

## 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

September 16, 2009

Electronic Mail - Received Receipt Requested

Mr. Robert L. Greene Industrial Power Generating Company (INGENCO), LLC 2250 Dabney Road Richmond, Virginia 23230

Re: DEP File No. 0250623-007-AC (PSD-FL-408)

INGENCO Dade South - Installation of 24 reciprocating internal combustion engines

Request for Additional Information - Reminder

#### Dear Mr. Greene:

On June 2, 2009, we received your application and sufficient fee for an air construction permit to allow INGENCO to construct and operate an electric generation facility at the Dade South Landfill Facility in Miami-Dade County. The application was deemed incomplete and we requested additional information needed to process your application on July 1, 2009 and on July 2, 2009. We have not yet received the requested additional information. Rule 62-4.055(1) of the Florida Administrative Code (F.A.C.) requires the following:

"The applicant shall have **ninety days** after the Department mails a timely request for additional information to submit that information to the Department. If an applicant requires more than ninety days in which to respond to a request for additional information, the applicant may notify the Department in writing of the circumstances, at which time the application shall be held in active status for one additional period of up to ninety days. Additional extensions shall be granted for good cause shown by the applicant. A showing that the applicant is making a diligent effort to obtain the requested additional information shall constitute good cause. Failure of an applicant to provide the timely requested information by the applicable deadline shall result in denial of the application."

It has been more than 76 days since our request for additional information (copies attached). You are reminded that the permit processing time clock has stopped for this project and that we will not continue our review until we receive the additional information. If you require a period of time in addition to the 90 days allowed by rule, please submit a written request indicating the amount of time necessary. If you fail to provide the additional information or request additional time to submit the additional information, we will deny your application for air permit. If you have any questions regarding this matter, please contact the project engineer, Syed Arif, at 850/921-9528.

Sincerely,

Sved Arif. P.E.

New Source Review Section

#### REQUEST FOR ADDITIONAL INFORMATION - REMINDER

This letter was sent to the following people by electronic mail with received receipt requested.

German Hernandez, Miami-Dade Solid Waste Management: germanh@miamidade.gov

Kathleen Forney, EPA Region 4: <a href="mailto:forney.kathleen@epa.gov">forney.kathleen@epa.gov</a>

Lee Hoefert, DEP-SED: <u>lee.hoefert@dep.state.fl.us</u> Mallika Muthiah, DERM: <u>muthim@miamidade.gov</u>

James A. Susan, P.E., Fishbeck, Thompson, Carr & Huber, Inc.: jasusan@ftch.com

Dee Morse, NPS: dee morse@nps.gov

Vicki Gibson, DEP-BAR Reading File: (victoria.gibson@dep.state.fl.us)



# Florida Department of Environmental Protection

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

Jeff Kottkamp 11. Governor

Michael W. Sole Secretary

July 1, 2009

Electronic Mail - Received Receipt Requested rgreene@ingenco.com

Mr. Robert L. Greene Industrial Power Generating Company (INGENCO), LLC 2250 Dabney Road Richmond, Virginia 23230

Re: DEP File No. 0250623-007-AC (PSD-FL-408)
INGENCO Dade South – Installation of 24 reciprocating internal combustion engines
Request for Additional Information

#### Dear Mr. Greene:

The Department has received the application on June 2, 2009, to allow INGENCO to construct and operate an electric generation facility at the Dade South Landfill Facility in Miami-Dade County.

Pursuant to Rules 62-296.340, 62-4.055, and 62-4.070 F.A.C., Permit Processing, the Department requests submittal of additional information prior to processing the application. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

- 1. Section 1.1 of the application: The application indicates that bio-diesel fuel might be used in the Detroit Diesel engines. Please provide more information on the bio-diesel fuel that will be utilized in the engines. What effect will the bio-diesel have on the nitrogen oxides (NOx) emissions from the engines? If the NOx emissions are higher compared to No. 2 fuel oil, have they been taken into account when determining total NOx emissions from the engines? [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 2. Section 1.3 of the application: The application indicates that the engines when operating in the dual fuel mode will be burning No. 2 fuel oil (or biodiesel) and landfill gas (LFG). Please indicate when the engines are operating in dual fuel mode, how will the fractions of each fuel be monitored? The application also indicates that the optimum level of LFG fraction will be in the 92 to 94 percent range. How will this fraction of LFG be monitored? [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 3. Section 1.3 of the application: The application indicates that the LFG will be treated compression, dewatering, and filtration through a 10-micron filter. The Department has required filtration through a 1-micron filter (primary and polishing) for similar projects in the past. The same requirement will be imposed by the Department for this project. [Rule 62-4.070, F.A.C. Reasonable Assurance]

- 4. Section 1.3 and 1.5 of the application: The application indicates that a process diagram of the LFG treatment is included in Figure 3. The process diagram of the LFG treatment was not included with the application. Please submit the process diagram of the LFG treatment system. The application states in Section 1.5 that INGENCO will purchase LFG from the landfill that has been treated by compression, filtration and moisture removal. Will the operation of the LFG treatment system INGENCO responsibility or the Dade South landfill? [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 5. Section 1.4 of the application: The application indicates that the 24 Detroit engines were manufactured prior to 2007. Please submit documentation to the Department that shows the manufactured date of the engines. [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 6. Section 2.1.1 and 2.1.2 of the application: Emission calculations were done for NOx, carbon monoxide (CO), volatile organic compound (VOC) and particulate matter (PM) based on stack sampling results from similar facilities. Please provide stack sampling test data that were used to determine emissions from this facility. [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 7. Section 2.1.3 of the application: Emission calculations for sulfur dioxide (SO<sub>2</sub>) were done by assuming the hydrogen sulfide (H<sub>2</sub>S) concentration in the LFG to be 347 ppm. The Department in a teleconference on September 30, 2008 (followed up by an e-mail on February 5, 2009) requested the applicant to conduct H<sub>2</sub>S analysis of the LFG. Please provide results of the analysis, and if the H<sub>2</sub>S analysis has not been performed, please conduct the analysis and provide the results to the Department. [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 8. Section 2.1.4 and Appendix 4 of the application: Emission calculations for hydrogen chloride (HCl) were based on a default concentration of chlorinated compounds in the LFG as shown in Appendix 4 of the application. Please explain if the concentration of chlorinated compounds were verified analytically for the Dade South LFG? [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 9. Section 3.15.1 and Appendix 2 of the application: The application states that the generator limits are 340 kilowatts (kW) per generator, which limits the engine output to 469 brake horsepower (bhp) and therefore, the new electrical generating station will not be subject to 40 CFR Part 63, Subpart ZZZZ as the engine rating is less than 500 bhp. The generator specification sheet in Appendix 2 of the application lists the rated power of the engine as 550 bhp and 410 kW. Please explain the discrepancy. [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 10. Section 5.2 of the application: The application states that the installation of siloxane removal system is possible and will allow operation of a catalytic control system such as selective catalytic reduction (SCR) to control NOx emissions. Please provide cost effectiveness data in dollars per ton of NOx removed with the installation of siloxane removal system and SCR. [Rule 62-4.070, F.A.C. Reasonable Assurance]
- 11. The National Park Service (NPS) reviewed the application and commented that the proposed facility will not cause significant impacts at the Everglades National Park. However, based on

Mr. Robert L. Greene Page 3 of 3 July 1, 2009

information in the application, significant plume impacts were predicted at Biscayne National Park (NP) from the proposed facility. Generally the NPS considers plumes from a proposed source as significant if the perceptible impacts exceed a delta E of 2.0. Because the reported impacts are above the NPS plume impact threshold at Biscayne NP, the NPS asked that Dade South Landfill to look at mitigating measures to reduce emissions and corresponding impacts.

Any additional comments from EPA will be forwarded to you after we receive them.

The Department will resume processing this application after receipt of the requested 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. A new certification statement by the authorized representative or responsible official must accompany any material changes to the application. Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

We will be happy to meet and discuss the details with you and your staff. If you have any questions, I can be contacted at 850/921-9528. You may discuss the modeling requirements with Mr. Cleve Holladay at 850/921-8689.

Sincerely,

Syed Arif, P.E.

Syed A

New Source Review Section

/sa

cc: German Hernandez, Miami-Dade Solid Waste Management: germanh@miamidade.gov

Kathleen Forney, EPA Region 4: <u>forney.kathleen@epa.gov</u> Lee Hoefert, DEP-SED: <u>lee.hoefert@dep.state.fl.us</u>

Mallika Muthiah, DERM: muthim@miamidade.gov

James A. Susan, P.E., Fishbeck, Thompson, Carr & Huber, Inc.: jasusan@ftch.com

Dee Morse, NPS: dee morse@nps.gov

Vicki Gibson, DEP-BAR: (victoria.gibson@dep.state.fl.us) (for read file)



# Florida Department of Environmental Protection

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

Jell kotil amp 11 Cavernor

Michael W. Sole Secretary

July 2, 2009

Electronic Mail - Received Receipt Requested rgreene@ingenco.com

Mr. Robert L. Greene Industrial Power Generating Company (INGENCO), LLC 2250 Dabney Road Richmond, Virginia 23230

Re: DEP File No. 0250623-007-AC (PSD-FL-408)
INGENCO Dade South – Installation of 24 reciprocating internal combustion engines
Supplemental Request for Additional Information-Item 12

#### Dear Mr. Greene:

The Department has received the application on June 2, 2009, to allow INGENCO to construct and operate an electric generation facility at the Dade South Landfill Facility in Miami-Dade County. The Department mailed a Request for Additional Information on July 1, 2009 with eleven items. This letter supplements that letter with an additional item-item No. 12.

Pursuant to Rules 62-296.340, 62-4.055, and 62-4.070 F.A.C., Permit Processing, the Department requests submittal of additional information prior to processing the application. Should your response to any of the below items require new calculations, please submit the new calculations, assumptions, reference material and appropriate revised pages of the application form.

12. Appendix 13 contains the model input parameters for carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>) and particulate matter less than 10 microns (PM<sub>10</sub>). These parameters are used for determining modeling impacts for comparison to increments and National Ambient Air Quality Standards (NAAQS). The "Model Input Parameters-NO<sub>x</sub> Increment/NAAQS Sources" table in this Appendix has discrepancies between the locations shown in the table and the locations that are actually modeled. It appears that the locations that are modeled are correct. However, this table and the others in Appendix should be corrected where necessary. Also provide the actual names of the facilities and the respective emission sources in the corrected tables. [Rule 62-4.070, F.A.C. Reasonable Assurance]

Any additional comments from EPA will be forwarded to you after we receive them.

The Department will resume processing this application after receipt of the requested 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. A new certification statement by the authorized representative or responsible official must accompany

Mr. Robert L. Greene Page 2 of 2 July 2, 2009

any material changes to the application. Rule 62-4.055(1), F.A.C. now requires applicants to respond to requests for information within 90 days.

We will be happy to meet and discuss the details with you and your staff. If you have any questions on the modeling requirements, I can be contacted at 850/921-8986.

Sincerely,

Cleve Holladay, Air Quality Modeler New Source Review Section

/ch

cc: German Hernandez, Miami-Dade Solid Waste Management: germanh@miamidade.gov
Kathleen Forney, EPA Region 4: forney.kathleen@epa.gov
Lee Heefort, DEP SED: lee heefort@dep.stote fl.vs

Lee Hoefert, DEP-SED: <u>lee.hoefert@dep.state.fl.us</u> Mallika Muthiah, DERM: <u>muthim@miamidade.gov</u>

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Dee Morse, NPS: dee morse@nps.gov

Vicki Gibson, DEP-BAR: (victoria.gibson@dep.state.fl.us) (for read file)

### Livingston, Sylvia

From:

Livingston, Sylvia

Sent:

Wednesday, September 16, 2009 1:07 PM

To:

rgreene@ingenco.com

Cc:

germanh@miamidade.gov; forney.kathleen@epa.gov; Hoefert, Lee;

'muthim@miamidade.gov'; jasusan@ftch.com; 'dee morse@nps.gov'; Gibson, Victoria;

Walker, Elizabeth (AIR); Anderson, Lennon

Subject:

RAI - INGENCO Dade South (0250623-007-AC/ PSD-FL-408)

#### 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, *noting that you can view the documents*, 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: <a href="http://www.adobe.com/products/acrobat/readstep.html">http://www.adobe.com/products/acrobat/readstep.html</a>>.

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,

Sylvia Livingston
Bureau of Air Regulation
Division of Air Resource Management (DARM)
850/921-9506
sylvia.livingston@dep.state.fl.us



250623-007-AC-2.pc

### Livingston, Sylvia

From:

Robert L. Greene [rgreene@ingenco.com] Wednesday, September 16, 2009 2:39 PM

Sent: To:

Livingston, Sylvia

Subject:

RE: RAI - INGENCO Dade South (0250623-007-AC/ PSD-FL-408)

#### Received

----Original Message-----

From: Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]

Sent: Wednesday, September 16, 2009 1:07 PM

To: Robert L. Greene

**Cc:** germanh@miamidade.gov; forney.kathleen@epa.gov; Hoefert, Lee; muthim@miamidade.gov; jasusan@ftch.com; dee\_morse@nps.gov; Gibson, Victoria; Walker, Elizabeth (AIR); Anderson, Lennon

Subject: RAI - INGENCO Dade South (0250623-007-AC/ PSD-FL-408)

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Thank you,

Sylvia Livingston

Bureau of Air Regulation

Division of Air Resource Management (DARM)

850/921-9506

sylvia.livingston@dep.state.fl.us

<<RAI 0250623-007-AC-2.pdf>>