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RECEIVED

MAY 11 2011

BUREAU OF  
AIR REGULATION

May 9, 2011

Ms. Trina Vielhauer, Director  
Division of Air Resource Management  
Florida Department of Environmental Protection  
2600 Blair Stone Road, MS5505  
Tallahassee, Florida 32399-2400

Subject: Hillsborough County, Florida Waste-to-Energy (WTE) Facility  
Continuous Emissions Monitoring System (CEMS) for Mercury

Dear Ms Vielhauer:

Camp Dresser & McKee Inc. (CDM) is the engineer of record of Hillsborough County's WTE facility. In follow up to our meeting on April 6, 2011 in your office, we are requesting that the Department extend the date for one (1) year by which Hillsborough County was to install a continuous mercury (Hg) monitoring device on combustion unit #4 under the permit conditions contained in Air Permit No. 0570261-010-AC, PSD-FL-369B. We are also requesting relief from the 95 per cent availability requirement found at Section 3, Specific Condition 33.b in the permit because our investigations, research, and experience indicates that Hg CEMS devices on WTE facility applications do not achieve this high level of reliability. During the requested time extension it is the County's intent to field test a new generation Hg CEMS offered by Sick Maihak, Inc. (Sick).

Covanta, the WTE facility operator and Hillsborough County are entering into an arrangement with Sick to install and field test their latest generation Hg CEMS. The Sick Hg CEMS system is scheduled to be installed on or about the end of June 2011 and should be operational shortly thereafter.

The field test will be conducted to demonstrate its reliability and accuracy on a WTE facility application. Covanta will work with Sick-Maihak technicians to install and operate the instrument in accordance with the manufacturer's recommendations. Selection of the monitoring location will be in accordance with the requirements of Performance Specification 12-A (PS-12A).

Hillsborough County, Covanta and CDM are suggesting that the criteria for judging success of this field test should be as follows:

1. The Hg CEMS accurately measures the Hg concentrations in the stack emissions. The monitor shall meet the requirements of PS-12A.





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2. The Hg CEMS demonstrates, over a 12 month period, reliability of at least 80% above the new availability factor the Department stipulates in its response to the request above for relief from 95% availability.
3. The demonstrated operating and maintenance (O&M) costs for the Sick Hg CEMS is consistent with the O&M costs for other CEMS currently in use at the Hillsborough facility, and with O&M costs for a sorbent trap style continuous Hg monitor.

All three of the above criteria should be met in order for the field test to be considered a success and that the Hg CEMS is suitable for commercial application at a WTE facility.

I have attached for your use DEP Form 62-210.900(1) - Long Form Air Permit Application with appropriate changes.

If you wish to discuss this request or have any questions in this regard do not hesitate to call me at (813) 281 2900 or email me at [strobridgeDE@cdm.com](mailto:strobridgeDE@cdm.com).

Very truly yours,

Daniel E. Strobridge, QEP  
Vice President  
Camp Dresser & McKee Inc.

cc: Nate Johnson, Hillsborough County  
Jason Gorrie, Covanta  
Bill Crellin, CDM





## 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

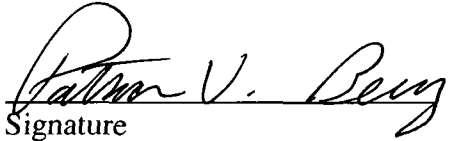
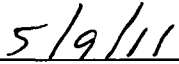
This application is a minor revision to administratively combine Title V operations renewal (File No. 0570261-012-AV) and amend Permit Conditions pursuant to meeting conducted at FDEP office on April 6, 2011. The applicant is requesting one (1) year extension to install continuous mercury (Hg) monitor on Combustion Unit No. 4 under permit No. 0570261-010-AC, PSD-FL-369B. The applicant is also requesting relief from 95% availability requirement for Hg CEM.



# APPLICATION INFORMATION

## Owner/Authorized Representative Statement

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

1. Owner/Authorized Representative Name : Patricia V. Berry, Interim Manager, Solid Waste Management Group
2. Owner/Authorized Representative Mailing Address... Organization/Firm: Hillsborough County Public Utilities Department Street Address: 925 Twiggs Street City: Tampa State: Florida Zip Code: 33602
3. Owner/Authorized Representative Telephone Numbers... Telephone: ( 813 ) 272 -5977 ext. 43338 Fax: (813) 272 - 6224
4. Owner/Authorized Representative E-mail Address: berryp@hillsboroughcounty.org
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: Patricia V. Berry, Interim Manager, Solid Waste Management Group
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 checked="" 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: Hillsborough County Public Utilities Department Street Address: 925 Twiggs Street City: Tampa State: Florida Zip Code: 33602
4. Application Responsible Official Telephone Numbers... Telephone: (813) 272 -5977 ext. 43338 Fax: (813) 272 - 6224
5. Application Responsible Official E-mail Address: berryv@hillsboroughcounty.org

**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.

Patricia V. Berry  
Signature

5/9/11  
Date



# APPLICATION INFORMATION

## Professional Engineer Certification

1. Professional Engineer Name: William R. Crellin Jr., P.E. Registration Number: 46574
2. Professional Engineer Mailing Address... Organization/Firm: CDM Street Address: 1715 N. Westshore Boulevard, Suite 875 City: Tampa State: Florida Zip Code: 33607
3. Professional Engineer Telephone Numbers... Telephone: (813) 262 - 8825 ext. Fax: (813) 288-8787
4. Professional Engineer E-mail Address: crellinwr@cdm.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i>  (1) <i>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>  (2) <i>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>  (3) <i>If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" 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>  (4) <i>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>  (5) <i>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>  <i>William Robert Crellin Jr. PE</i> Signature  <i>May 9, 2011</i> Date  (seal)

\* Attach any exception to certification statement.

## II. FACILITY INFORMATION

### A. GENERAL FACILITY INFORMATION

#### Facility Location and Type

1. Facility UTM Coordinates... Zone            East (km)    368.2 North (km)   3092.7		2. Facility Latitude/Longitude... Latitude (DD/MM/SS)    27/57/14 Longitude (DD/MM/SS) 82/20/22	
3. Governmental Facility Code: 3	4. Facility Status Code: C	5. Facility Major Group SIC Code: 49	6. Facility SIC(s): 4953
7. Facility Comment :			

#### Facility Contact

1. Facility Contact Name: Glenn Hoag
2. Facility Contact Mailing Address... Organization/Firm: Covanta Hillsborough Inc. Street Address: 350 N. Falkenburg Road <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>City: Tampa</span> <span>State: Florida</span> <span>Zip Code: 33619</span> </div>
3. Facility Contact Telephone Numbers: Telephone: (813) 684-5688 ext. 3013 Fax:( ) -
4. Facility Contact E-mail Address: ghoag@covantaenergy.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: Glenn Hoag
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Covanta Hillsborough Inc. Street Address: 350 N. Falkenburg Road <div style="display: flex; justify-content: space-between; margin-top: 10px;"> <span>City: Tampa</span> <span>State: Florida</span> <span>Zip Code: 33619</span> </div>
3. Facility Primary Responsible Official Telephone Numbers... Telephone: (813) 684-5688 ext. 3013 Fax: ( ) -
4. Facility Primary Responsible Official E-mail Address: ghoag@covantaenergy.com

## 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. <input type="checkbox"/> Small Business Stationary Source	<input type="checkbox"/> Unknown
2. <input type="checkbox"/> Synthetic Non-Title V Source	
3. <input checked="" type="checkbox"/> Title V Source	
4. <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)	
5. <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs	
6. <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)	
7. <input type="checkbox"/> Synthetic Minor Source of HAPs	
8. <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)	
9. <input checked="" type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)	
10. <input type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)	
11. <input type="checkbox"/> 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. Pollutant Classification	3. Emissions Cap [Y or N]?
SO <sub>2</sub>	A	N
NO <sub>x</sub>	A	N
CO	A	N
PM	A	N
PCDD/PCDF	A	N
Hg	A	N
Cd	A	N
Pb	A	N
HCl	A	N
HF	A	N
Ozone (as VOC)	A	N
SAM	A	N



**FACILITY INFORMATION**

**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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>6/8/10</u>
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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>6/8/10</u>
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) <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>6/8/10</u>

**Additional Requirements for Air Construction Permit Applications**

1.	Area Map Showing Facility Location: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): <input type="checkbox"/> Attached, Document ID: _____
3.	Rule Applicability Analysis: <input type="checkbox"/> Attached, Document ID: _____
4.	List of Exempt Emissions Units: <input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
9.	Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable
10.	Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.): <input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable

## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for FESOP Applications

- |   |
|---|
| 1. List of Exempt Emissions Units:<br><input type="checkbox"/> Attached, Document ID: _____ <input type="checkbox"/> Not Applicable (no exempt units at facility) |
|---|

#### Additional Requirements for Title V Air Operation Permit Applications

- |  |
|--|
| 1. List of Insignificant Activities: (Required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (revision application)   |
| 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)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Not Applicable (revision application with no change in applicable requirements)  |
| 3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)<br><input type="checkbox"/> Attached, Document ID: _____<br>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. |
| 4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____<br><input type="checkbox"/> Equipment/Activities Onsite but Not Required to be Individually Listed<br><input type="checkbox"/> Not Applicable   |
| 5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 6. Requested Changes to Current Title V Air Operation Permit:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable  |

## FACILITY INFORMATION

### C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

#### Additional Requirements for Facilities Subject to Acid Rain, CAIR, or Hg Budget Program

1. Acid Rain Program Forms:

Acid Rain Part Application (DEP Form No. 62-210.900(1)(a)):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable (not an Acid Rain source)

Phase II NO<sub>x</sub> Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable

New Unit Exemption (DEP Form No. 62-210.900(1)(a)2.):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable

2. CAIR Part (DEP Form No. 62-210.900(1)(b)):

Attached, Document ID: \_\_\_\_\_  Previously Submitted, Date: \_\_\_\_\_

Not Applicable (not a CAIR source)

#### Additional Requirements Comment

All above additional requirements were previously submitted on application dated June 8, 2010 and remains unchanged.