSPS) in 40 CFR 60 including:

• 40 CFR 60, Subpart A - General Provisions.

• 40 CFR 60, Subpart Da (Standards of Performance for Electric Utility Steam Generating Units for Which Construction is Commenced After September 18, 1978).

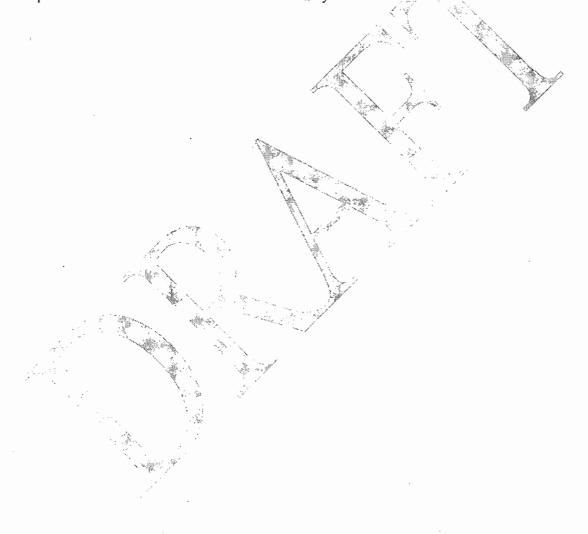
<u>CAIR</u>: The facility is subject to the Clean Air Interstate Rule (CAIR).

<u>CAMR</u>: The facility is subject to the Clean Air Mercury Rule (CAMR).

<u>Siting</u>: The facility is a steam electrical generating plant and IS subject to the power plant siting provisions of Chapter 62-17, F.A.C.

RELEVANT DOCUMENTS

The following relevant documents are not a part of this permit, but helped form the basis for this permitting action: the permit application and additional information received to make it complete; and the Department's Technical Evaluation and Preliminary Determination.



- 1. <u>Permitting Authority</u>: The Permitting Authority for this project is the Bureau of Air Regulation in the Division of Air Resource Management of the Department. The mailing address for the Bureau of Air Regulation is 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400.
- 2. <u>Compliance Authority</u>: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Southeast District Office. The mailing address and phone number of the Southeast District Office is: 400 North Congress Avenue, West Palm Beach, Florida 33416-5425, Telephone: 407/681-6600, Fax: 407/681-6755.
- 3. <u>Appendices</u>: The following Appendices are attached as part of this permit: Appendix GC (General Conditions); and Appendix C (Common State Regulatory Requirements).
- 4. <u>Applicable Regulations, Forms and Application Procedures</u>: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
- 5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- 6. <u>Modifications</u>: No emissions unit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
- 7. <u>Title V Permit</u>: This permit authorizes specific modifications and/or new construction on the affected emissions units as well as initial operation to determine compliance with conditions of this permit. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after completing the required work and commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Bureau of Air Regulation with copies to each Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

This section of the permit addresses the following emissions unit.

AIR RESOURCE MANAGEMENT SYSTEM (ARMS) Emissions Unit 006

The Lime Handling System is comprised of different conveying and storage units. Currently, lime arrives at the facility in powdered form via truck. Lime is slaked into a slurry for use in the pulverized coal (PC) boiler spray dryer absorber. The lime silo has a bin vent fabric filter baghouse. The lime handling system is enclosed to the extent practical. The overall capacity is 25 tons per hour. Because the potential to emit particulate matter (PM) is below the major source threshold, this emissions unit is not subject to CAM.

{Permitting Note: The unit remains subject to the applicable requirements of current Title V Air Operation Permit No. 0850102-007-AV.}

PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for this emissions unit. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulatory requirements. The permittee shall continue to comply with the conditions of these permits, which include restrictions and standards regarding capacities, production, operation, fuels, emissions, monitoring, record keeping, reporting, etc. [Rule 62-4.070, F.A.C.]

EQUIPMENT AND PERFORMANCE RESTRICTIONS

2. <u>Railcar Lime Unloading System</u>: This permit authorizes the construction activities necessary to add a railcar lime unloading system to ARMS Emissions Unit 006. In general, the equipment consists of a system that allows the unloading of the gravity flow type railcars through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 tons per hour (TPH) of lime. It is estimated that it will take approximately 4 hours to unload a 100-ton railcar.

The modified Lime Handling System includes an existing lime silo bin vent filter baghouse, a new filter receiver baghouse, and a new surge hopper baghouse. [Applicant request.]

{Permitting Note: This permit does not alter any previous requirements for other methods of operation or allowable hours of operation}

EMISSIONS STANDARDS

- 3. <u>Visible Emissions (VE):</u> Visible emissions from each of the three lime handling system baghouses shall not exceed 5% opacity.
 [PSD-FL-168, Specific Condition No. 8.]
- 4. Particulate Matter (PM): Particulate matter emissions from each bag filter exhaust of the lime handling system shall be limited to 0.010 grains per actual cubic foot. [PSD-FL-168, Specific Condition No. 11; and Applicant request.]
- 5. <u>Visible Emissions</u>: A visible emission reading of 5% opacity or less may be used to establish compliance with the emission limit in Specific Condition 4. A visible emission reading greater than 5% opacity will not create a presumption that the 0.010 grains per actual cubic foot emission limit is being violated. However, a visible emission reading greater than 5% opacity will require the permittee to perform a stack test.

[PSD-FL-168, Specific Condition No. 11.]

EMISSIONS PERFORMANCE TESTING

- 6. <u>Initial Compliance Tests</u>: Each unit shall be tested to demonstrate initial compliance with the VE and PM emissions standards specified in this permit. The initial tests shall be conducted within 60 days after completing construction of the project and achieving maximum production capacity, but not later than 180 days after initial operation of the unit with the railcar lime unloading system. [Rule 62-297.310(7)(a)1., F.A.C.]
- 7. Annual Compliance Tests: During each federal fiscal year (October 1st to September 30th), each unit shall be tested to demonstrate compliance with the VE and PM emissions standards specified in this permit.

[Rule and 62-297.310(7)(a)4, F.A.C.]

- 8. <u>Test Notifications</u>: At least 15 days prior to the date on which each required test is to begin, the permittee shall notify the Compliance Authority of the date, time, and place of each test. The notification shall also include the name and phone number of the contact person who will be responsible for coordinating and having the tests conducted. [Rule 62-297.310(7)(a)9, F.A.C.]
- 9. <u>Visible Emissions:</u> EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C. [PSD-FL-168, Specific Condition No. 19.]
- 10. Opacity: Tests must be conducted with a lime railcar unloading into the lime handling system, from start to finish. Emissions shall not be visible more than two minutes in any fifteen minute period. Compliance with fugitive emissions limitations from all transfer points will be determined by EPA/DEP reference Method 22 and opacity Method 9.

 [PSD-FL-168, Specific Conditions No. 12. and 19.; and Rule 62-4:070(3), F.A.C.]
- 11. <u>Particulate Matter:</u> EPA Method 5 shall be used to determine compliance with the particulate matter emissions limitation specified in Specific Condition 4. [PSD-FL-168, Specific Condition No. 19.]

NOTIFICATIONS, RECORDS AND REPORTS

- 12. Construction Notifications: Within 15 days of beginning construction, the permittee shall notify the Compliance Authority that construction has commenced. Within 15 days of completing construction, the permittee shall notify the Compliance Authority that construction has concluded. Each notification shall include an updated proposed schedule of activities through the initial shakedown period and initial testing. [Rule 62-4.070(3), F.A.C.]
- 13. <u>Test Reports</u>: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in the facility's current Title V Air Operation Permit. [Rule 62-297.310(8), F.A.C.]

SECTION 4. APPENDIX C

COMMON STATE REGULATORY REQUIREMENTS

{Permitting Note: Unless otherwise specified by permit, the following conditions apply to all emissions units and activities at the facility.}

EMISSIONS AND CONTROLS

- Plant Operation Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
- 2. <u>Circumvention</u>: The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
- 3. Excess Emissions Allowed: Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
- 4. <u>Excess Emissions Prohibited</u>: Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
- 5. Excess Emissions Notification: In case of excess emissions resulting from malfunctions, the permittee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
- 6. <u>VOC or OS Emissions</u>: No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
- 7. Objectionable Odor Prohibited: No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(217), F.A.C.]
- 8. <u>General Visible Emissions</u>: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. This regulation does not impose a specific testing requirement. [Rule 62-296.320(4)(b)1, F.A.C.]
- 9. <u>Unconfined Particulate Emissions</u>: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

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

COMMON STATE REGULATORY REQUIREMENTS

- 11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
- 12. <u>Calculation of Emission Rate</u>: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
- 13. <u>Test Procedures</u>: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.
 - b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
 - c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

14. Determination of Process Variables:

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

- 15. <u>Sampling Facilities</u>: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.
- 16. <u>Test Notification</u>: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]
- 17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]
- 18. <u>Test Reports</u>: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to

SECTION 4. APPENDIX C

COMMON STATE REGULATORY REQUIREMENTS

determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

- 1. The type, location, and designation of the emissions unit tested.
- 2. The facility at which the emissions unit is located.
- 3. The owner or operator of the emissions unit.
- 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
- 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
- 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
- 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
- 8. The date, starting time and duration of each sampling run.
- 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
- 10. The number of points sampled and configuration and location of the sampling plane.
- 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
- 12. The type, manufacturer and configuration of the sampling equipment used.
- 13. Data related to the required calibration of the test equipment.
- 14. Data on the identification, processing and weights of all filters used.
- 15. Data on the types and amounts of any chemical solutions used.
- 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
- 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
- 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
- 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
- 20. The applicable emission standard and the resulting maximum allowable emission rate for the emissions unit plus the test result in the same form and unit of measure.
- 21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

- 19. Records Retention: All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
- 20. <u>Annual Operating Report</u>: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

General Permit Conditions

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

- 1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- 2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- 3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- 4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- 5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- 6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- 7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
 - a. Have access to and copy and records that must be kept under the conditions of the permit;
 - b. Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

Reasonable time may depend on the nature of the concern being investigated.

- 8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
 - a. A description of and cause of non-compliance; and
 - b. The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

The permittee shall be responsible for any and all damages which may result and may be subject to enforcement action by the Department for penalties or for revocation of this permit.

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source

General Permit Conditions

arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

Golder Associates Inc.

6241 NW 23rd Street, Suite 500 Gainesville, FL USA 32653 Telephone (352) 336-5600 Fax (352) 336-6603 www.golder.com



April 13, 2007

RECEIVED

073-87554

Florida Department of Environmental Protection **Bob Martinez Center** 2600 Blair Stone Road Tallahassee, FL 32399-2400

APR 18 2007

BUREAU OF AIR REGULATION

Attention: Mr. A. A. Linero, P.E., Program Administrator, Permitting South Section

INDIANTOWN COGENERATION PLANT

DEP FILE NO. 0850102-009-AC

RAILCAR LIME UNLOADING SYSTEM

RESPONSE TO APRIL 2, 2007 REQUEST FOR ADDITIONAL INFORMATION

Dear Mr. Linero:

Indiantown Cogeneration, L.P. (IC) and Golder Associates Inc. (Golder) have received the Florida Department of Environmental Protection (FDEP) letter dated April 2, 2007, regarding the air construction permit application for the railcar lime unloading system. The request for additional information (RAI) contains a total of six comments. Each of these comments is responded to below, in the same order as they appear in the RAI.

Comment 1 Does the project involve the construction of a new rail line at the facility? If yes, what is your estimate of pollutant emissions due to the construction activities?

Response: The project does not involve construction of a new rail line at the facility, as the existing rail line will be used.

Comment 2 Will a new lime unloading building be required? If yes, what is your estimate of

pollutant emissions due to the construction?

Response: The project does not involve construction of a new lime unloading building.

Comment 3 Do you expect significant particulate matter fugitive emissions from the railcar

unloading system operations?

Response: There are no significant particulate matter (PM) fugitive emissions expected from the railcar unloading system, as the system will be completely enclosed. All exhausts will go through fabric filters with vendor-guaranteed outlet loadings of no more than 0.010 grains per actual cubic foot (gr/acf).

Comment 4 Please provide detailed schematic drawings of the new railcar unloading system, including interfaces with existing lime handling and pollution control equipment.

Response: A schematic flow diagram of the proposed system was shown in Attachment IC--EU1-I1 of the application. This diagram shows the existing facilities as well as the proposed facilities. Only the lime silo is included in the existing facility.

Previously, lime was delivered to the facility by pressurized discharge from trucks and vented through the lime silo vent filter. The railcar lime unloading system will use a vacuum exhauster to provide negative pressure into the filter receiver, which acts as both a collection bin and a mechanism to clean the transport of dust particles, since it has an integral baghouse. The new lime transport system will then interface with the existing transport piping to the lime silo. The lime will be conveyed to the lime silo from the filter receiver by a blower through a rotary air lock. The exhaust from the lime silo will continue to be vented through the exiting lime silo vent filter.

The existing 4-inch transport piping up the side of the lime silo will remain, and a new 6-inch line will be added. This new line will terminate at a 90-degree elbow that will direct the new lime stream through a new penetration in the roof of the lime silo. This new penetration will be near the penetration for the existing supply line. The existing supply line will be kept in place in order to account for possible railcar supply interruptions, which would make it necessary to receive lime deliveries by trucks.

In the original air construction permit application submitted to the FDEP, exhaust from the airlock surge hopper was vented back to the filter receiver. It has been determined that this design could potentially cause a too-high pressure differential across the rotary airlock. In order to alleviate this concern, another exhaust point has been added to the surge hopper allowing airlock leakage air to escape while keeping the surge hopper at roughly atmospheric pressure and ensuring that the pressure differential across the airlock is 15 pounds per square inch gauge (psig) or less. A baghouse with a cartridge filter will control the PM emissions. Revised application pages and schematic drawings have been provided as attachments to this response.

Comment 5 Please provide more details on the manufacturer's specifications of all new equipment, including the new baghouse (for example, electric power requirements, physical dimensions, etc.).

Response: The following list contains the new equipment being considered for purchase for the railcar lime unloading system. Final design engineering may dictate the purchase of different but equivalent equipment.

• Six Railcar Vacuum Pan Adapters – Six railcar vacuum unloading pans; two sized to fit a "6 pocket" car hopper, two sized to fit square hoppers (30 inches x 30 inches), and two sized to fit rectangular hoppers (14 inches x 42 inches). The design of the unloading pan is of the low-profile-type and will be capable of being connected to the outlet hopper flange of the railcar with clamps provided with the unloading pan. The pan will have an air inlet with a manually adjustable opening and be supplied with a 6-inch cam-type quick coupling for connection to the flexible metal unloading hose.

- One Group of Vacuum Conveying Line Approximately 80 feet (ft) of 6-inch schedule 40 carbon steel pipe. The vacuum conveying line will include a pipe manifold with five lateral connections, each with a quick disconnect cam-type coupler capped with a dust cap and chain. The vacuum manifold that runs parallel to the track will be installed approximately 3 ft above the existing grade. Also included will be three 6-inch 90-degree carbon steel Hammertech elbows with flanged connections, twelve 6-inch plate flange sets, three 6-inch-internal-diameter 12-ft long flexible steel hose with quick coupling, and five aluminum quick couplings.
- One AVR Air Vent Filter Model 39AVRC32, Style III, Vacuum Filter/Receiver One carbon steel air vent vacuum filter/receiver and structural support frame, with the capability of receiving pebble lime at a rate of 25 tons per hour (TPH), discharging into a double rotary valve airlock beneath it. The vacuum filter/receiver will have 1,152 square feet (ft²) of filter media, providing an air-to-cloth ratio of 1.36:1 at 1,570 cubic feet per minute (cfm). The pressure drop across the filter will be up to 17 inches of mercury, and have an efficiency of 99.9 percent. The filter/receiver will contain a mineral-reinforced nylon bag cup and venturi, and 6-inch diameter by 39-inch-long pleated cartridge filters. The unit requires 6.5 standard cubic feet per minute (scfm) at 90 to 100 pounds per square inch (psi), and 120 volts alternating current (VAC). The product discharge flange will mate to the first rotary airlock.
- Two Multi-Duty Wear Resistant Rotary Airlock, Model MD-139 A rotary airlock capable of delivering 25 TPH from the discharge of the air vent filter and transferring the material to a second rotary airlock. The rotary airlock will feature cast class 40 gray iron housing and end plates, a TS4 seal assembly, outboard sealed bearings, and an 8-vane, closed-end, carbon-steel rotor with fixed relieved 1/8-inch land rotor tips. The rotary airlock motor will be a right-angle drive, 2-horsepower totally enclosed fan cooled (TEFC) gear motor, and require 120 VAC.
- One Inline Filter Model ILFB-8 A pleated cartridge-type filter to be installed between the discharge of the vacuum filter/receiver and the inlet side of the vacuum pump. The filter will be sized to pass the intake air volume of the vacuum pump when operating at its full rated speed. A differential pressure switch will initiate an alarm and shutdown of the system upon the condition of a high-differential pressure. This unit requires 120 VAC.
- One Group of Clean Air Vacuum Line Approximately 40 ft of 8-inch schedule 10 carbon steel pipe, with two 8-inch, 90-degree schedule 10 carbon steel elbows, and six 8-inch plate flange sets.
- One Vacuum Pump Package, Model 566 A rotary lobe-type positive displacement vacuum pump with an inlet flexible connector, discharge flexible connector, inlet silencer, and full-welded, carbon steel base with a spring-loaded vacuum relief valve set at 15 inches of mercury. The vacuum pump will be driven by a 100 horsepower, 1,800 revolutions-per-minute (rpm) motor, and require 120 VAC.

- One Vacuum Pump Sound Enclosure A sound enclosure to reduce the noise level 3 ft from the vacuum pump to below 85 decibels (dB). It will be made of aluminum construction, with 2-3/4-inch polyurethane acoustical foam, which is resistant to heat and oils. The unit will be approximately 54 inches wide, 89 inches long, and 111 inches tall, and have a 750-cfm ventilation fan.
- One Pressure Blower Package, Model 526 A rotary lobe-type positive displacement blower package with features similar to the vacuum pump package. The unit will include a high-pressure switch set at 15 psi, and a 125-horsepower, 1,800-rpm motor requiring 120 VAC.
- One Pressure Blower Sound Enclosure A sound enclosure with similar specifications to the vacuum pump sound enclosure.
- One Group of Clean Pressurized Air Line Approximately 40 ft of 6-inch, schedule 10 carbon steel pipe. The pipe will include two 6-inch, 90-degree schedule 10 carbon steel elbows, and six 6-inch plate flange sets.
- One Airlock Surge Hopper Between the two rotary valves will be a carbon steel airlock surge hopper with 60-degree minimum sloped sides and one straight side. The inlet stub will connect to the rotary airlock. The unit will include a 4-inch dust draw-off stub, a level indicator mounted for high-level indication, and an 8-inch-diameter bolted access door.
- One Airlock Surge Hopper Vent Filter Model 39RTC1, Style II Airlock surge hopper vent ensures that the pressure differential across the airlock is 15 psig or less. The cartridge filter is of the same type as used in the Vacuum Filter/Receiver, with a 6-inch diameter and 39-inch length. This unit has a designed airflow of 86 cfm, 36 ft² of filter media, and a 2.39:1 airto-cloth ratio.
- One Control Panel A control panel with an Allen-Bradley MicroLogix 1500 PLC for control of the lime unloading system. The control panel will have a NEMA 4X enclosure with indicating lights for control power on, vacuum pump run, vacuum breaker closed, high vacuum, vacuum pump inline filter high differential pressure, receiver filter run, receiver filter high differential pressure, receiver high level, airlock run, pressure blower run, high pressure, silo bin vent filter run, silo bin vent filter high differential pressure, silo vent fan run, and silo high level. The NEMA 4X will have control operators for emergency stop, system stop, system start, vacuum pump hand operation/off/automatic operation, vacuum breaker hand/off/auto, receiver filter hand/off/auto, pressure blower hand/off/auto, receiver airlock hand/off/auto, silo vent filter hand/off/auto, silo vent hand/off/auto, and alarm silence. Audible alarms with alarm silence will be available for high vacuum and high pressure.

Comment 6 Please provide the basis for the flow rate (i.e., 2000 actual feet per minute) noted in Attachment IC-EU1-F1.10.

Response: The basis of using 2,000 actual cubic feet per minute (acfm) as the exhaust flow rate through the lime silo baghouse is that the design airflow for the blower is 1,500 internal cubic feet per minute (icfm) when the system is operating at 25 TPH of lime being transported. Because pneumatic conveying is an inexact science, a margin of error was provided to ensure that the 25 TPH of lime transport could be maintained. The manufacturer of the lime silo vent filter has stated that the baghouse would continue to function properly at airflow rates above 2,000 cfm, though the filters might need to be replaced more frequently, perhaps as often as once per year. The design airflow rate for the vacuum system (airflow through the filter receiver system) is 1,625 icfm.

Thank you for consideration of this additional information. Please call at (352) 336-5600 if you have any further questions.

Sincerely,

GOLDER ASSOCIATES INC.

David A. Buff, P.E., Q.E.P.

Principal Engineer

Philip D. Cobb, Ph.D., E.I.

Engineer

DB/all

Enclosures

cc: N. Laryea

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UPDATES TO AIR CONSTRUCTION APPLICATION

APPLICATION INFORMATION

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name:

Gary E. Willer, General Manager

2. Owner/Authorized Representative Mailing Address...

Organization/Firm: Indiantown Cogeneration, L.P.

Street Address: P.O. Box 1799

City: Indiantown

State: FL

Zip Code: **34956**

3. Owner/Authorized Representative Telephone Numbers...

Telephone: (772) 597-6500

ext.

Fax:

(772) 597-6210

4. Owner/Authorized Representative Email Address: GaryWiller@cogentrix.com

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

Say E. William Signature 4/16/07 Date

DEP Form No. 62-210.900(1) – Form Effective: 2/2/06

1.	Professional E	ngineer Name: I	David A. Bu	ıff			
		tion Number: 19					
2.							
	-	Firm: Golder Ass					
		ress: 6241 NW 2	•			7 . 6 . 1	
		City: Gainesville		State: FL	-	Zip Code: 3265 3	3
3.		-			7 (2)		
1	Telephone: (3		ext.5		Fax: (352)	336-6603	
	Professional E			ип@док	der.com		
٥.		· ·		. 1.	1 , 11	* .1	
	_	ed, hereby certify			-		
	unit(s) and the a properly operate	uir pollution contr ed and maintaine	rol equipme d, will comp	nt describ ly with a	bed in this d ll applicab	hat the air pollutant en application for air per le standards for contro Department of Enviro	mit, when ol of air
	(2) To the best of are true, accura calculating emisemissions unit a calculations sub	tte, and complete ssions or, for emi. ddressed in this o mitted with this o	and are eith ssion estima application, application.	er based tes of ha based so	upon reaso zardous air lely upon th	l or relied on in this ap onable techniques ava pollutants not regula he materials, informat	ilable for ted for an ion and
	so), I further cer properly operat application to w	rtify that each em ed and maintaine	issions unit d, will comp ubject, excep	described bly with the ot those e	d in this ap he applicab	ration permit (check h plication for air permi ble requirements identi nits for which a compl	it, when fied in this
	concurrently pro revision or rene so), I further cer application have found to be in co	ocess and obtain wal for one or mo rtify that the engine e been designed o	an air const ore proposed neering feat or examined und enginee	ruction p d new or ures of ec by me or ring prin	ermit and o modified en ach such en individual	ion permit (check here a Title V air operation missions units (check h nissions unit described s under my direct supe licable to the control o	permit here □, if l in this ervision and
N. S.	revision or rene	wal for one or mo certify that, with t ions unit has bee	ore newly co he exception n constructe onding appli	enstructed of any c ed or mod	d or modific changes det lified in sul	eration permit or oper ed emissions units (che ailed as part of this ap ostantial accordance w ruction permit and wit	eck here [], oplication, with the
	, E Deni	10 B.M.				4/11/07	
O	Signature E	70			Dat	te	
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, 8	A(ségl)	5				•	
9111	* Attach enty excepti	on to certification sta	tement. Certificate o	of Authori	zation #000	01670	
	EP Form No. 62-2 fective: 2/2/06	:10.900(1) – Forn	n .			07387554/4.3/IC-D	B-Indianto

Emissions Unit Control Equipment

1.	Control Equipment/Method(s) Description:
	3 Fabric Filters (Baghouses)
2.	Control Device or Method Code(s): 127

EMISSIONS UNIT INFORMATION

Section [1] Lime Handling System

C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Flow Diagram: Lime Silo		2.	Emission Point T 3	ype Code:
3.	3. Descriptions of Emission Points Comprising this Emissions Unit for VE Tracking: Lime Silo Baghouse Filter Receiver Baghouse Surge Hopper Baghouse 4. ID Numbers or Descriptions of Emission Units with this Emission Point in Common:				
5.	Discharge Type Code:	Stack Height115 feet	:		 Exit Diameter: 0.25 feet
8.	Exit Temperature: 75° F	9. Actual Volur 2000 acfm	netr	ic Flow Rate:	10. Water Vapor: %
11 ⁻	. Maximum Dry Standard F dscfm	low Rate:	12.	Nonstack Emissi feet	on Point Height:
13	Emission Point UTM Coo Zone: East (km): North (km)		14. Emission Point Latitude/Longitude Latitude (DD/MM/SS) Longitude (DD/MM/SS)		
	North (km): Longitude (DD/MM/SS) 15. Emission Point Comment: Parameters are for the Lime Silo Baghouse. Exit temperature is at ambient conditions. The Filter Receiver Baghouse has the equivalent exit diameter, exit temperature, but a flow rate of 1,570 cfm, and a release height of approximately 16 to 24 feet. The Surge Hopper Baghouse has equivalent exit diameter and exit temperature, but has an exit flow rate of 86 cfm, and a release height of 16 to 24 feet.				

POLLUTANT DETAIL INFORMATION
Page [1] of [2]
Particulate Matter Total – PM

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Pollutant Emitted: PM	2. Total Perc	ent Efficie	ency of Control:	
3. Potential Emissions:		4. Synth	netically Limited?	
0.31 lb/hour 1.3	7 tons/year	□ Yee	es 🛛 No	
5. Range of Estimated Fugitive Emissions (as	applicable):			
to tons/year				
6. Emission Factor: 0.010 grains/acf			7. Emissions	
Reference: Manufacturer's Data			Method Code: 0	
8.a. Baseline Actual Emissions (if required):	8.b. Baseline	24-month	Period:	
tons/year	From:	Го:		
9.a. Projected Actual Emissions (if required):	9.b. Projected	Monitori	ng Period:	
tons/year	☐ 5 years ☐ 10 years			
_				
10. Calculation of Emissions:				
See Attachment IC-EU1-F1.10				
See Attachment 10-LOT-1 1.10				
11. Potential Fugitive and Actual Emissions Comment:				
Potential emissions take into account emissions from both the silo and railcar unloading.				

POLLUTANT DETAIL INFORMATION
Page [1] of [2]
Particulate Matter Total – PM

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units: 0.010 grains/acf	4.	Equivalent Allowable Emissions: 0.31 lb/hour 1.37 tons/year
5.	Method of Compliance: EPA Method 9		
6.	Allowable Emissions Comment (Description	of (Operating Method):
	Allowable emissions and method of complian Condition Nos. 8, 11, and 19.	ice b	pased on PSD-FL-168, Specific
All	owable Emissions Allowable Emissions	c	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		
6.	Allowable Emissions Comment (Description	of (Operating Method):
All	owable Emissions Allowable Emissions	0	f
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5.	Method of Compliance:		,
6.	Allowable Emissions Comment (Description	of (Operating Method):

POLLUTANT DETAIL INFORMATION Page [2] of [2] Particulate Matter -- PM₁₀

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM ₁₀	2. Total Perc	ent Efficie	ency of Control:
3. Potential Emissions: 0.31 lb/hour 1.33	7 tons/year	4. Synth	netically Limited? es ⊠ No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):	·	
6. Emission Factor: 0.010 grains/acf Reference: Manufacturer's Data			7. Emissions Method Code: 5
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline From:	24-month To:	Period:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected ☐ 5 year	l Monitoria ars □ 10	
•.			
10. Calculation of Emissions:			_
See Attachment IC-EU1-F1.10			
11. Potential Fugitive and Actual Emissions Comment:			
Potential emissions take into account emissions from both the silo and railcar unloading.			

ATTACHMENT IC-EU1-F1.10

CALCULATION OF EMISSIONS

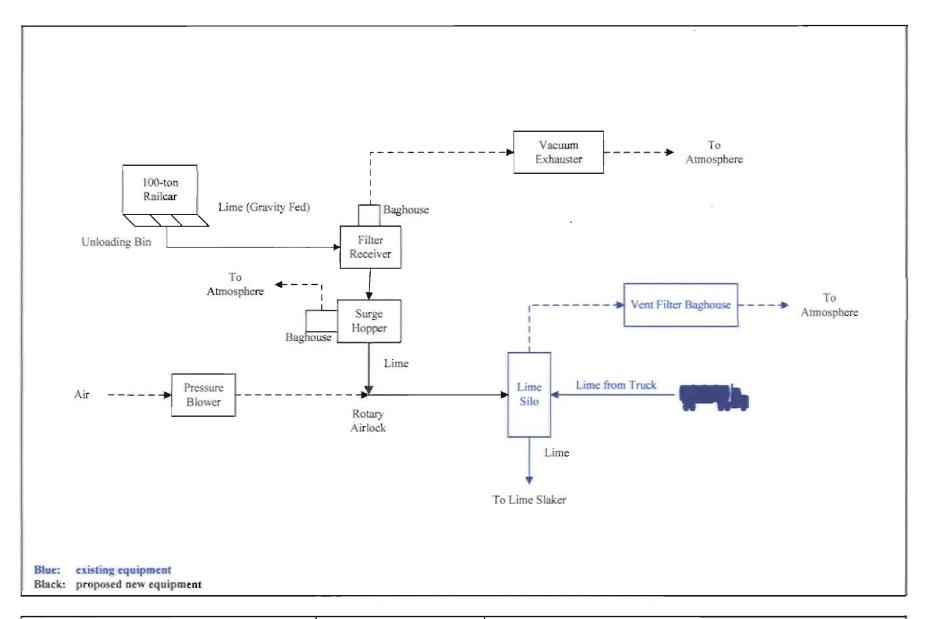
Summary of PM/PM₁₀ Maximum Potential Emission Rate for Railcar Unloading and Lime Storage Silo Indiantown Cogeneration

	Control	Exhaust Flow	Exhaust Grain Loading	Operating Hours	PM/PM ₁₀ Em	nission Rate
Source	Equipment	(acfm)	(gr/acf)	(hr/yr)	lb/hour	TPY
Lime Silo	Baghouse (Existing)	2,000	0.010	8,760	0.17	0.75
Railcar Unloading Filter Receiver	Baghouse	1,570	0.010	8,760	0.13	0.59
Surge Hopper Filter	Baghouse	86	0.010	8,760 Total:	0.01	0.03

Note: acfm = actual cubic feet per minute.

gr/acf = grains per actual cubic feet.

lb/hr = pounds per hour. TPY = tons per year.



Attachment IC-EU1-I1 Lime Handling System Process Flow Diagram Indiantown Cogeneration, L.P. Indiantown, Florida

Process Flow Legend
Solid/Liquid
Gas
Steam

Filename: 07387554/IC-EU1-I1.VSB

Date: 04/13/07



ATTACHMENT IC-EU1-I3a

CONTROL EQUIPMENT PARAMETERS FOR THE LIME SILO BAGHOUSE AT THE INDIANTOWN COGENERATION FACILITY

Manufacturer and Model No.	BHA, Model JP-H14 (Existing)
Outlet Gas Temp (°F)	75
Outlet Gas Flow Rate (acfin)	2000
Cleaning Method	Reverse Jet
No. of bags	12
Bag Material	Spun Bonded Polyester
Total Area of Filter Media (sq. ft)	516
Air to Cloth Ratio	3.88
Manufacturer's Guaranteed Outlet Loading (grains/acf)	0.010
Pollutants	Outlet Loading
Particulate Matter (lb/hr)	0.17

Note: Parameters based on manufacturers design specifications as shown on the following page.

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (acfin) X outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT IC-EU1-I3b

CONTROL EQUIPMENT PARAMETERS FOR THE RAILCAR UNLOADING FILTER RECEIVER BAGHOUSE AT THE INDIANTOWN COGENERATION FACILITY

	<u> </u>
Manufacturer and Model No.	MAC Equipment Inc. Air Vent Filter, Model 39AVR32, Style III
Outlet Gas Temp (°F)	
Outlet Gas Flow Rate (acfm)	1,570
Bag Material	Mineral Reinforced Nylon
Total Area of Filter Media (sq. ft)	1,152
Air to Cloth Ratio	1.36
Manufacturer's Guaranteed Outlet Loading (grains/acf)	0.010
Pollutants	Outlet Loading
Particulate Matter (lb/hr)	0.13

Note: Parameters based on manufacturers design specifications as shown on the following page.

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT IC-EU1-13c

CONTROL EQUIPMENT PARAMETERS FOR THE SURGE HOPPER VENT FILTER BAGHOUSE AT THE INDIANTOWN COGENERATION FACILITY

Manufacturer and Model No.	MAC Equipment Inc., 39RTC, STYLE II		
Outlet Gas Temp (°F)	75		
Outlet Gas Flow Rate (acfm)	. 86		
Bag Material	Mineral Reinforced Nylon 36		
Total Area of Filter Media (sq. ft)			
Air to Cloth Ratio	2.39		
Manufacturer's Guaranteed Outlet Loading (grains/acf)	0.010		
Pollutants	Outlet Loading		
Particulate Matter (lb/hr)	0.01		

Note: Parameters based on manufacturers design specifications as shown on the following page.

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT A

SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

Indiantown Cogeneration, L.P. (Indiantown Cogeneration) owns and operates a cogeneration plant located in Indiantown, Martin County, Florida. The plant currently operates under Title V Operating Permit No. 0850102-007-AV. The facility generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant.

The facility currently uses lime as a reactant in its boiler flue gas desulfurization (FGD) systems. Lime in powdered form is delivered to the facility by truck. The lime is then off-loaded into the existing 900-ton storage silo. Lime from the trucks is transported to the silos via pneumatic discharge at a rate of 25 tons per hour (TPH) (i.e., 1 hour to unload a 25-ton truck) by using the on-board blowers to transfer the lime to the top of the silo. The stored lime is then slaked into a slurry for use in the two boilers' (EU 001) spray dryer absorbers. The lime silo has a bin vent fabric filter baghouse. The lime-handling system is enclosed to the extent practical.

Indiantown Cogeneration is proposing to add the capability to receive lime by railcar. Unloading of the gravity flow-type railcars will be accomplished through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 25 TPH. It will take approximately 4 hours to unload a 100-ton railcar.

The lime will be unloaded directly from railcars through a receiving pan clamped onto the flange at the bottom of the railcar. This procedure will keep the process material flowing from the railcar into the transport system and will prevent fugitive emissions from the unloading process.

The lime will enter a vacuum-type system that transports the lime from the railcar to a filter receiver. The filter receiver acts both as a collection bin and also as a mechanism to clean the transport air of dust particles, since it has an integral baghouse. A rotary air lock will then feed the lime into the air lock surge hopper, which will have a vent to control the pressure differential across the airlock. A baghouse will control the PM emissions from the surge hopper vent. The lime will then enter a second rotary air lock, which will feed into the air stream created from a transporter blower, which transports the lime pneumatically to the existing lime silo. The existing silo already has a dust collector, and this will continue to be used in the future.

Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year (TPY) based on 365 days per year operation.

As described above, a baghouse (MAC Equipment Inc. Air Vent Filter, Model 39AVR32, Style III) is integral to the filter receiver on the railcar unloading system, which reduces PM emissions associated with unloading the railcars. A baghouse (MAC Equipment Inc. Model 39RTC1, Style II) will control PM emissions from the surge hopper vent. The existing bin vent filter baghouse (BHA Model JP-H14) on the lime silo will continue to serve to reduce the PM emission associated from loading the silo.

Maximum hourly and annual PM and particulate matter less than 10 microns in diameter (PM₁₀) emissions from the Lime Silo baghouse are 0.17 pound per hour (lb/hr) and 0.75 TPY, respectively. The maximum hourly and annual PM and PM₁₀ emissions for the railcar unloading filter receiver baghouse are 0.13 lb/hr and 0.59 TPY. The maximum hourly and annual PM and PM₁₀ emissions for the surge hopper baghouse are 0.01 lb/hr and 0.03 TPY. Total PM/PM₁₀ emissions from all three baghouses are 0.31 lb/hr and 1.37 TPY. The PM/PM₁₀ emissions are based on a maximum actual flow rate from each baghouse of 2,000 actual cubic feet per minute (acfin) for the lime silo baghouse, 1,570 acfm for the railcar unloading filter receiver, and 86 acfm for the surge hopper baghouse. The design grain loading is 0.01 grains per actual cubic feet for each baghouse. Hours of operation are assumed continuous. Details of each baghouse, including emissions estimates, are included in this application for an air construction permit.



Florida Department of Environmental Protection

Bob Martinez Center 2600 Blair Stone Road Tallahassee, Florida 32399-2400 Charlie Crist Governor

Jeff Kottkamp Lt. Governor

Michael W. Sole Secretary

April 2, 2007

Electronic Mail - Received Receipt Requested

Mr. Gary E. Willer, General Manager: GaryWiller@cogentrix.com Indiantown Cogeneration, L.P. P.O. Box 1799 Indiantown, Florida 34596

Re:

Indiantown Cogeneration Plant DEP File No. 0850102-009-AC Railcar Lime Unloading System Request for Additional Information

Dear Mr. Willer:

We received your application on March 13, 2007, for an air construction permit for the referenced facility for a new railcar lime unloading system. However, review of the document reveals that further information is needed on the following items, and thus we have deemed your application incomplete.

- 1. Does the project involve the construction of a new rail line at the facility? If yes, what is your estimate of pollutant emissions due to the construction activities?
- 2. Will a new lime unloading building be required? If yes, what is your estimate of pollutant emissions due to the construction?
- 3. Do you expect significant particulate matter fugitive emissions from the railcar unloading system operations?
- 4. Please provide detailed schematic drawings of the new railcar unloading system, including interfaces with existing lime handling and pollution control equipment.
- 5. Please provide more details on the manufacturer's specifications of all new equipment, including the new baghouse (for example, electric power requirements, physical dimensions, etc.).
- 6. Please provide the basis for the exhaust flow rate (i.e., 2000 actual feet per minute) noted in Attachment IC-EU1-F1.10

When we receive this information, we will continue processing your application. We are available to discuss the details of our request for additional information. Rule 62-4.050(3), F.A.C., requires that all applications for a Department permit must be certified by a professional engineer registered in the State of Florida. This requirement also applies to responses to Department requests for additional information of an engineering nature. Permit applicants are advised that Rule 62-213.420(1)(b), F.A.C., requires applicants to respond to requests for information within 90 days, unless the applicant has requested in writing, and has been granted, additional time within 90 days. If you have any questions, please contact Tom Cascio at 850-921-9526.

Sincerely,

A. A. Linero, P.E. Program Administrator Permitting South Section

AAL/tbc

Cc: Nicholas Laryea, Indiantown Cogeneration, L.P.: Nicholas Laryea@cogentrix.com Darrel Graziani, P.E., Southeast District Office: darrel.graziani@dep.state.fl.us David A. Buff, P.E., Golder Associates, Inc.: dbuff@golder.com Jim Little, EPA Region 4: little.james@epa.gov

From:

System Administrator

To:

Cascio, Tom

Sent:

Monday, April 02, 2007 1:54 PM

Subject:

Delivered: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for

Additional Information

Your message

To:

'GaryWiller@cogentrix.com'; 'NicholasLaryea@cogentrix.com'; Graziani, Darrel; 'dbuff@golder.com'; 'Little.James@epamail.epa.gov'

Cc:

Cascio, Tom

Subject:

DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Sent:

4/2/2007 1:54 PM

was delivered to the following recipient(s):

Cascio, Tom on 4/2/2007 1:54 PM

From:

System Administrator

To:

Graziani, Darrel

Sent:

Monday, April 02, 2007 1:54 PM

Subject:

Delivered: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for

Additional Information

Your message

To:

'GaryWiller@cogentrix.com'; 'NicholasLaryea@cogentrix.com'; Graziani, Darrel; 'dbuff@golder.com'; 'Little.James@epamail.epa.gov'

Cc:

Cascio, Tom

Subject:

DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Sent:

4/2/2007 1:54 PM

was delivered to the following recipient(s):

Graziani, Darrel on 4/2/2007 1:54 PM

From:

Exchange Administrator

Sent:

Monday, April 02, 2007 1:54 PM

To:

Friday, Barbara

Subject:

Delivery Status Notification (Relay)

Attachments:

ATT117689.txt; DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for

Additional Information





ATT117689.txt (378 B)

DEP File No.)850102-009-AC - ..

This is an automatically generated Delivery Status Notification.

Your message has been successfully relayed to the following recipients, but the requested delivery status notifications may not be generated by the destination.

GaryWiller@cogentrix.com NicholasLaryea@cogentrix.com

From:

Mail Delivery System [MAILER-DAEMON@sophos.golder.com]

Sent:

Monday, April 02, 2007 1:54 PM

To:

Friday, Barbara

Subject:

Successful Mail Delivery Report

Attachments:

Delivery report; Message Headers





Delivery report.txt (455 B)

Message

Headers.txt(2 KB)

This is the mail system at host sophos.golder.com.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<dbuff@qolder.com>: delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 46114325_21846 283 1

From:

Mail Delivery System [MAILER-DAEMON@mseive02.rtp.epa.gov]

Sent:

Monday, April 02, 2007 1:58 PM

To:

Friday, Barbara

Subject:

Successful Mail Delivery Report

Attachments:

Delivery report; Message Headers





Delivery report.txt (531 B)

Message

Headers.txt (2 KB)

This is the mail system at host mseive02.rtp.epa.gov.

Your message was successfully delivered to the destination(s) listed below. If the message was delivered to mailbox you will receive no further notifications. Otherwise you may still receive notifications of mail delivery errors from other systems.

The mail system

<little.james@epa.gov> (expanded from <little.james@mseive.epa.gov>): delivery via 127.0.0.1[127.0.0.1]:10025: 250 OK, sent 46114420 6253_109291_10

From: To: Graziani, Darrel

Sent:

Friday, Barbara

Subject:

Monday, April 02, 2007 2:02 PM Read: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for

Additional Information

Your message

To:

 $\label{lem:composition} \begin{tabular}{ll} \begin{tabular}{ll}$

Cc:

Cascio, Tom

Subject:

DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Sent:

4/2/2007 1:54 PM

was read on 4/2/2007 2:02 PM.

From:

Laryea, Nicholas [NicholasLaryea@Cogentrix.com]

To:

Friday, Barbara

Sent:

Monday, April 02, 2007 2:08 PM

Subject:

Read: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Your message

To:

NicholasLaryea@Cogentrix.com

Subject:

was read on 4/2/2007 2:08 PM.

From: Sent: Little.James@epamail.epa.gov Monday, April 02, 2007 2:08 PM

To:

Friday, Barbara

Subject:

Re: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional

Information

We received. Thanks.

Jim Little - U.S. EPA Region 4

"Friday, Barbara" <Barbara.Friday@ dep.state.fl.us>

04/02/2007 01:53

PM

GaryWiller@cogentrix.com,
NicholasLaryea@cogentrix.com,
"Graziani, Darrel"

<Darrel.Graziani@dep.state.fl.us>
, dbuff@golder.com, James
Little/R4/USEPA/US@EPA

Τо

CC

"Cascio, Tom"

<Tom.Cascio@dep.state.fl.us>
Subject

DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant -

Request for Additional

Information

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s); this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,
DEP, Bureau of Air Regulation
[attachment "0850102-009-AC-Indiantown Cogeneration, L.P. Incompleteness Letter.pdf"
deleted by James Little/R4/USEPA/US]

From: Laryea, Nicholas [NicholasLaryea@Cogentrix.com]

Sent: Monday, April 02, 2007 2:14 PM

To: Friday, Barbara

Subject: RE: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional

Information

Thanks Barbara

From: Friday, Barbara [mailto:Barbara.Friday@dep.state.fl.us]

Sent: Monday, April 02, 2007 1:54 PM

To: Willer, Gary; Laryea, Nicholas; Graziani, Darrel; dbuff@golder.com; Little.James@epamail.epa.gov

Cc: Cascio, Tom

Subject: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Dear Sir/Madam:

Please send a "reply" message verifying receipt of the attached document(s), this may be done by selecting "Reply" on the menu bar of your e-mail software and then selecting "Send". We must receive verification of receipt and your reply will preclude subsequent e-mail transmissions to verify receipt of the document(s).

The document(s) may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible.

The document is in Adobe Portable Document Format (pdf). Adobe Acrobat Reader can be downloaded for free at the following internet site: http://www.adobe.com/products/acrobat/readstep.html.

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record.

Thank you,

DEP, Bureau of Air Regulation

From:

Buff, Dave [DBuff@GOLDER.com]

To:

undisclosed-recipients

Sent:

Subject:

Monday, April 02, 2007 2:30 PM
Read: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Your message

To:

DBuff@GOLDER.com

Subject:

was read on 4/2/2007 2:30 PM.

From:

Willer, Gary [GaryWiller@cogentrix.com]

To:

Friday, Barbara

Sent:

Subject:

Monday, April 02, 2007 4:01 PM
Read: DEP File No. 0850102-009-AC - Indiantown Cogeneration Plant - Request for Additional Information

Your message

To:

GaryWiller@cogentrix.com

Subject:

was read on 4/2/2007 4:01 PM.

Indiantown Cogeneration, L.P. P.O. Box 1799 13303 SW Silver Fox Lane Indiantown, FL 34956

772.597.6500 Fax: 772.597.6210

March 12, 2007

Trina Vielhauer, Bureau Chief Florida Department of Environmental Protection Division of Air Resource Management Bureau of Air Regulation 2600 Blair Stone Road MS 5500 Tallahassee, Florida 32399-2400

RECEIVED
MAK 13 2007

BUREAU OF AIR REGULATION

Dear Ms. Vielhauer

Indiantown Cogeneration LP is submitting herewith four (4) copies of the air construction permit application for Lime unloading system to be located at the Indiantown Cogeneration Plant.

Indiantown Cogeneration LP is proposing to add the capability of having lime delivered to the facility by railcar. In order to implement this, the facility will need to install a railcar unloading system. The lime would be unloaded from the railcars through a vacuum and pneumatic transfer system, and a bag house to control the particulate matter emissions.

If you have any questions concerning the enclosed permit application, please do not hesitate to contact Nicholas Laryea at 772-597-6500 extension 19.

Sincerely yours,

Gary E. Willer

General Manager

Cc Lauren Billheimer File

Part E. Wille

APPLICATION FOR
AIR CONSTRUCTION PERMIT
FOR LIME UNLOADING SYSTEM
INDIANTOWN COGENERATION
INDIANTOWN, FLORIDA

Prepared For: Indiantown Cogeneration, L.P. 13303 SW Silver Fox Lane Indiantown, Florida 34956

Prepared By: Golder Associates Inc. 6241 NW 23rd Street, Suite 500 Gainesville, Florida 32653-1500

March 2007

07387554

DISTRIBUTION:

- 4 Copies FDEP
- 2 Copies Indiantown Cogeneration, L.P.
- 1 Copy Golder Associates Inc.

APPLICATION FOR AIR PERMIT – LONG FORM



Department of Environmental Protection

Division of Air Resource Management APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

Air	Construction Permit - Use this form to apply for an air construction permi	t at a facility operating und	der a
	federally enforceable state air operation permit (FESOP) or Title V air permit.	Also use this form to apply	y for
	an air construction permit:		

- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- Where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- Where the applicant proposes to establish, revise, or renew a plantwide applicability limit (PAL).

Air Operation Permit – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

Air Construction Permit & Title V Air Operation Permit (Concurrent Processing Option) — Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

proposed project.						
To ensure accuracy,	, please see form instructions.					
Identification of Facility	Identification of Facility					
1. Facility Owner/Company Name: Indianto	own Cogeneration, L.P.					
2. Site Name: Indiantown Cogeneration Plan	nt					
3. Facility Identification Number: 0850102						
4. Facility Location: Street Address or Other Locator: 13303 S	4. Facility Location: Street Address or Other Locator: 13303 SW Silver Fox Lane					
City: Indiantown County	: Martin Zip Code: 34956					
5. Relocatable Facility? ☐ Yes ☒ No	6. Existing Title V Permitted Facility? ☑ Yes ☐ No					
Application Contact						
1. Application Contact Name: Nicholas Lary	ea, Environmental Manager					
2. Application Contact Mailing Address Organization/Firm: Indiantown Cogenerat						
Street Address: 13303 SW Silver Fox L	ane					
City: Indiantown	State: FL Zip Code: 34956					
3. Application Contact Telephone Numbers.						
Telephone: (772) 597-6500 ext.19 Fax: (772) 597-6210						
4. Application Contact Email Address: NicholasLaryea@cogentrix.com						
Application Processing Information (DEP Use)						
1. Date of Receipt of Application: $3/13/1/9$	3. PSD Number (if applicable):					
2. Project Number(s): 0450103-0119-AC	4. Siting Number (if applicable):					
<i></i>						

Purpose of Application

This application for air permit is submitted to obtain: (Check one) Air Construction Permit Air construction permit. Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL). Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL. **Air Operation Permit** Initial Title V air operation permit. Title V air operation permit revision. Title V air operation permit renewal. Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required. Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required. Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing) Air construction permit and Title V permit revision, incorporating the proposed project. Air construction permit and Title V permit renewal, incorporating the proposed project. Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box: ☐ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

Indiantown Cogeneration, L.P. is proposing to add the capability of having lime delivered to the facility by railcar. In order to implement this, a railcar unloading system will be installed. The lime would be unloaded from the railcars through a vacuum and pneumatic transfer system, and baghouses would control the particulate matter emissions.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Proc. Fee
006	Lime Handling System	AC1F	N/A
			·
		٠.	
•			· · · · · · · · · · · · · · · · · · ·

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

Owner/Authorized Representative Statement

Complete if applying for an air construction permit or an initial FESOP.

1. Owner/Authorized Representative Name:

Gary E. Willer, General Manager

2. Owner/Authorized Representative Mailing Address...

Organization/Firm: Indiantown Cogeneration, L.P.

Street Address: P.O. Box 1799

City: Indiantown

State: FL

Zip Code: **34956**

3. Owner/Authorized Representative Telephone Numbers...

Telephone: (772) 597-6500

ext.

Fax:

(772) 597-6210

4. Owner/Authorized Representative Email Address: GaryWiller@cogentrix.com

5. Owner/Authorized Representative Statement:

I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.

Say E. Willing

Application Responsible Official Certification

Complete if applying for an initial/revised/renewal Title V permit or concurrent processing of an air construction permit and a revised/renewal Title V permit. If there are multiple responsible officials, the "application responsible official" need not be the "primary responsible official."

1.	Application Responsible Official Name:				
2.	Application Responsible Official Qualification (Check one or more of the following				
ľ	options, as applicable):				
	For a corporation, the president, secretary, treasurer, or vice-president of the corporation in				
	charge of a principal business function, or any other person who performs similar policy or				
	decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more				
	manufacturing, production, or operating facilities applying for or subject to a permit under				
	Chapter 62-213, F.A.C.				
	For a partnership or sole proprietorship, a general partner or the proprietor, respectively.				
	For a municipality, county, state, federal, or other public agency, either a principal executive				
	officer or ranking elected official.				
3.	The designated representative at an Acid Rain source. Application Responsible Official Mailing Address				
, J.	Organization/Firm:				
	Street Address:				
	City: State: Zip Code:				
4.	Application Responsible Official Telephone Numbers				
٠.	Telephone: () - ext. Fax: () -				
5.	Application Responsible Official Email Address:				
6.	Application Responsible Official Certification:				
	I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.				
	Signature Date				

Pr	ofessional Engineer Certification
	Professional Engineer Name: David A. Buff
	Registration Number: 19011
2.	Professional Engineer Mailing Address
١,	Organization/Firm: Golder Associates Inc.**
	Street Address: 6241 NW 23 rd Street, Suite 500
	City: Gainesville State: FL Zip Code: 32653
3.	Professional Engineer Telephone Numbers
	Telephone: (352) 336-5600 ext.545 Fax: (352) 336-6603
4.	Professional Engineer Email Address: dbuff@golder.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
,	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \square , if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.
	(4) If the purpose of this application is to obtain an air construction permit (check here \boxtimes , if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here \square , if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.
	(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the sinformation given in the corresponding application for air construction permit and with all provisions contained in such permit. 3/9/07 Date

Attach any exception to certification statement.

Board of Professional Engineers Certificate of Authorization #00001670

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility 1	<u>Location</u>	and	Type
------------	-----------------	-----	------

Zone 17 East (km) 422.3 North (km) 2952.9		2. Facility Latitude/Longitude Latitude (DD/MM/SS) 27 / 02 / 20 Longitude (DD/MM/SS) 80 / 30 / 45			27 / 02 / 20
3. Governmental Facility Code: 0	Facility Status Code:	5.	Facility Major Group SIC Code: 49	6.	Facility SIC(s): 4911
7. Facility Comment:					
•					•

Facility Contact

1.	Facility Contact Name:						
	Nicholas Laryea, Environmental M	lanager	·				
2.	Facility Contact Mailing Address.						
ľ	Organization/Firm: Indiantown Cogeneration, L.P.						
	Street Address: P.O. Box 1799						
-	City: Indiantown	Ç	State: FL	Zip Code: 34956			
3.	Facility Contact Telephone Numb	ers:					
	Telephone: (772) 597-6500	ext.	Fax:	(772) 597-6210			
4.	Facility Contact Email Address: N	licholasi	-aryea@cog	entrix.com			

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I. that is not the facility "primary responsible official."

1.	Facility Primary Responsible Official Name:							
		×						
2.	Facility Primary Respon	sible Official Mailing Address				.,		-
ŀ	Organization/Firm:							
	Street Address:				•			
	City:	State:		Zip	Code:			
3.	Facility Primary Respons	sible Official Telephone Number	s					
	Telephone: () -	ext. Fax:	()	-	•		
4.	Facility Primary Respons	sible Official Email Address:						

FACILITY INFORMATION

Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a "major source" and a "synthetic minor source."

1. ☐ Small Business Stationary Source ☐	Unknown
2. Synthetic Non-Title V Source	
3. X Title V Source	,
4. Major Source of Air Pollutants, Other than Hazardous Air I	Pollutants (HAPs)
5. Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. Major Source of Hazardous Air Pollutants (HAPs)	
7. Synthetic Minor Source of HAPs	
8. One or More Emissions Units Subject to NSPS (40 CFR Pa	rt 60)
9. One or More Emissions Units Subject to Emission Guidelin	es (40 CFR Part 60)
10. One or More Emissions Units Subject to NESHAP (40 CFR	Part 61 or Part 63)
11. Title V Source Solely by EPA Designation (40 CFR 70.3(a)	(5))
12. Facility Regulatory Classifications Comment:	
	•

FACILITY INFORMATION

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollut	ant Classification	3. Emissions Cap [Y or N]?
PM – Particulate Matter Total	Α	· .	N
PM ₁₀	A	· ·	N .
SO ₂ – Sulfur Dioxide	Α	<u> </u>	, N
NO _x – Nitrogen Oxides	Α		N
CO – Carbon Monoxide	Α		N
VOC – Volatile Organic Compounds	В		N .
SAM – Sulfuric Acid Mist	В		N
H021 – Beryllium Compounds	В	·	N
H114 – Mercury Compounds	B [·]		N
Pb – Lead	В		. N
FL - Fluorides	B :		N .:
AS - Arsenic	В		N
Ammonia	В		N
HAPs – Total Hazardous Air Pollutants	Α		N
		·	·

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

1. Pollutant Subject to Emissions Cap	2. Facility Wide Cap [Y or N]? (all units)	3. Emissions Unit ID No.s Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
			,		
	·				· · · ·
•					
					·
				;	
				·	-
7. Facility-	-Wide or Multi-	Unit Emissions Ca	p Comment:		·

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date:
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date:
<u>A</u>	dditional Requirements for Air Construction Permit Applications
1.	Area Map Showing Facility Location: ☐ Attached, Document ID: ☐ Not Applicable (existing permitted facility)
2.	
3.	Rule Applicability Analysis: Attached, Document ID: See Attachment A
4.	List of Exempt Emissions Units (Rule 62-210.300(3), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: ☐ Attached, Document ID:
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): Attached, Document ID: Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable

FACILITY INFORMATION

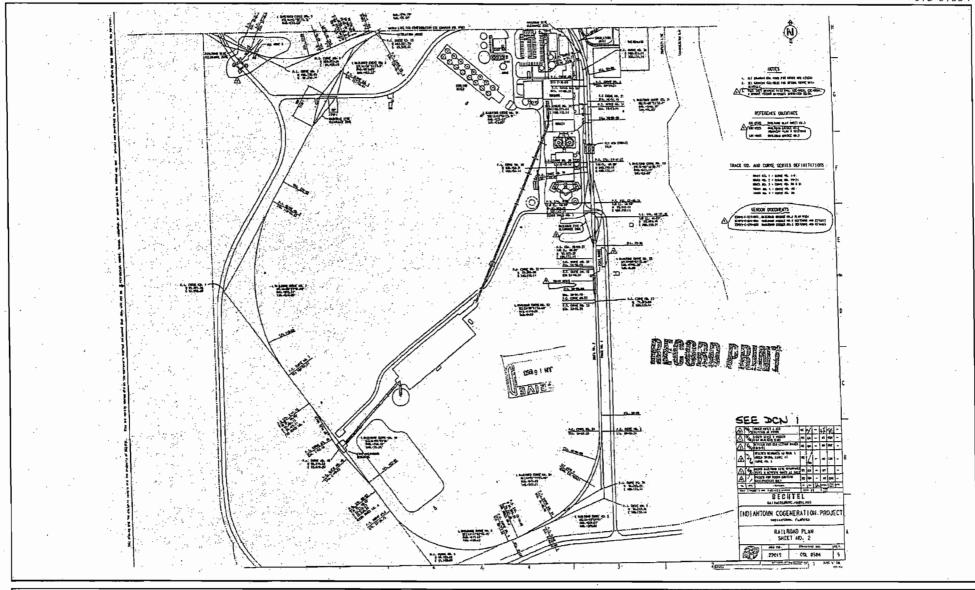
	Additional Requirements for FESOP Applications					
/1.	List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.): Attached, Document ID: Not Applicable (no exempt units at facility)					
<u>A</u>	dditional Requirements for Title V Air Operation Permit Applications					
1.	List of Insignificant Activities (Required for initial/renewal applications only):					
2.	Identification of Applicable Requirements (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought): Attached, Document ID:					
	☐ Not Applicable (revision application with no change in applicable requirements)					
3.	Compliance Report and Plan (Required for all initial/revision/renewal applications): Attached, Document ID: Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.					
5.	List of Equipment/Activities Regulated under Title VI (If applicable, required for initial/renewal applications only): Attached, Document ID: Equipment/Activities On site but Not Required to be Individually Listed Not Applicable Verification of Risk Management Plan Submission to EPA (If applicable, required for					
J.	initial/renewal applications only):					
	☐ Attached, Document ID: ☐ Not Applicable					
6.	Requested Changes to Current Title V Air Operation Permit: Attached, Document ID: Not Applicable					
Ad	ditional Requirements Comment					

ATTACHMENT IC-FI-C1

FACILITY PLOT PLAN

March 2007

073-87554

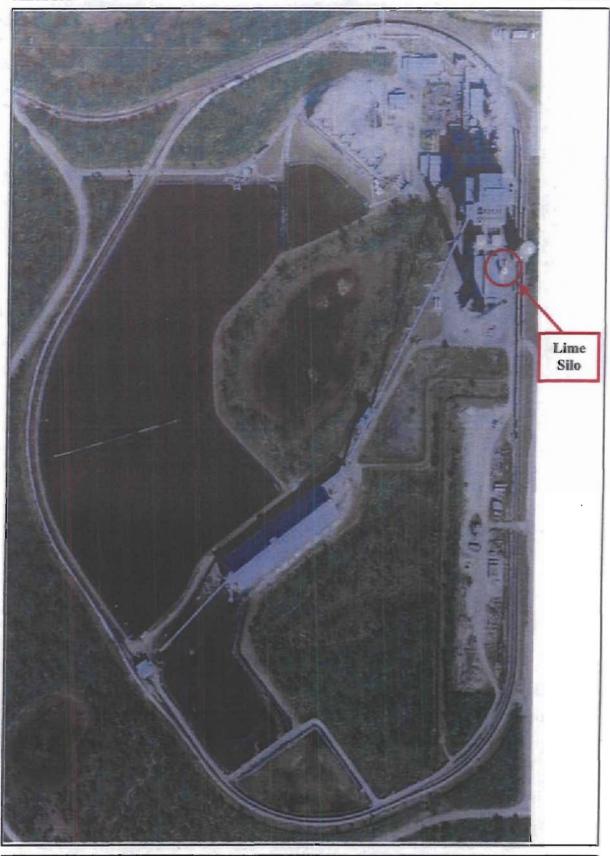


Attachment IC-FI-Cla Facility Plot Plan 07387554/4.4/IC-FI-Cl

Source: Golder, 2006.



March 2007 073787554



Attachment IC-FI-C1b Aerial Photo with Lime Silo Identified 07387554/4.4/IC-FI-C1b

Source: Golder, 2006.

REV.	SCALE:
DESIGN	-
CADD	
CHECK	
REVIEW	



EMISSIONS UNIT INFORMATION Section [1] Lime Handling System

III. EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Application - For Title V air operation permitting only, emissions units are classified as regulated, unregulated, or insignificant. If this is an application for Title V air operation permit, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each regulated and unregulated emissions unit addressed in this application for air permit. Some of the subsections comprising the Emissions Unit Information Section of the form are optional for unregulated emissions units. Each such subsection is appropriately marked. Insignificant emissions units are required to be listed at Section II, Subsection C.

Air Construction Permit or FESOP Application - For air construction permitting or federally enforceable state air operation permitting, emissions units are classified as either subject to air permitting or exempt from air permitting. The concept of an "unregulated emissions unit" does not apply. If this is an application for air construction permit or FESOP, a separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air permitting are required to be listed at Section II, Subsection C.

Air Construction Permit and Revised/Renewal Title V Air Operation Permit Application — Where this application is used to apply for both an air construction permit and a revised/renewal Title V air operation permit, each emissions unit is classified as either subject to air permitting or exempt from air permitting for air construction permitting purposes and as regulated, unregulated, or insignificant for Title V air operation permitting purposes. The air construction permitting classification must be used to complete the Emissions Unit Information Section of this application for air permit. A separate Emissions Unit Information Section (including subsections A through I as required) must be completed for each emissions unit subject to air permitting addressed in this application for air permit. Emissions units exempt from air construction permitting and insignificant emissions units are required to be listed at Section II, Subsection C.

If submitting the application form in hard copy, the number of this Emissions Unit Information Section and the total number of Emissions Unit Information Sections submitted as part of this application must be indicated in the space provided at the top of each page.

Section [1] Lime Handling System

A. GENERAL EMISSIONS UNIT INFORMATION

Title V Air Operation Permit Emissions Unit Classification

1.	renewal Title V air operation permit. Skip this item if applying for an air construction permit or FESOP only.)							
	☐ The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.							
			in this Emission	ons Unit Information S	Section is an			
	unregula	ted emissions unit.						
E	missions Unit	Description and St	<u>atus</u>					
1.	Type of Emi	ssions Unit Address	ed in this Section	on: (Check one)	:			
				dresses, as a single em	_			
	•	or production unit, or is at least one definat	• .	n produces one or mor int (stack or vent).	e air pollutants and			
					nissions unit, a group of			
		-		-	efinable emission point			
	`	vent) but may also p		•				
				dresses, as a single em les which produce fug				
2.	Description of	of Emissions Unit Ac	ddressed in this	Section:				
ļ. ·	Lime Handlin	g System		•	•			
3.	Emissions U	nit Identification Nu	mber: 006					
4.	Emissions	5. Commence	6. Initial	7. Emissions Unit	8. Acid Rain Unit?			
	Unit Status Code:	Construction Date:	Startup	Major Group SIC Code:	☐ Yes			
	A	Date.	Date:	49	⊠ No			
9.	Package Unit	<u>.</u>						
	Manufacture			Model Number:				
10	. Generator N	ameplate Rating:	MW					
11	. Emissions Ui	nit Comment:	. "					
	The existing lime handling system will be modified to allow for the receiving of lime by railcar. The existing lime silo will be used.							
					···			

Section [1] Lime Handling System

Emissions Unit Control Equipment

	inssions Out Control Equipment	The second secon
1.	Control Equipment/Method(s) Description:	
	2 Fabric Filters (Baghouses)	
٠.		
		•
•		

2. Control Device or Method Code(s): 127

Section [1] Lime Handling System

B. EMISSIONS UNIT CAPACITY INFORMATION

(Optional for unregulated emissions units.)

Emissions Unit Operating Capacity and Schedule

1.	Maximum Process or Through	put Rate: 25 tons/hour lime	
2.	Maximum Production Rate:		
3.	Maximum Heat Input Rate:	million Btu/hr	
4.	Maximum Incineration Rate:	pounds/hr	
		tons/day	•
5.	Requested Maximum Operating	g Schedule:	
	•	24 hours/day	7 days/week
		52 weeks/year	8,760 hours/year
6.	Operating Capacity/Schedule C	Comment:	•
	Represents the total hourly lime	e throughput through the lime system	•
		·	
	•		
			•

Section [1] Lime Handling System

C. EMISSION POINT (STACK/VENT) INFORMATION (Optional for unregulated emissions units.)

Emission Point Description and Type

1.	Identification of Point on Flow Diagram: Lime Silo	Plot Plan or	2. Emission 3	n Point 7	Гуре Code:	_
3.	Descriptions of Emission	Points Comprising	g this Emissio	ns Unit	for VE Tracking:	
	Filter Receiver Baghouse Lime Silo Baghouse		. •			
			·			
4.	ID Numbers or Descriptio	ns of Emission Ur	nits with this l	Emissior	Point in Common:	
					·	
5.	Discharge Type Code:	6. Stack Height 115 feet	: :		7. Exit Diameter: 0.25 feet	
8.	Exit Temperature: 75°F	9. Actual Volur 2000 acfm	netric Flow R	ate:	10. Water Vapor: %	
11.	Maximum Dry Standard F dscfm	low Rate:	12. Nonstack fee		on Point Height:	
13.	Emission Point UTM Coo Zone: East (km):	rdinates	14. Emission Latitude		atitude/Longitude M/SS)	
	North (km)	•	Longitud	le (DD/N	MM/SS)	,
15.	Emission Point Comment:				,	-
	Downward discharge of vent filter located on the top of the lime silo. Exit temperature is at ambient conditions. Baghouse for railcar unloading filter receiver has the equivalent exit diameter, exit temperature, and flow rate, but a release height of approximately 16 to 24 feet.					
	• •					
			•			
		e e e e e e e e e e e e e e e e e e e			e e	

Section [1] Lime Handling System

D. SEGMENT (PROCESS/FUEL) INFORMATION

Segment Description and Rate: Segment 1 of 1

1.	. Segment Description (Process/Fuel Type):						
	Industrial Processes; Mineral Products; Bulk Materials Storage Bins; Minerals; Lime						
			· .				
2.	Source Classification Cod 3-05-102-98	e (SCC):	3. SCC Units: Tons Proce		<u> </u>		
4.	Maximum Hourly Rate: 25	5. Maximum 2 36,500	Annual Rate:	6.	Estimated Annual Activity Factor:		
7.	Maximum % Sulfur:	8. Maximum	% Ash:	9.	Million Btu per SCC Unit:		
10.	Segment Comment:						
	Lime unloading and storag railcar or truck. Maximu approximately one hour. 20 tons/hour. Maximum a 100 tons/day and 365 days	m hourly rate is A 100-ton railc nnual rate is bas	based on one ar will unload a	25-te at a	on truck unloading in rate of approximately		
Se	gment Description and Ra	ite: Segment	of				
1.	Segment Description (Prod	cess/Fuel Type):					
			•				
4,	•						
2.	Source Classification Code	e (SCC):	3. SCC Units:				
4.	Maximum Hourly Rate:	5. Maximum A	Annual Rate:	6.	Estimated Annual Activity Factor:		
7.	Maximum % Sulfur:	8. Maximum %	∕₀ Ash:	9.	Million Btu per SCC Unit:		
10.	Segment Comment:						
					·		
			•				
					·		

Section [1] Lime Handling System

E. EMISSIONS UNIT POLLUTANTS.

List of Pollutants Emitted by Emissions Unit

1. Pollutant Emitted	Primary Control Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
РМ	127		NS
PM ₁₀	127		NS
	· · · · · · · · · · · · · · · · · · ·	·.	
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EMISSIONS UNIT INFORMATION Section [1] Lime Handling System

POLLUTANT DETAIL INFORMATION
Page [1] of [2]
Particulate Matter Total – PM

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

Pollutant Emitted: PM	2. Total Perc	ent Effici	ency of Control:
3. Potential Emissions:		-	netically Limited?
0.34 lb/hour 1.50	tons/year	Ye	es 🛛 No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):		
6. Emission Factor: 0.010 grain/acf		•	7. Emissions Method Code:
Reference: PSD-FL-168, Specific Con	dition No. 11		0
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline From:	24-month Γο:	Period:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected ☐ 5 year	Monitori	_
		·.	
10. Calculation of Emissions:			
See Attachment IC-EU1-F1.10		-	
			4
11. Potential Fugitive and Actual Emissions Con	nment:		
Potential emissions take into account emissi	ons from both t	he silo and	d railcar unloading.

Section [1] Lime Handling System

POLLUTANT DETAIL INFORMATION

Page [1] of [2] Particulate Matter Total – PM

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allowable Emissions 1 of 1

1.	Basis for Allowable Emissions Code: OTHER	2.	Future Effective Date of Emissions:	Allowable
3.	Allowable Emissions and Units: 0.010 grains/acf	4.	Equivalent Allowable En 0.34 lb/hour	missions: 1.50 tons/year
5.	Method of Compliance: EPA Method 9	•		
6.	Allowable Emissions Comment (Description	of	Operating Method):	
	Allowable emissions and method of complian Condition Nos. 8, 11, and 19.	nce I	pased on PSD-FL-168, Spe	cific
<u>Al</u>	lowable Emissions Allowable Emissions		of	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Emissions:	Allowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable Er lb/hour	nissions: tons/year
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	of (Operating Method):	•
			•	
All	owable Emissions Allowable Emissions	o	f	
1.	Basis for Allowable Emissions Code:	2.	Future Effective Date of Emissions:	Allowable
3.	Allowable Emissions and Units:	4.	Equivalent Allowable En	
			lb/hour	tons/year
5.	Method of Compliance:			
6.	Allowable Emissions Comment (Description	of C	Operating Method):	
	•			

EMISSIONS UNIT INFORMATION Section [1] Lime Handling System

POLLUTANT DETAIL INFORMATION
Page [2] of [2]
Particulate Matter – PM₁₀

F1. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION – POTENTIAL/ESTIMATED FUGITIVE EMISSIONS

(Optional for unregulated emissions units.)

Potential/Estimated Fugitive Emissions

Complete for each pollutant identified in Subsection E if applying for an air construction permit or concurrent processing of an air construction permit and a revised or renewal Title V permit. Complete for each emissions-limited pollutant identified in Subsection E if applying for an air operation permit.

1. Pollutant Emitted: PM ₁₀	2. Total Percent Efficiency of Control:
3. Potential Emissions:	4. Synthetically Limited?
0.34 lb/hour 1.5 0	tons/year ☐ Yes ☒ No
5. Range of Estimated Fugitive Emissions (as to tons/year	applicable):
6. Emission Factor: 0.010 grains/acf Reference: PSD-FL-168, Specific Con	7. Emissions Method Code: 5
8.a. Baseline Actual Emissions (if required): tons/year	8.b. Baseline 24-month Period: From: To:
9.a. Projected Actual Emissions (if required): tons/year	9.b. Projected Monitoring Period: ☐ 5 years ☐ 10 years
10. Calculation of Emissions:	
See Attachment IC-EU1-F1.10	
11. Potential Fugitive and Actual Emissions Con	mment:
Potential emissions take into account emissi	ons from both the silo and railcar unloading.

EMISSIONS UNIT INFORMATION Section [1] Lime Handling System

POLLUTANT DETAIL INFORMATION Page [2] of [2] Particulate Matter – PM₁₀

F2. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION - ALLOWABLE EMISSIONS

Complete if the pollutant identified in Subsection F1 is or would be subject to a numerical emissions limitation.

Allov	vable Emissions Allowable Emissions	0	f
1. B	asis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3. A	llowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5. M	lethod of Compliance:		
6. A	llowable Emissions Comment (Description	of C	Operating Method):
Allow	vable Emissions Allowable Emissions	<u> </u>	f
1. Ba	asis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3. Al	llowable Emissions and Units:	4	Equivalent Allowable Emissions: lb/hour tons/year
	ethod of Compliance:		``
6. Al	llowable Emissions Comment (Description	of C	Operating Method):
Allow	able Emissions Allowable Emissions	of	f
1. Ba	sis for Allowable Emissions Code:	2.	Future Effective Date of Allowable Emissions:
3. Al	lowable Emissions and Units:	4.	Equivalent Allowable Emissions: lb/hour tons/year
5. Me	ethod of Compliance:		
6. Al	lowable Emissions Comment (Description	of C	perating Method):
•			

Section [1] Lime Handling System

G. VISIBLE EMISSIONS INFORMATION

Complete if this emissions unit is or would be subject to a unit-specific visible emissions limitation.

<u>Visible Emissions Limitation</u>: Visible Emissions Limitation 1 of 1

	•	, and the second of the second	<u> </u>
1.	Visible Emissions Subtype: VE05	2. Basis for Allowable Opacity:☑ Rule ☐ Oth	The second secon
3.	Allowable Opacity:		
		ceptional Conditions:	%
	Maximum Period of Excess Opacity Allowe	*	min/hour
4.	Method of Compliance:		
	EPA Method 9	· ·	•
5.	Visible Emissions Comment:		
	Limit based on PSD-FL-168, Specific Condition	on No. 11.	· · · · ·
Vis	sible Emissions Limitation: Visible Emission	ons Limitation of	
1.	Visible Emissions Subtype:	2. Basis for Allowable Opacity: Rule	er
3.	Allowable Opacity:		
	• ·	ceptional Conditions: d:	% min/hour
4.	Method of Compliance:	•	
5.	Visible Emissions Comment:		·
•			
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Section [1] Lime Handling System

H. CONTINUOUS MONITOR INFORMATION

Complete if this emissions unit is or would be subject to continuous monitoring.

	ontinuous Monitoring System: Continuous	1410		
1.	Parameter Code:	2.	Pollutant(s):	
3.	CMS Requirement:		Rule	
4.	Monitor Information Manufacturer:			
	Model Number:		Serial Number:	
5.	Installation Date:	6.	Performance Specification Test Date:	
7.	Continuous Monitor Comment:			
<u>Co</u>	ntinuous Monitoring System: Continuous	Mor	nitor of	
1.	Parameter Code:		2. Pollutant(s):	
	Parameter Code: CMS Requirement:		2. Pollutant(s): Rule	
	·			
3.	CMS Requirement: Monitor Information			
3.	CMS Requirement: Monitor Information Manufacturer:		Rule	· · · · · · · · · · · · · · · · · · ·
3. 4.	CMS Requirement: Monitor Information Manufacturer: Model Number:		Rule	»:

Section [1] Lime Handling System

I. EMISSIONS UNIT ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Process Flow Diagram (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: IC-EU1-II Previously Submitted, Date
2.	operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
3.	Detailed Description of Control Equipment (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: IC-EU1-I3 Previously Submitted, Date
4.	Procedures for Startup and Shutdown (Required for all operation permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date
5.	Operation and Maintenance Plan (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought) Attached, Document ID: Previously Submitted, Date Not Applicable
6.	Compliance Demonstration Reports/Records Attached, Document ID: Test Date(s)/Pollutant(s) Tested:
	Previously Submitted, Date: Test Date(s)/Pollutant(s) Tested:
•	☐ To be Submitted, Date (if known): Test Date(s)/Pollutant(s) Tested:
	Not Applicable ■ Not Applicable Not Applicable
-	Note: For FESOP applications, all required compliance demonstration records/reports must be submitted at the time of application. For Title V air operation permit applications, all required compliance demonstration reports/records must be submitted at the time of application, or a compliance plan must be submitted at the time of application.
7.	Other Information Required by Rule or Statute ☐ Attached, Document ID: ☐ ☑ Not Applicable

DEP Form No. 62-210.900(1) - Form Effective: 02/02/06

07387554/4.3/IC-DB-EU1 3/6/2007

Section [1] Lime Handling System

Additional Requirements for Air Construction Permit Applications

1. Control Technology Review and Analysis (Rules 62-212.400(10) and 62-212.500(7),	
F.A.C.; 40 CFR 63.43(d) and (e))	
☐ Attached, Document ID: ☐ Not Applicable	
2. Good Engineering Practice Stack Height Analysis (Rule 62-212.400(4)(d), F.A.C., and	
Rule 62-212.500(4)(f), F.A.C.)	
☐ Attached, Document ID: ☐ Not Applicable	
3. Description of Stack Sampling Facilities (Required for proposed new stack sampling facilities only)	
☐ Attached, Document ID: ☐ Not Applicable	
Additional Requirements for Title V Air Operation Permit Applications	
1. Identification of Applicable Requirements	
Attached, Document ID: Not Applicable	
2. Compliance Assurance Monitoring	•
Attached, Document ID: Not Applicable	
3. Alternative Methods of Operation	
Attached, Document ID: Not Applicable	
4. Alternative Modes of Operation (Emissions Trading)	
Attached, Document ID: Not Applicable	
5. Acid Rain Part Application	·
☐ Certificate of Representation (EPA Form No. 7610-1)	
Copy Attached, Document ID:	•
☐ Acid Rain Part (Form No. 62-210.900(1)(a))	
Attached, Document ID:	
Previously Submitted, Date:	
☐ Repowering Extension Plan (Form No. 62-210.900(1)(a)1.) ☐ Attached, Document ID:	
Previously Submitted, Date:	
☐ New Unit Exemption (Form No. 62-210.900(1)(a)2.)	
Attached, Document ID:	
☐ Previously Submitted, Date:	
Retired Unit Exemption (Form No. 62-210.900(1)(a)3.)	- 1
Attached, Document ID:	
☐ Previously Submitted, Date:	
Phase II NOx Compliance Plan (Form No. 62-210.900(1)(a)4.)	•
Attached, Document ID:	
☐ Previously Submitted, Date:	
Phase II NOx Averaging Plan (Form No. 62-210.900(1)(a)5.)	
Attached, Document ID:	
☐ Previously Submitted, Date:	
☐ Not Applicable	

Lime Handling System Additional Requirements Comment

EMISSIONS UNIT INFORMATION

Section [1]

ATTACHMENT IC-EU1-F1.10

CALCULATION OF EMISSIONS

ATTACHMENT IC-EU1-F1.10

CALCULATION OF EMISSIONS

Summary of PM/PM₁₀ Maximum Potential Emission Rate for Railcar Unloading and Lime Storage Silo Indiantown Cogeneration

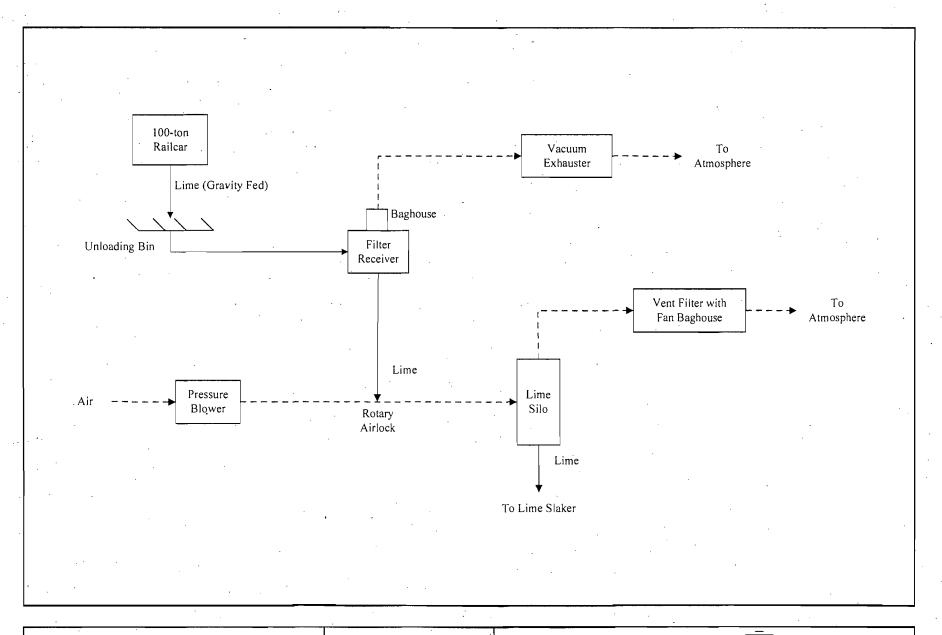
Control Equipment Baghouse	Flow (acfm)	Loading (gr/acf)	Hours (hr/yr)	lb/hour	TPY_
Baghouse	2.000				
-	2,000	0.010	8,760	0.17	0.75
Baghouse	2,000	0.010	8,760	0.17	0.75
			Total:	0.34	1.50
	Baghouse	Baghouse 2,000	Baghouse 2,000 0.010		

Note: acfm = actual cubic feet per minute.

gr/acf = grains per actual cubic feet.

lb/hr = pounds per hour. TPY = tons per year. ATTACHMENT IC-EU1-I1

PROCESS FLOW DIAGRAM



Attachment IC-EU1-11 Lime Handling System Process Flow Diagram Indiantown Cogeneration, L.P. Indiantown, Florida

Filename: 07387554/IC-EU1-11.VSD

Date: 03/09/07



ATTACHMENT IC-EU1-I3

DETAILED DESCRIPTION OF CONTROL EQUIPMENT

ATTACHMENT IC-EU1-I3a

CONTROL EQUIPMENT PARAMETERS FOR THE LIME SILO BAGHOUSE AT THE INDIANTOWN COGENERATION FACILITY

Manufacturer and Model No.		BHA, Model JP-H14		
j.				
Outlet Gas Temp (°F)			75	
Outlet Gas Flow Rate (acfin)			2,000	
Cleaning Method			Reverse Jet	
No. of bags	•		12	
Bag Material		Spun Bonded Polyeste		
Total Area of Filter Media (sq. ft)			516	
Air to Cloth Ratio			3.88	
Manufacturer's Guaranteed Outlet Loading (grains/act	f)		0.010	
Pollutants		Outlet Loading		
Particulate Matter (lb/hr)		0.17		

Note: Parameters based on manufacturers design specifications as shown on the following page:

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (acfin) X outlet loading rate (grains/acf) ÷ 7000 grains/lb X 60 min/hr

ATTACHMENT IC-EUI-I3b

CONTROL EQUIPMENT PARAMETERS FOR THE RAILCAR UNLOADING FILTER RECEIVER BAGHOUSE AT THE INDIANTOWN COGENERATION FACILITY

Manufacturer and Model No.	AVR Air Vent Filter, Model 72AVR32, Style III
Outlet Gas Temp (°F)	7:
Outlet Gas Flow Rate (acfin)	2,000
Bag Material	Mineral Reinforced Nylor
Total Area of Filter Media (sq. ft)	291
Air to Cloth Ratio	6.87
Manufacturer's Guaranteed Outlet Loading (grains/acf)	Ö.010
Pollutants	Outlet Loading
Particulate Matter (lb/hr)	0.17

Note: Parameters based on manufacturers design specifications as shown on the following page.

Sample calculations:

Outlet loading rate (lb/hr) = outlet gas flow rate (acfm) X outlet loading rate (grains/acf) \div 7000 grains/lb X 60 min/hr

ATTACHMENT A

ATTACHMENT A

SUPPLEMENTAL INFORMATION FOR CONSTRUCTION PERMIT APPLICATION

Indiantown Cogeneration, L.P. (Indiantown Cogeneration) owns and operates a cogeneration plant located in Indiantown, Martin County, Florida. The plant currently operates under Title V Operating Permit No. 0850102-007-AV. The facility generates electricity for sale and exports steam to the Louis Dreyfus Citrus Processing Plant.

The Indiantown facility currently uses lime as a reactant in its boiler flue gas desulfurization (FGD) systems. Lime in powdered form is delivered to the facility by truck. The lime is then off-loaded into the existing 900-ton storage silo. Lime from the trucks is transported to the silos via pneumatic discharge at a rate of 25 tons per hour (TPH) (i.e., 1 hour to unload a 25-ton truck) by using the on-board blowers to transfer the lime to the top of the silo. The stored lime is then slaked into a slurry for use in the two boilers (EU 001) spray dryer absorbers. The lime silo has a bin vent fabric filter baghouse. The lime-handling system is enclosed to the extent practical.

Indiantown Cogeneration is proposing to add the capability to receive lime by railcar. Unloading of the gravity flow-type railcars will be accomplished through a dilute phase, combination vacuum and pressure pneumatic transfer system at a rate of 20 TPH. It will take approximately 5 hours to unload a 100-ton railcar.

The lime will be unloaded into a bin via gravity-fed, bottom dump railcars. The bin will be located below ground level, and unloading will occur inside a building (open on either end to allow railcars to pass through). This design minimizes fugitive dust emissions from the unloading.

The lime will then enter a vacuum-type unloading system that transports the lime from the railcar to a filter receiver. The filter receiver acts both as a collection bin and also as a mechanism to clean the transport air of dust particles, since it has an integral baghouse. A rotary air lock will then feed the lime into the air stream created from a from a transporter blower, which transports the lime pneumatically to the existing lime silo. The existing silo already has a dust collector, and this will continue to be used in the future.

Total throughput of lime into the system is approximately 100 tons per day, or 36,500 tons per year (TPY) based on 365 days per year operation.

As described above, a baghouse (AVR Air Vent Filter, Model 72AVR32) is integral to the filter receiver on the railcar unloading system, which reduces PM emissions associated with unloading the railcars. The existing bin vent filter baghouse (BHA Model JP-H14) on the lime silo will continue to serve to reduce the PM emission associated from loading the silo.

Maximum PM and particulate matter less than 10 microns in diameter (PM₁₀) emissions from each baghouse are 0.17 pound per hour (lb/hr) and 0.75 TPY. Total PM/PM₁₀ emissions from both baghouses are 0.34 lb/hr and 1.50 TPY. The PM/PM₁₀ emissions are based on a maximum actual flow rate from each baghouse of 2,000 actual cubic feet per minute and a design grain loading rate of 0.01 grain per actual cubic feet per baghouse. Hours of operation are assumed continuous. Details of each bin vent filter baghouse, including emissions estimates, are included in this application for an air construction permit.