



BOARD OF COUNTY COMMISSIONERS

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JUL 23 2012

**DIVISION OF AIR
RESOURCE MANAGEMENT**

John E. Manning
District One July 20, 2012

Brian Bigelow
District Two

Mr. Yousry Attalla, P.E.

Ray Judah
District Three

Florida Department of Environmental Protection
2600 Blair Stone Road

Tammy Hall
District Four

Tallahassee, Florida 32399-2400

Frank Mann
District Five

SUBJ: Application for Permit Modification
PSD-FL-151D/0710119-007-AV

Karen B. Hawes
County Manager

Lee County Resource Recovery Facility

Michael D. Hunt
County Attorney

Diana M. Parker
County Hearing Examiner

Dear Mr. Attalla:

Project No.: 0710119-010-AC/0710119-011-AV

Enclosed, please find four copies of a completed Form No. 62-210.900(1) related to the Lee County Resource Recovery Facility. The purpose of this requested modification is to remove the stack testing requirements for ammonia slip (NH₃) for Municipal Waste Combustor (MWC) units 1, 2, and 3. We also request the Department to waive the requirement to continuously monitor ammonia (NH₃) emissions from MWC Unit No. 3 at the Facility.

Specific Condition A.36 of Permit No. 0710119-007-AV¹ states in part: "Prior to permit renewal, Emissions Unit ID Nos. 001 and 002 shall be tested to demonstrate compliance with the emission limitations and standards for ammonia slip" (i.e., approx. once every five years). Stack test data indicate that Units 1 & 2 have successfully demonstrated compliance with the permitted limit of 50 ppm @ 7% O₂ since initial operation. In fact, since 2005, stack test results have not exceeded 5 ppm for units 1 & 2.

Specific Condition B.32 of Permit No. 0710119-007-AV² states in part: "An ammonia CEMS shall be operated for the purpose of measuring ammonia slip from this emissions unit (with a range of 100 ppm), and used for informational purposes rather than continuous compliance ...". Since the commissioning of Unit 3 in 2007, the facility has used a Midac Model I309-1 instrument to comply with condition B. 32. However, the instrument now requires significantly more maintenance and replacement parts are becoming more difficult to obtain.

Also included with this application package are the monthly average ammonia slip values recorded by the Midac since it was installed. The recorded values have always been well below the permitted NH₃ limit of 30 ppm. Given that MWC Unit 3 now has an established track record of NO_x reduction without excessive NH₃ slip, Lee County is

¹ Condition A.36 of the Title V Operating Permit derives from Condition C. 3 of Permit No. PSD-FL-151E
² Condition B. 32 of the Title V Operating Permit derives from Condition B. 13 of Permit No. PSD-FL-151C

requesting that the NH3 slip CEM provision (Condition B. 32) be removed from the permit(s).

The purpose of testing and monitoring for ammonia slip has been to provide assurance that the facility does not 'over-dose' the ammonia feed in order to meet its NOx emission limits. The historic emissions of both NOx and ammonia slip clearly indicate that such practice has not been demonstrated, nor is there a purpose for such practice. Therefore, we believe that the stack testing and monitoring requirements for ammonia slip provides no additional benefit with regard to ensuring environmental protection from air emissions.

Thank you for your consideration of this requested modification. If you have any questions regarding this application for permit modification, please do not hesitate to contact me at (239) 533-8000.

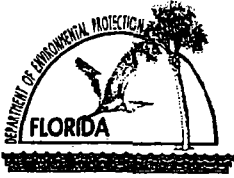
Sincerely,



Lindsey Sampson, Director
Solid Waste Division

w/ Attachments

cc: Mike Duff
Tyler Huffman
Jason Gorie
Don Castro
Ajaya Satyal



Department of Environmental Protection

RECEIVED

Division of Air Resource Management

JUL 23 2012

APPLICATION FOR AIR PERMIT - LONG FORM

DIVISION OF AIR RESOURCE MANAGEMENT

I. APPLICATION INFORMATION

Air Construction Permit – Use this form to apply for an air construction permit:

- For any required purpose at a facility operating under a federally enforceable state air operation permit (FESOP) or Title V air operation permit;
- For a proposed project subject to prevention of significant deterioration (PSD) review, nonattainment new source review, or maximum achievable control technology (MACT);
- To assume a restriction on the potential emissions of one or more pollutants to escape a requirement such as PSD review, nonattainment new source review, MACT, or Title V; or
- 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, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

| | |
|--|--|
| 1. Facility Owner/Company Name: Lee County Solid Waste Division | |
| 2. Site Name: Lee County Resource Recovery Facility | |
| 3. Facility Identification Number: 0710119 | |
| 4. Facility Location... Street Address or Other Locator: 10500 Buckingham Rd City: Ft. Myers County: Lee Zip Code: 33905 | |
| 5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No | 6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

Application Contact

| | |
|--|--|
| 1. Application Contact Name: Lindsey Sampson | |
| 2. Application Contact Mailing Address... Organization/Firm: Lee County Department of Solid Waste Management Street Address: 10500 Buckingham Rd City: Ft Myers State: FL Zip Code: 33905 | |
| 3. Application Contact Telephone Numbers... Telephone: (239) 533 - 8000 ext. Fax: (239) 461-5871 | |
| 4. Application Contact E-mail Address: | |

Application Processing Information (DEP Use)

| | |
|--|-----------------------------------|
| 1. Date of Receipt of Application: 7-23-2012 | 3. PSD Number (if applicable): |
| 2. Project Number(s): 0710119-01-AV | 4. Siting Number (if applicable): |

0710119-01-AV

APPLICATION INFORMATION

Purpose of Application

This application for air permit is being 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

The purpose of this application is to eliminate the ammonia slip stack test requirements for units 1 & 2 (PSD-FL-151E/0710119-008-AC, Condition C.3 & 0710119-007-AV, A.36) and also the ammonia slip monitoring and stack test requirements for unit 3 (PSD-FL-151D/0710119-005-AC, Condition D.3 & 0710119-007-AV, B.32). The facility has successfully demonstrated compliance since the emission units became operational. Such demonstration indicates that the combustion units are not over-dosed with ammonia (or urea for unit 3) in order to meet Nox compliance. Additionally, the ammonia slip monitor on unit 3 is becoming increasingly difficult to repair as the parts have become obsolete.

APPLICATION INFORMATION

Scope of Application

| Emissions Unit ID Number | Description of Emissions Unit | Air Permit Type | Air Permit Processing Fee |
|---------------------------------|--------------------------------------|------------------------|----------------------------------|
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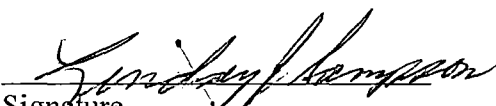
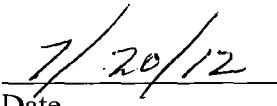
Application Processing Fee

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

APPLICATION INFORMATION

Owner/Authorized Representative Statement

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

| |
|--|
| 1. Owner/Authorized Representative Name : Lindsey Sampson |
| 2. Owner/Authorized Representative Mailing Address... Organization/Firm: Lee County Solid Waste Division Street Address: 10500 Buckingham Rd City: Ft. Myers State: FL Zip Code: 33905 |
| 3. Owner/Authorized Representative Telephone Numbers... Telephone: (239) 533 - 8000 ext. Fax: (239) 461 - 5871 |
| 4. Owner/Authorized Representative E-mail Address: LSampson@leegov.com |
| 5. Owner/Authorized Representative Statement: <i>I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.</i>  Signature  Date |

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation 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 options, as applicable): <input type="checkbox"/> 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. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source. |
| 3. Application Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code: |
| 4. Application Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () - |
| 5. Application Responsible Official E-mail Address: |

APPLICATION INFORMATION

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

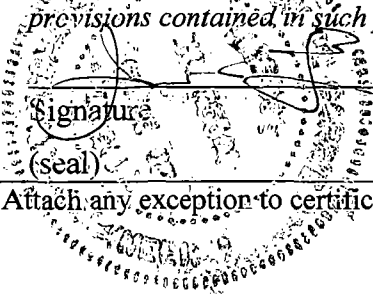
Lindsay J. Sampson

Date

7/20/12

APPLICATION INFORMATION

Professional Engineer Certification

| |
|---|
| 1. Professional Engineer Name: Jason M. Gorrie Registration Number: 55341 |
| 2. Professional Engineer Mailing Address... Organization/Firm: Covanta Energy Corporation Street Address: 350 N. Falkenburg Rd. City: Tampa State: FL Zip Code: 33619 |
| 3. Professional Engineer Telephone Numbers... Telephone: (813) 684-5688 ext.3015 Fax: () - |
| 4. Professional Engineer E-mail Address: jgorrie@covantaenergy.com |
| 5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(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</i> <i>(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.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, 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.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, 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 <input checked="" type="checkbox"/>, 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.</i> <i>(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 <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i>  _____ Signature (seal) 4/25/12 _____ Date |

* Attach any exception to certification statement.

LCRRF
NO_x
12-Month Rolling Average

| Month | Monthly NOx Average (ppm) corrected to 7% O2 | 12-month Rolling NOx Average (ppm) | 12-month Rolling NOx Average (allowable) (ppm) | Monthly NH3 Slip Average (ppm) |
|--------------|--|------------------------------------|--|--------------------------------|
| October-07 | 114 | | 140 | 5.3 |
| November-07 | 104 | | 140 | 4.9 |
| December-07 | 125 | | 140 | 2.9 |
| January-08 | 130 | | 140 | 2.2 |
| February-08 | 128 | | 140 | 2.5 |
| March-08 | 124 | | 140 | 2.4 |
| April-08 | 119 | | 140 | 2.5 |
| May-08 | 120 | | 140 | 3.0 |
| June-08 | 118 | | 140 | 3.2 |
| July-08 | 126 | | 140 | 4.4 |
| August-08 | 129 | | 140 | 5.5 |
| September-08 | 130 | | 140 | 4.9 |
| October-08 | 121 | 123 | 140 | 4.9 |
| November-08 | 110 | 123 | 137.5 | 4.6 |
| December-08 | 108 | 122 | 135 | 4.2 |
| January-09 | 106 | 120 | 132.5 | 3.9 |
| February-09 | 102 | 118 | 130 | 6.1 |
| March-09 | 101 | 116 | 127.5 | 5.6 |
| April-09 | 101 | 114 | 125 | 5.1 |
| May-09 | 102 | 113 | 122.5 | 5.8 |
| June-09 | 101 | 111 | 120 | 13.2 |
| July-09 | 105 | 110 | 117.5 | 7.7 |
| August-09 | 100 | 107 | 115 | 7.3 |
| September-09 | 102 | 105 | 112.5 | 8.8 |
| October-09 | 104 | 104 | 110 | 6.5 |
| November-09 | 105 | 103 | 110 | 5.6 |
| December-09 | 105 | 103 | 110 | 3.1 |
| January-10 | 106 | 103 | 110 | 3.9 |
| February-10 | 106 | 103 | 110 | 1.6 |
| March-10 | 104 | 103 | 110 | 2.0 |
| April-10 | 104 | 104 | 110 | 4.7 |
| May-10 | 108 | 104 | 110 | 6.4 |
| June-10 | 103 | 104 | 110 | 12.2 |
| July-10 | 103 | 104 | 110 | 9.7 |
| August-10 | 106 | 105 | 110 | 6.1 |
| September-10 | 103 | 105 | 110 | 5.2 |
| October-10 | 105 | 105 | 110 | 4.6 |
| November-10 | 107 | 105 | 110 | 6.6 |
| December-10 | 102 | 105 | 110 | 6.6 |
| January-11 | 104 | 105 | 110 | 6.6 |
| February-11 | 107 | 105 | 110 | 3.0 |
| March-11 | 101 | 104 | 110 | 3.5 |
| April-11 | 103 | 104 | 110 | 2.5 |
| May-11 | 100 | 104 | 110 | 6.3 |
| June-11 | 106 | 104 | 110 | 6.5 |
| July-11 | 105 | 104 | 110 | 5.0 |
| August-11 | 104 | 104 | 110 | 3.3 |
| September-11 | 107 | 104 | 110 | 2.8 |
| October-11 | 105 | 104 | 110 | 2.7 |
| November-11 | 105 | 104 | 110 | 1.9 |
| December-11 | 104 | 104 | 110 | 1.4 |
| January-12 | 104 | 104 | 110 | 1.3 |
| February-12 | 105 | 104 | 110 | 1.3 |
| March-12 | 104 | 104 | 110 | 1.4 |
| April-12 | 105 | 104 | 110 | 1.5 |
| May-12 | 106 | 105 | 110 | 1.9 |
| June-12 | | | 110 | |
| July-12 | | | 110 | |
| August-12 | | | 110 | |
| September-12 | | | 110 | |
| October-12 | | | 110 | |
| November-12 | | | 110 | |
| December-12 | | | 110 | |

Monthly NH3 Slip and NOx Averages

