



# Florida Department of Environmental Protection

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

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

*Sent by Electronic Mail - Received Receipt Requested*

Ms. Patricia V. Berry  
Interim Manager  
Hillsborough County  
Solid Waste Management Group  
601 E. Kennedy Boulevard  
Tampa, Florida 33602

Re: Hillsborough County  
Draft Permit No. 0570261-012-A V, Title V Air Operation Permit Revision  
Draft Permit No. 0570261-013-AC/PSD-FL-369C, Air Construction Permit Revision

Dear Ms. Berry:

Enclosed is the draft permit package for a Title V air operation permit revision and an air construction permit revision for the Hillsborough County Resource Recovery Facility. This facility is located in Hillsborough County at 350 North Falkenburg Road in Tampa, Florida. The permit package includes the following documents:

- The Written Notice of Intent to Issue Air Permits provides important information regarding: the Permitting Authority's intent to issue air permits for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue air permits; the procedures for submitting comments on the draft Title V air operation permit revision and the draft air construction permit revision; the process for filing a petition for an administrative hearing; and, the availability of mediation.
- The Public Notice of Intent to Issue Air Permits is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Air Permits must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication.
- The Statement of Basis, which summarizes the facility, the equipment, and the primary rule applicability.
- The draft Title V air operation permit revision, which includes the specific permit conditions that regulate the emissions units covered by the proposed project.
- The Technical Evaluation and Preliminary Determination, which explains the revisions to underlying construction permit conditions.
- The draft air construction permit revision.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Mr. Syed Arif, P.E., Environmental Administrator, at the above letterhead address. If you have any questions, please contact Mr. Scott M. Sheplak, P.E., by telephone at 850/717-9074 or by email at [scott\\_sheplak@dep.state.fl.us](mailto:scott_sheplak@dep.state.fl.us).

Sincerely,

Jeffery F. Koerner, Program Administrator  
Office of Permitting and Compliance  
Division of Air Resource Management

8-3-11

Date

JFK/sa/sms

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

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*In the Matter of an  
Application for Permits by:*

Hillsborough County  
Solid Waste Management Group  
601 E. Kennedy Boulevard  
Tampa, Florida 33602

Draft Permit No. 0570261-012-AV  
Draft Permit No. 0570261-013-AC/PSD-FL-369C  
Facility ID No. 0570261  
Hillsborough County Resource Recovery Facility

*Responsible Official:*  
Ms. Patricia V. Berry, Interim Manager

Title V Air Operation Permit Revision  
Air Construction Permit Revision  
Hillsborough County, Florida

**Facility Location:** The applicant owns and Covanta Hillsborough operates the existing Hillsborough County Resource Recovery Facility, which is located in Hillsborough County at 350 North Falkenburg Road in Tampa, Florida.

**Project:** The purpose of this project is for a revision, Permit No. 0570261-012-AV to include Unit 4 in the Title V air operation permit and to revise several of the mercury (Hg) continuous emission monitoring system (CEMS) provisions in the underlying air construction permit No. 0570261-010-AC/PSD-FL-369B. Details of the project are provided in the application, the enclosed Statement of Basis and the Technical Evaluation and Preliminary Determination.

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft Title V air operation permit revision, the Statement of Basis, the draft air construction permit revision, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft Title V air operation permit revision or the draft air construction permit revision by visiting the following web site:

<http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Air Permits:** The Permitting Authority gives notice of its intent to issue a draft Title V air operation permit revision and a concurrent draft air construction permit revision for the projects described above. The applicant has provided reasonable assurance that operation of the existing equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed Title V air operation permit and subsequent final permits in accordance with the conditions of the draft Title V air operation permit revision and the draft air construction permit revision unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

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applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permits (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet 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 Permitting Authority at the above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the draft Title V air operation permit revision and the draft air construction permit revision for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft Title V air operation permit revision or the draft air construction permit revision, the Permitting Authority shall issue a revised draft Title V air operation permit revision or a revised draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permits. 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 attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permits, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 each petitioner received notice of the agency action or proposed 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

**WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS**

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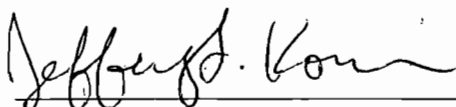
explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority'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 Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permits. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

**Objections:** Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.

Executed in Tallahassee, Florida.



Jeffery F. Koerner, Program Administrator  
Office of Permitting and Compliance  
Division of Air Resource Management

8-3-11

Date

WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMITS

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Permits package (including the Public Notice, the Statement of Basis, the Draft Title V Air Operation Permit Revision, the Technical Evaluation and Preliminary Determination, and the Draft Air Construction Permit Revision), or a link to these documents available electronically on a publicly accessible server, was sent by electronic mail with received receipt requested before the close of business on 8-3-11 to the persons listed below.

- Ms. Patricia V. Berry, Hillsborough County: [berryp@hillsboroughcounty.org](mailto:berryp@hillsboroughcounty.org)
- Mr. Glenn Hoag, Covanta Hillsborough: [ghoag@covantaenergy.com](mailto:ghoag@covantaenergy.com)
- Mr. Jason Gorrie, P.E., Covanta: [jgorrie@covantaenergy.com](mailto:jgorrie@covantaenergy.com)
- Mr. William J. Crellin, Jr., P.E., CDM: [crellinwr@cdm.com](mailto:crellinwr@cdm.com)
- Mr. Daniel E. Strobridge, QEP, CDM: [strobridgede@cdm.com](mailto:strobridgede@cdm.com)
- Ms. Diana M. Lee, P.E., EPCHC: [lee@epchc.org](mailto:lee@epchc.org)
- Ms. Cindy Zhang-Torres, P.E., DEP SWD: [zhang-torres@dep.state.fl.us](mailto:zhang-torres@dep.state.fl.us)
- Ms. Cindy Mulkey, DEP Siting Office: [cindy.mulkey@dep.state.fl.us](mailto:cindy.mulkey@dep.state.fl.us)
- Ms. Heather Abrams, U.S. EPA Region 4: [abrams.heather@epa.gov](mailto:abrams.heather@epa.gov)
- Ms. Katy R. Forney, U.S. EPA Region 4: [forney.kathleen@epa.epa.gov](mailto:forney.kathleen@epa.epa.gov)
- Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: [oquendo.ana@epa.gov](mailto:oquendo.ana@epa.gov)
- Ms. Barbara Friday, DEP OPC: [barbara.friday@dep.state.fl.us](mailto:barbara.friday@dep.state.fl.us) (for posting with U.S. EPA, Region 4)
- Ms. Lynn Searce, DEP OPC: [lynn.searce@dep.state.fl.us](mailto:lynn.searce@dep.state.fl.us) (for reading file)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

Lynn Searce (Clerk)      August 3, 2011 (Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

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Florida Department of Environmental Protection  
Division of Air Resource Management, Office of Permitting and Compliance  
Draft Permit No. 0570261-012-AV, Title V Air Operation Permit Revision  
Draft Permit No. 0570261-013-AC/PSD-FL-369C, Air Construction Permit Revision  
Hillsborough County  
Hillsborough County Resource Recovery Facility  
Hillsborough County, Florida

**Applicant:** The applicant for this project is Hillsborough County. The applicant's responsible official and mailing address are: Ms. Patricia V. Berry, Interim Manager, Hillsborough County, Solid Waste Management Group, 601 E. Kennedy Boulevard, Tampa, Florida 33602.

**Facility Location:** The applicant owns and Covanta Hillsborough operates the existing Hillsborough County Resource Recovery Facility, which is located in Hillsborough County at 350 North Falkenburg Road in Tampa, Florida.

**Project:** The applicant applied on June 9, 2010, to the Department for a revision to include Unit 4 in the Title V air operation permit.

This existing facility consists of: four municipal solid waste combustors (Unit Nos. 1, 2, 3 and 4) with auxiliary burners; lime storage and processing facilities; ash storage and processing facilities; cooling towers; and, ancillary support equipment. Also included in this permit are miscellaneous insignificant emissions units and/or activities. The total capacity of the Hillsborough County Resource Recovery Facility is 1,800 tons/day (TPD) of municipal solid waste fuel with an average heating value of 4,500 Btu/lb. The gross nominal electric generating capacity of the facility is 47 megawatts (MW). The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc. a subsidiary of Covanta Energy Corporation.

The project also includes an air construction permit revision to change several of the mercury (Hg) continuous emission monitoring system (CEMS) provisions in the underlying air construction permit No. 0570261-010-AC/PSD-FL-369B for Unit 4.

**Permitting Authority:** Applications for Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-213 of the Florida Administrative Code (F.A.C.). Applications for air construction permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210 and 62-212 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and a Title V air operation permit is required to operate the facility. The Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at the address indicated above for the Permitting Authority. The complete project file includes the draft Title V air operation permit revision, the Statement of Basis, the draft air construction permit revision, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may view the draft Title V air operation permit revision or the draft air construction permit revision by visiting the following web site:

<http://www.dep.state.fl.us/air/emission/apds/default.asp> and entering the permit number shown above.

Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Air Permits:** The Permitting Authority gives notice of its intent to issue a draft Title V air operation permit revision and a concurrent draft air construction permit revision for the projects described

(Public Notice to be Published in the Newspaper)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

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above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a proposed Title V air operation permit and subsequent final permits in accordance with the conditions of the draft Title V air operation permit revision and the draft air construction permit revision unless a response received in accordance with the following procedures results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the draft Title V air operation permit revision and the draft air construction permit revision for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. As part of his or her comments, any person may also request that the Permitting Authority hold a public meeting on this permitting action. If the Permitting Authority determines there is sufficient interest for a public meeting, it will publish notice of the time, date, and location in the Florida Administrative Weekly (FAW). If a public meeting is requested within the 30-day comment period and conducted by the Permitting Authority, any oral and written comments received during the public meeting will also be considered by the Permitting Authority. If timely received written comments or comments received at a public meeting result in a significant change to the draft Title V air operation permit revision or the draft air construction permit revision, the Permitting Authority shall issue a revised draft Title V air operation permit revision or a revised draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection at 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. 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 receipt of a written notice, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority 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, F.A.C.

A petition that disputes the material facts on which the Permitting Authority'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 rights will be affected by the agency determination; (c) A statement of when and how the petitioner received notice of the agency action or proposed 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 the 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 Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall

**(Public Notice to be Published in the Newspaper)**

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMITS

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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 Permitting Authority's final action may be different from the position taken by it in this Public Notice of Intent to Issue Air Permits. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.


**Mediation:** Mediation is not available for this proceeding.

**Objections:** Finally, pursuant to 42 United States Code (U.S.C.) Section 7661d(b)(2), any person may petition the Administrator of the EPA within 60 days of the expiration of the Administrator's 45-day review period as established at 42 U.S.C. Section 7661d(b)(1), to object to the issuance of any Title V air operation permit. Any petition shall be based only on objections to the permit that were raised with reasonable specificity during the 30-day public comment period provided in the Public Notice, unless the petitioner demonstrates to the Administrator of the EPA that it was impracticable to raise such objections within the comment period or unless the grounds for such objection arose after the comment period. Filing of a petition with the Administrator of the EPA does not stay the effective date of any permit properly issued pursuant to the provisions of Chapter 62-213, F.A.C. Petitions filed with the Administrator of EPA must meet the requirements of 42 U.S.C. Section 7661d(b)(2) and must be filed with the Administrator of the EPA at: U.S. EPA, 401 M Street, S.W., Washington, D.C. 20460. For more information regarding EPA review and objections, visit EPA's Region 4 web site at <http://www.epa.gov/region4/air/permits/Florida.htm>.



# Memorandum

# Florida Department of Environmental Protection

TO: Jeffery F. Koerner, P.E., Program Administrator  
Office of Permitting and Compliance 

THROUGH: Syed Arif, P.E. SA 8/3/11

FROM: Scott M. Sheplak, P.E. sms

DATE: August 2, 2011

SUBJECT: Hillsborough County  
Hillsborough County Resource Recovery Facility (HCRRF)  
Intent to Issue Package  
Title V Air Operation Permit Revision  
Draft Permit No. 0570261-012-AV  
Air Construction Permit Revision  
Draft Permit No. 0570261-013-AC/PSD-FL-369C  
**Permitting Clock:** Today is ARMS Day 83, Day 90 is August 9, 2011

Attached for your review are the following documents:

- Cover Letter;
- Written Notice of Intent to Issue Air Permits with Public Notice of Intent to Issue Air Permits;
- P.E. Certification Statement;
- Technical Evaluation and Preliminary Determination;
- Draft Air Construction Permit Revision;
- Statement of Basis; and,
- Draft Title V Air Operation Permit.

This application was received via Electronic Permit Submittal and Processing System (EPSAP). The applicant requested the concurrent processing of an air construction permit revision to change underlying air construction (AC)/PSD permit conditions related to the mercury (Hg) continuous emission monitoring system (CEMS) provisions for Unit 4. The applicant certified compliance in the Title V air operation permit revision application. Review of the Department's Air Compliance and Enforcement Search (ACES) indicates that an inspection performed on March 10, 2011 indicated the facility is in compliance.

Unit 4 at the HCRRF was the first municipal waste combustor (MWC) unit in the U.S. with the requirement to install a Hg CEMS.

I recommend approval of the permits.

Attachments

SA/sms

## P.E. CERTIFICATION STATEMENT

### APPLICANT

Hillsborough County  
Hillsborough County Resource Recovery Facility

Draft Permit No. 0570261-013-AC/PSD-FL-369C

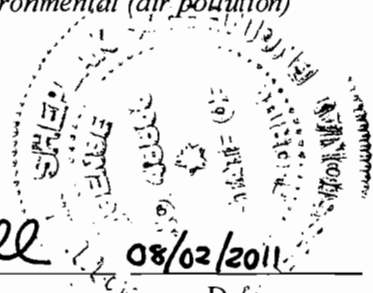
**PROJECT TYPE:** Air Construction Permit Revision (Revises Permit No. 0570261-010-AC/PSD-FL-369B)

### PROJECT DESCRIPTION

This project is for an air construction (AC)/Prevention of Significant Deterioration (PSD) permit revision.

This project is subject to the general preconstruction review requirements in Rule 62-212.300, Florida Administrative Code (F.A.C.) and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the PSD of Air Quality. The Department's full review of the project and rationale for issuing the draft air construction permit revision is provided in the Technical Evaluation and Preliminary Determination.

***I HEREBY CERTIFY** that the air pollution control 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 (F.S.), and F.A.C. Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features). My licensed area of practice as a professional engineer under Chapter 471, F.S. is environmental (air pollution) engineering.*



*Scott M. Sheplak*

08/02/2011

Scott M. Sheplak  
Professional Engineer (P.E.)  
License Number 48866

Date

Permitting Authority's Physical Location:

111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301

Telephone: 850/717-9074 Fax: 850/717-9097

E-mail: [scott.sheplak@dep.state.fl.us](mailto:scott.sheplak@dep.state.fl.us)

SMS/

Permitting Authority's Mailing Address:

Florida Department of Environmental Protection  
Division of Air Resource Management • Office of Permitting and Compliance • Key Industries - Minerals & Metals  
2600 Blair Stone Road, Mail Station #5505 • Tallahassee, Florida 32399-2400

## Scearce, Lynn

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**From:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**To:** 'berryp@hillsboroughcounty.org'  
**Cc:** 'ghoag@covantaenergy.com'; 'jgorrie@covantaenergy.com'; 'crellinwr@cdm.com'; 'strobridgede@cdm.com'; 'lee@epchc.org'; 'Zhang-Torres'; Mulkey, Cindy; 'abrams.heather@epa.gov'; 'forney.kathleen@epa.gov'; 'oquendo.ana@epa.gov'; Sheplak, Scott; Arif, Syed; 'Scearce, Lynn'; Friday, Barbara; Holtom, Jonathan  
**Subject:** Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit  
**Attachments:** Hillsborough County Recovery Facility, 0570261\_signature\_page.pdf

Tracking:	Recipient	Delivery	Read
	'berryp@hillsboroughcounty.org'	✓	✓ complete
	'ghoag@covantaenergy.com'		
	'jgorrie@covantaenergy.com'		
	'crellinwr@cdm.com'		
	'strobridgede@cdm.com'		
	'lee@epchc.org'		
	'Zhang-Torres'		
	Mulkey, Cindy	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 4:02 PM
	'abrams.heather@epa.gov'		
	'forney.kathleen@epa.gov'		
	'oquendo.ana@epa.gov'		
	Sheplak, Scott	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:24 PM
	Arif, Syed	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:54 PM
	'Scearce, Lynn'		Read: 8/3/2011 3:24 PM
	Friday, Barbara	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:19 PM
	Holtom, Jonathan	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:49 PM
	Zhang-Torres	Delivered: 8/3/2011 3:18 PM	
	Scearce, Lynn	Delivered: 8/3/2011 3:18 PM	

Dear Ms. Berry:

Attached is the official **Notice of Draft Permit** for the project referenced below. Click on the link displayed below to access the permit project documents and send a "reply" message verifying receipt of the document(s) provided in the link; 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".

**Note: We must receive verification that you are able to access the documents. Your immediate reply will preclude subsequent e-mail transmissions to verify accessibility of the document(s).**

Attention:

Owner/Company Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.  
Facility Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.  
Project Number: 0570261-012-AV/0570261-013-AC  
Permit Status: DRAFT

Permit Activity: CONSTRUCTION  
Facility County: HILLSBOROUGH

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0570261.013.AC.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570261.013.AC.D_pdf.zip)

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0570261.012.AV.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570261.012.AV.D_pdf.zip)

The Office of Permitting and Compliance 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. Access these documents by clicking on the link provided above, or search for other project documents using the "*Air Permit Documents Search*" website at <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached 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>.

Regards,

**Lynn Scearce**

Office of Permitting and Compliance (OPC)

Division of Air Resources Management

850-717-9025

## Scearce, Lynn

---

**From:** Berry, Patricia [BerryP@HillsboroughCounty.ORG]  
**Sent:** Thursday, August 04, 2011 9:02 AM  
**To:** Scearce, Lynn  
**Cc:** Johnson, Nate  
**Subject:** RE: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

This is to confirm that I can access and view the listed documents. Thank you.

### Patricia V. Berry

Solid Waste Management Group Manager  
Public Utilities Department  
Hillsborough County BOCC  
p: 813.272.5977 ext. 43338 | f: 813.272.6224  
c: 813.323.6557  
e: [berryp@hillsboroughcounty.org](mailto:berryp@hillsboroughcounty.org)  
w: <http://www.hillsboroughcounty.org>

Please note: all correspondence to or from this office is subject to Florida's Public Records laws.



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**From:** Scearce, Lynn [<mailto:Lynn.Scearce@dep.state.fl.us>]  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**To:** Berry, Patricia  
**Cc:** [ghoag@covantaenergy.com](mailto:ghoag@covantaenergy.com); [jgorrie@covantaenergy.com](mailto:jgorrie@covantaenergy.com); [crellinwr@cdm.com](mailto:crellinwr@cdm.com); [strobridgede@cdm.com](mailto:strobridgede@cdm.com); Lee, Diana; Zhang-Torres; Mulkey, Cindy; [abrams.heather@epa.gov](mailto:abrams.heather@epa.gov); [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov); [oquendo.ana@epa.gov](mailto:oquendo.ana@epa.gov); Sheplak, Scott; Arif, Syed; Scearce, Lynn; Friday, Barbara; Høltom, Jonathan  
**Subject:** Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

Dear Ms. Berry:

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Attention:

Owner/Company Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.  
Facility Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.  
Project Number: 0570261-012-AV/0570261-013-AC  
Permit Status: DRAFT  
Permit Activity: CONSTRUCTION  
Facility County: HILLSBOROUGH

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0570261.013.AC.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570261.013.AC.D_pdf.zip)

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Permit project documents addressed in this email may require immediate action within a specified time frame. Please open and review the document(s) as soon as possible, and verify that they are accessible. Please advise this office of any changes to your e-mail address or that of the Engineer-of-Record. If you have any problems opening the documents or would like further information, please contact the Florida Department of Environmental Protection, Office of Permitting and Compliance.

Note: The attached 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> .

Regards,  
**Lynn Searce**  
Office of Permitting and Compliance (OPC)  
Division of Air Resources Management  
850-717-9025

*The Department of Environmental Protection values your feedback as a customer. DEP Secretary Herschel T. Vinyard Jr. is committed to continuously assessing and improving the level and quality of services provided to you. Please take a few minutes to comment on the quality of service you received. Simply click on [this link to the DEP Customer Survey](#). Thank you in advance for completing the survey.*

**Scearce, Lynn**

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**From:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**To:** 'Ana Oquendo'; 'Kathleen Forney'; 'Lynn Scearce'; Walker, Elizabeth (AIR)  
**Cc:** Friday, Barbara; 'Scearce, Lynn'; Sheplak, Scott  
**Subject:** Hillsborough County Recovery Facility, New Posting #0570261-012-AV

<b>Tracking:</b>	<b>Recipient</b>	<b>Delivery</b>	<b>Read</b>
	'Ana Oquendo'		
	'Kathleen Forney'		
	'Lynn Scearce'	Delivered: 8/3/2011 3:18 PM	
	Walker, Elizabeth (AIR)	Delivered: 8/3/2011 3:18 PM	
	Friday, Barbara	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:19 PM
	'Scearce, Lynn'		Read: 8/3/2011 3:24 PM
	Sheplak, Scott	Delivered: 8/3/2011 3:18 PM	Read: 8/3/2011 3:24 PM

There is a new Title V Permit posted on Florida's website.

Owner/Company Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.

Facility Name: HILLSBOROUGH CTY. RESOURCE RECOVERY FAC.

Project Number: 0570261-012-AV/0570261-013-AC

Permit Status: DRAFT

Permit Activity: PERMIT REVISION

Facility County: HILLSBOROUGH

Click on the following link to access the permit project documents:

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0570261.012.AV.D.pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0570261.012.AV.D.pdf.zip)

If you have any questions about the posting, please feel free to contact me at the phone number below. If you have questions about the project please contact the Southwest District Office, 813-632-7600.

**Regards,**

**Lynn Scearce**

Office of Permitting and Compliance (OPC)

Division of Air Resources Management

850-717-9025

## Scearce, Lynn

---

**From:** Microsoft Exchange  
**To:** crellinwr@cdm.com; strobridgede@cdm.com  
**Sent:** Wednesday, August 03, 2011 3:19 PM  
**Subject:** Relayed: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[crellinwr@cdm.com](mailto:crellinwr@cdm.com)

[strobridgede@cdm.com](mailto:strobridgede@cdm.com)

Subject: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

---

Sent by Microsoft Exchange Server 2007



## Scearce, Lynn

---

**From:** Microsoft Exchange  
**To:** ghoag@covantaenergy.com; jgorrie@covantaenergy.com  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**Subject:** Relayed: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[ghoag@covantaenergy.com](mailto:ghoag@covantaenergy.com)

[jgorrie@covantaenergy.com](mailto:jgorrie@covantaenergy.com)

Subject: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

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Sent by Microsoft Exchange Server 2007

## Scearce, Lynn

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**From:** Microsoft Exchange  
**To:** [berryp@hillsboroughcounty.org](mailto:berryp@hillsboroughcounty.org)  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**Subject:** Relayed: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[berryp@hillsboroughcounty.org](mailto:berryp@hillsboroughcounty.org)

Subject: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

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Sent by Microsoft Exchange Server 2007

## Scearce, Lynn

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**From:** Microsoft Exchange  
**To:** lee@epchc.org  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**Subject:** Relayed: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

**Delivery to these recipients or distribution lists is complete, but delivery notification was not sent by the destination:**

[lee@epchc.org](mailto:lee@epchc.org)

Subject: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

---

Sent by Microsoft Exchange Server 2007

## Scearce, Lynn

---

**From:** Hoag, Glenn [GHoag@CovantaEnergy.com]  
**To:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:23 PM  
**Subject:** Read: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

Your message was read on Wednesday, August 03, 2011 3:22:59 PM (GMT-05:00) Eastern Time (US & Canada).

## **Scearce, Lynn**

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**From:** Gorrie, Jason [jgorrie@CovantaEnergy.com]  
**To:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:24 PM  
**Subject:** Read: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

Your message was read on Wednesday, August 03, 2011 3:23:39 PM (GMT-05:00) Eastern Time (US & Canada).

## Scearce, Lynn

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**From:** Crellin, William [CrellinWR@cdm.com]  
**To:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:57 PM  
**Subject:** Read: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

Your message was read on Wednesday, August 03, 2011 3:57:27 PM (GMT-05:00) Eastern Time (US & Canada).

## Scearce, Lynn

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**From:** Mulkey, Cindy  
**To:** Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 4:02 PM  
**Subject:** Read: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

Your message was read on Wednesday, August 03, 2011 4:02:29 PM (GMT-05:00) Eastern Time (US & Canada).

**Scearce, Lynn**

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**From:** Microsoft Exchange  
**To:** Zhang-Torres; Mulkey, Cindy; Holtom, Jonathan; Scearce, Lynn  
**Sent:** Wednesday, August 03, 2011 3:18 PM  
**Subject:** Delivered: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/  
0570261-012AV - Draft Permit

**Your message has been delivered to the following recipients:**

Zhang-Torres

Mulkey, Cindy

Holtom, Jonathan

Scearce, Lynn

Subject: Hillsborough County Recovery Facility, 0570261-013-AC-PSD-FL-369C/ 0570261-012AV - Draft Permit

---

Sent by Microsoft Exchange Server 2007



**TECHNICAL EVALUATION  
AND  
PRELIMINARY DETERMINATION**

**APPLICANT**

Hillsborough County

50 North Falkenburg Road  
Tampa, Florida

Hillsborough County Resource Recovery Facility  
Facility ID No. 0570261

**PROJECT**

Draft Permit No. 0570261-013-AC/PSD-FL-369C  
Application for Minor Source Air Construction Permit  
Revisions to Mercury (Hg) Continuous Emission Monitoring System (CEMS) Provisions for Unit 4

**COUNTY**

Hillsborough County, Florida

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Office of Permitting and Compliance  
2600 Blair Stone Road, MS#5505  
Tallahassee, Florida 32399-2400



August 1, 2011

## 1. GENERAL PROJECT INFORMATION

### Air Pollution Regulations

Projects at stationary sources with the potential to emit air pollution are subject to the applicable environmental laws specified in Section 403 of the Florida Statutes (F.S.). The statutes authorize the Department of Environmental Protection (Department) to establish regulations regarding air quality as part of the Florida Administrative Code (F.A.C.), which includes the following applicable chapters: 62-4 (Permits); 62-204 (Air Pollution Control - General Provisions); 62-210 (Stationary Sources - General Requirements); 62-212 (Stationary Sources - Preconstruction Review); 62-213 (Operation Permits for Major Sources of Air Pollution); 62-296 (Stationary Sources - Emission Standards); and 62-297 (Stationary Sources - Emissions Monitoring). Specifically, air construction permits are required pursuant to Rules 62-4, 62-210 and 62-212, F.A.C.

In addition, the U. S. Environmental Protection Agency (EPA) establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 specifies New Source Performance Standards (NSPS) for numerous industrial categories. Part 61 specifies National Emission Standards for Hazardous Air Pollutants (NESHAP) based on specific pollutants. Part 63 specifies NESHAP based on the Maximum Achievable Control Technology (MACT) for numerous industrial categories. The Department adopts these federal regulations on a quarterly basis in Rule 62-204.800, F.A.C.

### Facility Description and Location

This existing plant is a mass-burn municipal waste combustor (MWC) plant categorized under Standard Industrial Classification No. 4953. This existing plant is located in Hillsborough County at 350 North Falkenburg Road in Tampa, Florida. The UTM Coordinates are: Zone 17, 368.2 km East and 3092.7 km North; Latitude: 27° 57' 14" North and Longitude: 82° 40' 22" West.

This site is in an area that is in attainment (or designated as unclassifiable) for all air pollutants subject to state and federal Ambient Air Quality Standards (AAQS).

### Facility Regulatory Categories

- The facility is a major source of hazardous air pollutants (HAP).
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act.
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is major stationary source in accordance with Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality.

### Project Description

As part of the project for the Title V air operation permit revision (Project No. 0570261-012-AV), the applicant requested a concurrent air construction permit revision to change several underlying construction permit conditions related to mercury (Hg) continuous emission monitoring system (CEMS) provisions for Unit 4.

### Application Processing Schedule

Application for a Title V Air Operation Permit Revision received via Electronic Permit Submittal and Processing System (EPSAP) on June 9, 2010.

Application for Concurrent Air Construction/PSD Permit Revision from CDM (consultant) dated May 9, 2011 and received on May 11, 2011.

### Relevant Documents

- Permit No. 0570261-007-AC/PSD-FL-369
- Permit No. 0570261-010-AC/PSD-FL-369B

## 2. PSD APPLICABILITY

### General PSD Applicability

For areas currently in attainment with the state and federal AAQS or areas otherwise designated as unclassifiable, the Department regulates major stationary sources of air pollution in accordance with Florida's PSD preconstruction review program as defined in Rule 62-212.400, F.A.C. Under preconstruction review, the Department first must determine if a project is subject to the PSD requirements ("PSD applicability review") and, if so, must conduct a PSD preconstruction review. A PSD applicability review is required for projects at new and existing major stationary sources. In addition, proposed projects at existing minor sources are subject to a PSD applicability review to determine whether potential emissions *from the proposed project itself* will exceed the PSD major stationary source thresholds. A facility is considered a major stationary source with respect to PSD if it emits or has the potential to emit:

- 5 tons per year or more of lead;
- 250 tons per year or more of any regulated air pollutant; or
- 100 tons per year or more of any regulated air pollutant and the facility belongs to one of the following 28 PSD-major facility categories: fossil fuel-fired steam electric plants of more than 250 million British thermal units per hour heat input, coal cleaning plants (with thermal dryers), Kraft pulp mills, portland cement plants, primary zinc smelters, iron and steel mill plants, primary aluminum ore reduction plants, primary copper smelters, municipal incinerators capable of charging more than 250 tons of refuse per day, hydrofluoric, sulfuric, and nitric acid plants, petroleum refineries, lime plants, phosphate rock processing plants, coke oven batteries, sulfur recovery plants, carbon black plants (furnace process), primary lead smelters, fuel conversion plants, sintering plants, secondary metal production plants, chemical process plants, fossil fuel boilers (or combinations thereof) totaling more than 250 million British thermal units per hour heat input, petroleum storage and transfer units with a total storage capacity exceeding 300,000 barrels, taconite ore processing plants, glass fiber processing plants and charcoal production plants.

Once it is determined that a project is subject to PSD preconstruction review, the project emissions are compared to the "significant emission rates" defined in Rule 62-210.200, F.A.C. for the following pollutants: carbon monoxide (CO); nitrogen oxides (NO<sub>x</sub>); sulfur dioxide (SO<sub>2</sub>); particulate matter (PM); particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>); volatile organic compounds (VOC); lead (Pb); fluorides (F); sulfuric acid mist (SAM); hydrogen sulfide (H<sub>2</sub>S); total reduced sulfur (TRS), including H<sub>2</sub>S; reduced sulfur compounds, including H<sub>2</sub>S; municipal waste combustor organics measured as total tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans; municipal waste combustor metals measured as PM; municipal waste combustor acid gases measured as SO<sub>2</sub> and hydrogen chloride (HCl); municipal solid waste landfills emissions measured as non-methane organic compounds (NMOC); and Hg. In addition, significant emissions rate also means any emissions rate or any net emissions increase associated with a major stationary source or major modification which would construct within 10 kilometers of a Class I area and have an impact on such area equal to or greater than 1 µg/m<sup>3</sup>, 24-hour average.

If the potential emission exceeds the defined significant emissions rate of a PSD pollutant, the project is considered "significant" for the pollutant and the applicant must employ the Best Available Control Technology (BACT) to minimize the emissions and evaluate the air quality impacts. Although a facility or project may be *major* with respect to PSD for only one regulated pollutant, it may be required to install BACT controls for several "significant" regulated pollutants.

### PSD Applicability for Project

The project will revise permit conditions related to Hg CEMS provisions for Unit 4. There will be no emissions increases and the project is not subject to PSD preconstruction review. Because the revisions are being made to a PSD air construction permit a 30-day comment period will be specified concurrent with the 30-day comment period for the draft Title V air operation permit.

### 3. DEPARTMENT REVIEW

#### Background

Municipal waste combustors (MWCs) currently are required to perform stack tests to monitor mercury emissions under the federal regulations, 40 CFR 60, Subparts Cb/Eb. Hg CEMS are currently optional under 40 CFR 60, Subparts Cb/Eb. The Department recognizes that Unit 4 at the HCRRF may be the first MWC unit in the U.S. with the requirement in a permit to install a Hg CEMS. The application of Hg CEMS technology to MWCs is new in the U.S.

The initial PSD permit, Permit No. 0570261-007-AC/PSD-FL-369, had required the installation of a Hg CEMS within two years of Unit 4's commencement of operation. The basis for the two year timeframe after Unit 4's commencement of operation was predicated on Hg CEMS being installed and operated on utilities under the federal Clean Air Mercury Rule (CAMR) regulations (discussed in detail on Page 4 of the Technical Evaluation and Preliminary Determination document for Permit No. 0570261-007-AC/PSD-FL-369). The Department had concluded that 3<sup>rd</sup> generation Hg CEMS would become available and reasonably accurate by the time the HCRRF Unit 4 was to start operation. About 2 ½ years after coal-fired utility boilers were to have installed Hg CEMS, the HCRRF was to install a Hg CEMS. Subsequent to issuance (October 2, 2006) of the initial PSD permit for the HCRRF Unit 4, the federal CAMR regulations were vacated on February 8, 2008. Many of the Hg CEMS purchased by utilities were effectively mothballed.<sup>1</sup> The proposed federal Utility MACT (maximum achievable control technology) also known as the "NESHAP" (National Emissions Standards for Hazardous Air Pollutants) was recently promulgated on March 16, 2011.<sup>2</sup> The proposed Utility MACT contains mercury emission standards and monitoring requirements, e.g., Hg CEMS or Hg sorbent traps. The proposed dates for compliance with the Utility MACT are up to 2014/2015. With the federal regulatory drivers like the Utility MACT, Hg monitoring technology advancements and the market for Hg monitoring technology should increase in the near future.

#### Response to Requested Revisions

As part of the project for the Title V air operation permit revision (Project No. 0570261-012-AV), the applicant requested several changes to Title V air operation permit conditions. Some of these changes required revisions to the underlying construction permit conditions, which are explained below in this Technical Evaluation and Preliminary Determination.

The applicant requested changes to the AC/PSD permit by submitting a permit modification request by letter on May 11, 2011. The "Specific Condition No." cited below refers to the specific condition in Permit No. 0570261-010-AC/PSD-FL-369B. Specific Condition Nos. 3.B.19., 26., 30., 32., 33. and 35., contain Hg CEMS provisions for Unit 4. The applicant requested changes to these provisions.

1. Specific Condition Nos. 3.B.19., 26., 30., 32. and 35., mention the timeframe in which a Hg CEMS is required to be installed or reference the period prior to its installation.

#### Applicant's Requested Changes:

1-year Extension on Installing a Hg CEMS. CDM (consultant) on behalf of Hillsborough County RRF (the applicant) requested an additional year (12 months) to install a Hg CEMS on Unit 4.

#### Department's Responses:

An additional 1 year (12 months) extension in which to install a Hg CEMS is reasonable considering the new Hg monitoring technology and learning curve challenges associated with being first in the MWC industry to install a Hg CEMS.

Specific Condition 3.B.35. is where the core requirement to install a Hg CEMS within two years of Unit 4's commencement of operation is located in PSD permit, Permit No. 0570261-010-AC/PSD-FL-369B. Specific Condition Nos. 3.B.19., 26., 30. and 32. in the PSD permit mention or cross reference the two year timeframe in which to install a Hg CEMS. The Department agrees with the requested change, changing these affected specific conditions.

2. Specific Condition 3.B.33.b., contains CEMS data availability requirements.

Applicant's Requested Changes:

Relief on the % Hg CEMS Data Availability. The applicant requested relief on the percent (%) data availability as it applies to a Hg CEMS. CDM on behalf of the applicant indicated that from their investigations, research and experiences show that Hg CEMS on MWC applications have not achieved 95% monitor availability. Specifically, the applicant requested relief from the 95% monitor availability stated in Specific Condition 3.B.33.b.

Department's Responses:

The percent (%) data availability requirements in Specific Condition 3.B.33.b. require 95% data availability for each CEMS with an exception to the Hg CEMS. As stated at the end of this specific condition the 95% monitor availability requirement were not to apply during the first two years of operation of the Hg CEMS (mentioned in 40 CFR 60, Subpart Eb for optional Hg CEMS). The limit in the PSD permit, 28 ug/dscm, was established to avoid a BACT determination. The Hg CEMS was required for reasonable assurance purposes not under 40 CFR 60, Subpart Eb. Unless a Hg CEMS is used to demonstrate compliance with the Eb limit (50 ug/dscm), the owner or operator is not required to comply with the Eb requirements like the prescribed % data availability, site-specific plans, etc.

Being that this is the first Hg CEMS being applied to an MWC unit in the U.S., it is recognized that it will be a challenge to work through any issues encountered during the initial installation and operation of the Hg CEMS. Relief on the % data availability may be provided in the form of a step approach as experience is gained by HCRRF. A step approach may be desirable to ultimately achieve a % data availability goal. A two step approach is proposed by the Department; specifically, for the 3<sup>rd</sup> year of operation of the CEMS an 80% data availability annually and for the 4<sup>th</sup> year of operation of the CEMS a 90% data availability annually with an ultimate goal of achieving 95% data availability annually. This two step approach is added to the specific condition.

3. Specific Condition 3.B.35. is where the core requirement to install a Hg CEMS within two years of Unit 4's commencement of operation is located in PSD permit, Permit No. 0570261-010-AC/PSD-FL-369B.

Applicant's Requested Changes:

Hg CEMS Field Test and Success Criteria. CDM on behalf of the applicant requested that a Hg CEMS be field tested on Unit 4 and success criteria for the field test to be added to the permit.

Department's Responses:

In the Fall of 2010, the applicant had reported to the Department problems with a Tekran Instruments Corp. manufactured Hg CEMS which had voluntarily been installed on an MWC unit in the U.S.<sup>3</sup> At the April 6, 2011 meeting Department agreed to allow the field testing of a Hg CEMS on Unit 4. CDM followed up with a letter dated May 9, 2011, reaffirming that a new generation Hg CEMS made by Sick-Maihak, Inc. would be field tested on HCRRF Unit 4. Field testing of a Hg CEMS is warranted as this is the first such Hg CEMS application on an MWC unit in the U.S.

The applicant proposed three specific criteria to judge the success of field testing a Hg CEMS on Unit 4. The three criteria were: 1) Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor Phase Mercury Continuous Monitoring Systems in Stationary Sources;" 2) a minimum % data availability; and, 3) a cost comparison between the operation & maintenance (O&M) costs of a Hg CEMS vs. the O&M costs of CEMS currently operational at HCRRF like the SO<sub>2</sub>, NO<sub>x</sub> and CO CEMS.

The Department concurs with a quality assurance quality control (QA/QC) criteria. The addition of a method for the QA/QC of a Hg CEMS is appropriate.

The Department concurs with the idea behind this criteria. The Department was unable to understand clearly the specific requested language. As previously proposed by the Department, the proposed monitor availability for the 3<sup>rd</sup> year of operation of the Hg CEMS is 80%. The Department proposes to establish a minimum level of 70% for monitoring availability during the field testing.

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

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The Department concurs with the idea behind a cost criterion. However, the Department proposes to not make this part of the field test “success criteria.” Instead the applicant is being required to separately prepare and report updated cost information for a Hg CEMS with a field test report and to provide its conclusions and recommendations.

The applicant previously provided cost estimations on March 7, 2011 in a follow up to its report entitled “Findings and Recommendations: Continuous Monitoring of Mercury Emissions at a Municipal Waste Combustor - January 2011.”<sup>4,5</sup> In that cost analysis, the lowest Hg CEMS cumulative (total) cost was estimated to be \$4.9 million compared to an Hg sorbent trap monitoring system of \$1.65 million; a difference of about \$3.25 million. In the same cost analysis, a Hg CEMS’s cost range from 2.96 - 4.4 times more than an Hg sorbent trap monitoring system. It is important to note that the higher cost estimates were based on a Tekran Hg CEMS instrument having to replace the gold trap more frequently. Using capital costs from a next generation Hg CEMS like the Sick-Maihak instrument and O&M costs derived from actual Hg CEMS field testing on an MWC unit is more appropriate for use. Also, more up-to-date purchase costs for Hg monitoring technology is appropriate under the current market conditions. The applicant should be able to easily update the previously submitted cost estimation information for a Hg CEMS. For convenience, the cited cost estimation information which can be updated is attached to this technical evaluation.

### Revisions

The approved revisions are shown in strikethrough (for deletions) and double-underlines (for additions) format within the permit revision itself. All changes are emphasized with yellow highlight.

### 4. PRELIMINARY DETERMINATION

The Department makes a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations as conditioned by the draft permit. This determination is based on a technical review of the complete application, reasonable assurances provided by the applicant, and the conditions specified in the draft permit. No air quality modeling analysis is required because the project does not result in a significant increase in emissions.

Mr. Scott M. Sheplak, P.E. was the project engineer responsible for reviewing the application and drafting Permit No. 0570261-007-AC/PSD-FL-369. He is the project engineer responsible for reviewing this application and drafting this permit revision. Additional details of this analysis may be obtained by contacting him by telephone at 850/717-9074 or by e-mail at [scott.sheplak@dep.state.fl.us](mailto:scott.sheplak@dep.state.fl.us) in the Department’s Office of Permitting and Compliance at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

### References

<sup>1</sup> World wide web site. Mid-Atlantic Regional Air Management Association, Inc. (MARAMA)/Institute of Clean Air Companies (ICAC) Hg CEMS Webinar. Webinar attended on July 26, 2011. Presentations posted on the following world wide web site <http://www.marama.org/mercury-cems-webinar>.

<sup>2</sup> World wide web site. U.S. Environmental Protection Agency (EPA). Utility MACT Information. <http://www.epa.gov/airquality/powerplanttoxics/actions.html>. Accessed on March 16, 2011.

<sup>3</sup> Reported to the Department on October 22, 2010 at the meeting between HCRRF representatives and the Department.

<sup>4</sup> World wide web site. State of Florida, Department of Environmental Protection. “Attachment A” of response to request for additional information dated and received on March 7, 2011. Posted and available at <http://arm-permit2k.dep.state.fl.us/psd/0570261/000059BF.pdf>.

<sup>5</sup> World wide web site. “Findings and Recommendations: Continuous Monitoring of Mercury Emissions at a Municipal Waste Combustor - January 2011” received by the Department on January 28, 2011. Posted and available at <http://arm-permit2k.dep.state.fl.us/psd/0570261/0000582F.pdf>.



# Florida Department of Environmental Protection

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

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

## PERMITTEE

Hillsborough County  
Solid Waste Management Group  
601 E. Kennedy Boulevard  
Tampa, Florida 33602

Authorized Representative:  
Ms. Patricia V. Berry, Interim Manager

Draft Permit No. 0570261-013-AC/PSD-FL-369C  
Air Construction Permit Revision -  
Revisions to Mercury (Hg) Continuous Emission  
Monitoring System (CEMS) Provisions for Unit 4

Hillsborough County Resource Recovery Facility  
Hillsborough County, Florida

## PROJECT

This is the final air construction permit, which revises Permit No. 0570261-010-AC/PSD-FL-369B for Unit 4. The revised permit conditions are related to Hg CEMS provisions. This existing plant is a mass-burn municipal waste combustor (MWC) plant categorized under Standard Industrial Classification No. 4953. This existing plant is located in Hillsborough County at 350 North Falkenburg Road in Tampa, Florida. The UTM Coordinates are: Zone 17, 368.2 km East and 3092.7 km North; Latitude: 27° 57' 14" North and Longitude: 82° 40' 22" West.

This final permit is organized into the following sections: Section 1 (General Information) and Section 2 (Permit Revisions). [(if applicable) As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.]

## 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.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, 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 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida  
For the Division of Air Resource Management

*(Draft)*

\_\_\_\_\_  
(Signature)

\_\_\_\_\_  
(Date)

\_\_\_\_\_  
(Printed Name of Above Designee)

JFK/jkh/sms

**CERTIFICATE OF SERVICE**

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit Revision) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on \_\_\_\_\_ (Draft) \_\_\_\_\_ to the persons listed below.

- Ms. Patricia V. Berry, Hillsborough County: [berryvp@hillsboroughcounty.org](mailto:berryvp@hillsboroughcounty.org)
- Mr. Glenn Hoag, Covanta Hillsborough: [ghoag@covantaenergy.com](mailto:ghoag@covantaenergy.com)
- Mr. Jason Gorrie, P.E., Covanta: [jgorrie@covantaenergy.com](mailto:jgorrie@covantaenergy.com)
- Mr. William J. Crellin, Jr., P.E., CDM: [crellinwr@cdm.com](mailto:crellinwr@cdm.com)
- Mr. Daniel E. Stobridge, QEP, CDM: [stobridgedede@cdm.com](mailto:stobridgedede@cdm.com)
- Ms. Diana M. Lee, P.E., EPCHC: [lee@epchc.org](mailto:lee@epchc.org)
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- Ms. Cindy Mulkey, DEP Siting Office: [cindy.mulkey@dep.state.fl.us](mailto:cindy.mulkey@dep.state.fl.us)
- Ms. Heather Abrams, U.S. EPA Region 4: [abrams.heather@epa.gov](mailto:abrams.heather@epa.gov)
- Ms. Katy R. Forney, U.S. EPA Region 4: [forney.kathleen@epa.gov](mailto:forney.kathleen@epa.gov)
- Ms. Ana Oquendo-Vazquez, U.S. EPA Region 4: [oquendo.ana@epa.gov](mailto:oquendo.ana@epa.gov)
- Ms. Barbara Friday, DEP OPC: [barbara.friday@dep.state.fl.us](mailto:barbara.friday@dep.state.fl.us) (for posting with U.S. EPA, Region 4)
- Ms. Lynn Scarce, DEP OPC: [lynn.scarce@dep.state.fl.us](mailto:lynn.scarce@dep.state.fl.us) (for reading file)

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

(Draft)

\_\_\_\_\_

Clerk

\_\_\_\_\_

Date



## SECTION 1. GENERAL INFORMATION

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### **FACILITY DESCRIPTION**

This existing facility consists of: four municipal solid waste combustors (Unit Nos. 1, 2, 3 and 4) with auxiliary burners; lime storage and processing facilities; ash storage and processing facilities; cooling towers; and, ancillary support equipment.

The total capacity of the Hillsborough County Resource Recovery Facility is 1,800 tons/day (TPD) of municipal solid waste fuel with an average heating value of 4,500 Btu/lb. The gross nominal electric generating capacity of the facility is 47 megawatts (MW).

The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc. a subsidiary of Covanta Energy Corporation.

### **FACILITY REGULATORY CLASSIFICATION**

- This facility is a major source of hazardous air pollutants (HAP).
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

### **PROPOSED PROJECT**

As part of the project for the Title V air operation permit revision (Project No. 0570261-012-AV), the applicant requested a concurrent air construction permit revision to change several underlying construction permit conditions related to Hg CEMS provisions for Unit 4.

## SECTION 2. PERMIT REVISIONS

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight in the electronic document.

**Permit Being Modified:** Permit No. 0570261-010-AC/PSD-FL-369B

**Affected Emissions Units:** Municipal Waste Combustor & Auxiliary Burners - Unit 4 (E.U. ID No. 107)

The affected Specific Condition Nos. 3.B.19., 26., 30., 32., 33. and 35. from Permit No. 0570261-010-AC/PSD-FL-369B are hereby changed as follows (the remainder of the permit remains unchanged as a result of this permitting action):

19. Mercury (Hg): Emissions of Hg shall not exceed 28 µg/dscm or an emissions reduction of 85 percent shall be achieved as demonstrated during the required annual stack test. During the first ~~two~~three years of operation, emissions of Hg shall not exceed 0.022 lb/hr as measured during quarterly stack tests to provide reasonable assurance that 12-month emissions are less than the applicable PSD threshold of 200 lb/yr.

After the certification of the Hg-CEMS as described in **Specific Condition 35.**, the owner or operator may demonstrate compliance with all Hg limits in this permit with data collected during an annual stack test or from the Hg-CEMS.

*{Permitting Note: If the Hg-CEMS is certified prior to the end of the first ~~two~~three years of operation, the permittee may use the CEMS in lieu of the remaining quarterly tests.}*

26. Subsequent Compliance Testing: Annual compliance stack tests for NO<sub>x</sub>, CO, SO<sub>2</sub>, HCl, PM/PM<sub>10</sub>, lead, cadmium, dioxins/furans, and ammonia shall be conducted during each federal fiscal year (October 1st to September 30th). Data collected from the reference method during the required RATA tests for CO, NO<sub>x</sub>, and SO<sub>2</sub> may be used to satisfy the annual testing requirement provided the notification requirements and emission testing requirements for performance and compliance tests of this permit are satisfied.

Prior to the certification of the Hg-CEMS as described in **Specific Condition 35.**, performance tests for Hg emissions shall be conducted quarterly during the first ~~two~~three years of operation then on a calendar year basis to demonstrate compliance with the concentration/reduction standards.

After the certification of the Hg-CEMS as described in **Specific Condition 35.**, the owner or operator may demonstrate compliance with all Hg limits in this permit with data collected from the Hg-CEMS.

[Rules 62-297.310(7)(a) and (b), and 62-296.416, F.A.C., and 40 CFR 60.8 and 60.58b]

30. CEM Systems: The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO, NO<sub>x</sub>, Hg and SO<sub>2</sub> from Unit 4 in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this subsection. All continuous monitoring systems other than the Hg CEMS shall be installed and functioning within the required performance specifications by the time of the initial performance tests. The Hg CEMS shall be installed and functioning within the required performance specifications by the end of the ~~second~~third year of operation as specified in **Specific Condition 35.**

- a. CO Monitor: The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.

## SECTION 2. PERMIT REVISIONS

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- b. *NO<sub>x</sub> Monitor*: The NO<sub>x</sub> monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. The NO<sub>x</sub> monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
  - c. *SO<sub>2</sub> Monitor*: The SO<sub>2</sub> monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR 60. The SO<sub>2</sub> monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.
  - d. *Diluent Monitor*: A continuous emission monitoring system for measuring the oxygen content of the flue gas at each location where carbon monoxide, sulfur dioxide, nitrogen oxides emissions are monitored shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.58b.
  - e. *Mercury Monitor*: A mercury monitor (Hg CEMS) shall be installed, certified and operated as described in **Specific Condition 35**. below.
32. **CEMS/COMS Certification and Initial Startup**: Each CEMS/COMS, other than the Hg CEMS, required by this permit shall be installed prior to startup. Within 60 calendar days of achieving the maximum production rate, but no later than 180 calendar days after initial startup, the owner or operator shall certify each CEMS/COMS. Upon certification of each CEMS/COMS, the owner or operator shall demonstrate compliance with all applicable standards as specified in this permit. The Hg CEMS shall be installed and functioning within the required performance specifications within the first ~~two~~three years of operation as specified in **Specific Condition 35**. [Rules 62-4.070(3), 62-210.800, 62-210.200(BACT) and 62-297.520, F.A.C.; 40 CFR 60.7(a), 60.13(b), and 60.58b, and Appendix B]
33. **CEMS Data Requirements**: The CEMS shall express the results in the units of the applicable standard and in accordance with 40 CFR 60 subparts A, and Eb.
- a. *Data Exclusion*: Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Limited amounts of CEMS emissions data (other than mercury data) recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of **Specific Conditions 28. and 29.** in this subsection. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
  - b. *Availability*: Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority. The monitor availability requirements of this condition do not apply to the Hg CEMS for the first two years of operation of the CEM system. (This is consistent with the Hg CEMS availability requirement of subpart Eb.) For the Hg CEMS, the monitor availability for the 3<sup>rd</sup> year of operation of

## SECTION 2. PERMIT REVISIONS

the Hg CEMS shall be 80% annually and for the 4<sup>th</sup> year of operation of the Hg CEMS shall be 90% annually, with a goal to achieve 95% annually afterwards unless, the Hg CEMS is requested by the permittee to be used for compliance under 40 CFR 60, Subpart Eb. If the Hg CEMS is used for compliance under 40 CFR 60, Subpart Eb then the applicable % monitor availability from 40 CFR 60, Subparts Eb must be met.

35. Mercury Continuous Emissions Monitoring System (Hg-CEMS): Within 2436 months of commencing operation, the owner or operator shall install and certify a mercury CEMS demonstrated to meet the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor Phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. If the vendor provides to the Department verification of certification difficulties such that the CEMS cannot be certified by the certification deadline, and every reasonable effort has been made to do so, the Department shall grant a reasonable extension of time to certify the CEMS. After certification the owner or operator will begin reporting Hg mass emissions data. The owner or operator shall adhere to the calibration drift and quarterly performance evaluation procedures and ongoing data quality assurance procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The mass emissions shall be estimated based on the actual data collected no later than 10 days following the end of the month. The mercury monitoring data results shall be submitted quarterly. The CEMS shall only be used as the method of compliance if the owner or operator, at a minimum, meets the requirements of 40 CFR 60.58b(n). Prior to use of the Hg-CEMS as the method to demonstrate compliance, the owner or operator shall submit written notice to the Department, and receive approval for missing data substitution and a data calculation approach plans.

Hg CEMS Field Test and Success Criteria. The permittee shall field test the application of a Hg CEMS on Unit 4 for 1-year. The criteria for judging the success of the field test are defined as follows:

1. The Hg CEMS shall accurately measure the Hg concentrations in the stack emissions. The permittee shall submit a quality assurance/quality control (QA/QC) plan for the Hg CEMS to be field tested to the Office of Permitting & Compliance in Tallahassee for review and approval; and,
2. The data availability over a 12-month period shall be at least 70%. The permittee shall maintain a log of the Hg CEMS downtime along with the reason(s) why and shall make it available upon request by the Department.

Hg emissions data shall be made available upon request by the Department.

The permittee shall track and report on a monthly basis the man-hours for operation & maintenance (O&M) of the Hg CEMS during the field test. The monthly O&M man-hours shall be reported to the Office of Permitting & Compliance in Tallahassee within 14 days after the end of each month.

Both criteria (1. and 2.) shall be met in order for the Hg CEMS field test to be considered a success.

Within 60 days of the conclusion of the field test period, the permittee shall submit a Field Test Report for the Hg CEMS which addresses criteria 1. and 2.

As part of the Field Test Report the permittee shall prepare and submit an updated cost estimation for the commercial application of a Hg CEMS on HCRRF Unit 4. The costing estimate techniques from U.S. EPA (similar to what had been provided in Attachment A) shall be used. The permittee shall include documentation from the vendor to support Hg CEMS purchase prices. Actual O&M costs like Hg CEMS labor tracked during the field testing of the Hg CEMS shall be used in estimating the projected O&M costs for the Hg CEMS.

In the Field Test Report the permittee shall provide its conclusions and recommendations regarding Hg CEMS suitability for commercial application on HCRRF Unit 4. The Field Test Report shall be certified by

## SECTION 2. PERMIT REVISIONS

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the responsible official (R.O.) and by a Florida professional engineer (P.E.) using the certification statements from DEP Form No. 62-210.900(1). The completed R.O. and P.E. certification statements shall be included with the Field Test Report. The complete Field Test Report shall be submitted to the Office of Permitting & Compliance in Tallahassee for review and approval.

Should the field test of the Hg CEMS be determined not to be a success, the permittee shall submit an alternative Hg monitoring plan using an Hg continuous sorbent trap monitoring system to the Office of Permitting & Compliance in Tallahassee for review and approval within 120 days of the conclusion of the Hg CEMS field test period.

The Compliance Authority shall be copied on all reports.

[Rules 62-4.070(1) and (3), and 62-210.200(BACT), F.A.C., 40 CFR 60.58b, and, Hillsborough County Environmental Protection Commission Local Ordinance 1-3.53.1(f), *Municipal Solid Waste Incinerators* (for Hg monitoring)]

## P.E. CERTIFICATION STATEMENT

### APPLICANT

Hillsborough County  
Hillsborough County Resource Recovery Facility

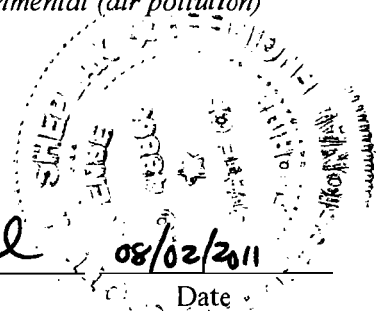
Draft Permit No. 0570261-012-AV

**PROJECT TYPE:** Title V Air Operation Permit Revision

### PROJECT DESCRIPTION

This project is for a Title V air operation permit revision and for the concurrent processing of an air construction (AC)/Prevention of Significant Deterioration (PSD) permit revision. The Statement of Basis contains more details on the Title V air operation permit revision.

*I HEREBY CERTIFY that the air pollution control 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 (F.S.), and F.A.C. Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal outside of my area of expertise (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features). My licensed area of practice as a professional engineer under Chapter 471, F.S. is environmental (air pollution) engineering.*

  
*Scott M. Sheplak*      08/02/2011  
Date

Scott M. Sheplak  
Professional Engineer (P.E.)  
License Number 48866

Permitting Authority's Physical Location:

111 South Magnolia Drive, Suite 4  
Tallahassee, Florida 32301

Telephone: 850/717-9074      Fax: 850/717-9097

E-mail: [scott.sheplak@dep.state.fl.us](mailto:scott.sheplak@dep.state.fl.us)

SMS/

Permitting Authority's Mailing Address:

Florida Department of Environmental Protection

Division of Air Resource Management • Office of Permitting and Compliance • Key Industries - Minerals & Metals  
2600 Blair Stone Road, Mail Station #5505 • Tallahassee, Florida 32399-2400

## STATEMENT OF BASIS

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### Hillsborough County Hillsborough County Resource Recovery Facility

Draft Permit No. 0570261-012-AV, Title V Air Operation Permit Revision

#### APPLICANT

The applicant for this project is Hillsborough County. The applicant's responsible official and mailing address are: Ms. Patricia V. Berry, Interim Manager, Hillsborough County, Solid Waste Management Group, 601 E. Kennedy Boulevard, Tampa, Florida 33602.

#### FACILITY DESCRIPTION

The Hillsborough County Resource Recovery Facility is located in Hillsborough County at 350 North Falkenburg Road, Tampa, Florida.

This existing facility consists of: four municipal solid waste combustors (Unit Nos. 1, 2, 3 and 4) with auxiliary burners; lime storage and processing facilities; ash storage and processing facilities; cooling towers; and, ancillary support equipment. Also included in this permit are miscellaneous insignificant emissions units and/or activities.

The total capacity of the Hillsborough County Resource Recovery Facility is 1,800 tons/day (TPD) of municipal solid waste fuel with an average heating value of 4,500 Btu/lb. The gross nominal electric generating capacity of the facility is 47 megawatts (MW).

The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc. a subsidiary of Covanta Energy Corporation.

#### PROJECT DESCRIPTION

The purpose of this project is for a revision, Permit No. 0570261-012-AV to incorporate the applicable specific terms and conditions from a previously issued air construction (AC) permit, Permit No. 0570261-010-AC/PSD-FL-369B, which authorized the construction of a nominal 600 tons per day (TPD) mass-burn municipal waste combustor (MWC) referred to as "Unit 4."

This permit is for the initial operation of Unit 4. Compliance with all of the terms and conditions of the AC permit was demonstrated. Initial testing demonstrated compliance with the emission standards and limitations specified in the AC permit. A complete summary of the initial compliance test results are provided in the permit application.

#### PROCESSING SCHEDULE AND RELATED DOCUMENTS

Application for a Title V Air Operation Permit Revision received via Electronic Permit Submittal and Processing System (EPSAP) on June 9, 2010.

Request for Additional Information dated and sent via e-mail on July 6, 2010.

Additional Information Response from CDM (consultant) dated August 6, 2010 and received on August 9, 2010.

Request for Additional Information dated and sent via e-mail on September 7, 2010.

Request for extension to respond from CDM (consultant) dated and received via e-mail on November 8, 2010.

E-mail dated November 9, 2010 granting request to respond up to March 7, 2011.

Additional Information Response from CDM (consultant) dated and received via e-mail on March 7, 2011.

Application for Concurrent Air Construction/PSD Permit Revision from CDM dated May 9, 2011 and received on May 11, 2011.

Draft Air Construction Permit Revision clerked (issued) on Month day, 2011.

Draft Title V Air Operation Permit Revision clerked (issued) on Month day, 2011.

## STATEMENT OF BASIS

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Public Notice published on Month day, 2011.

Proposed Title V Air Operation Permit Revision posted onto web site on Month day, 2011.

### PRIMARY REGULATORY REQUIREMENTS

Title III: This facility is a major source of hazardous air pollutants (HAP), based on the Title V air operation permit revision application.

NESHAP: This facility operates units subject to the National Emissions Standards for Hazardous Air Pollutants (NESHAP) of 40 Code of Federal Regulations (CFR) 63.

Title IV: This facility does not operate units subject to the acid rain provisions of the Clean Air Act.

Title V: This facility is a Title V major source of air pollution in accordance with Chapter 62-213, Florida Administrative Code (F.A.C.).

PSD: This facility is a Prevention of Significant Deterioration (PSD)-major source of air pollution in accordance with Rule 62-212.400, F.A.C.

NSPS: This facility operates units subject to the New Source Performance Standards (NSPS) of 40 Code of Federal Regulations (CFR) 60.

CAIR: This facility does not operate units subject to the Clean Air Interstate Rule (CAIR) set forth in Rule 62-296.470, F.A.C.

Siting: This facility operates units subject to the power plant siting provisions of Chapter 62-17, F.A.C.

CAM: Emissions units at this facility are not subject to Compliance Assurance Monitoring (CAM) for one or more of the following reasons: they do not trigger the potential pre-air pollution control device major source emission thresholds; they demonstrate continuous compliance with a continuous emission monitoring system (CEMS); they are not equipped with air pollution control device(s); they are equipped with device(s) which are considered to be inherent to the process/operation; or, they satisfy CAM by meeting the post-1990 40 CFR 60 Subparts Cb/Eb federal monitoring requirements for the same or similar air pollutants.

The U.S. EPA letter dated July 7, 1999 (attached to permit), supports the use of monitoring under the post-1990 40 CFR 60 Subparts Cb/Eb to satisfy CAM for the same air pollutants and mentions the use of surrogate pollutants for similar air pollutants. Air pollutants specifically regulated under 40 CFR 60 Subparts Cb/Eb for Municipal Waste Combustors (MWCs) are: total particulate matter (PM); metals and metal compounds (cadmium (Cd), mercury (Hg) and lead (Pb)); all acid gases (including, but not limited to, sulfur dioxide (SO<sub>2</sub>) and hydrogen chloride (HCl) gases); organic compounds (includes dioxins/furans (D/F)); nitrogen oxides (NO<sub>x</sub>); and, carbon monoxide (CO). In addition to the air pollutant limits specified under 40 CFR 60 Subparts Cb/Eb for MWCs, some of the same air pollutants are regulated for other reasons i.e., PSD BACT, state implementation plan (SIP) standard, etc. A streamlined approach for multiple emission limits of the same air pollutant is preferred for simplified monitoring. As outlined in the U.S. EPA letter and described herein, monitoring under the post-1990 40 CFR 60 Subpart Cb/Eb for the MWC Units 1 - 4 is therefore, deemed to be adequate for the same air pollutants.

The baghouses on the material storage silos are considered to be inherent to the process/operation. The scrubber installed on the Ash Handling Building (AHB) was also installed for worker protection/safety. The baghouses and the scrubber are therefore exempt from CAM.

### PROJECT REVIEW

This project review summarizes the changes made in this Title V air operation permit revision.

The changes made in the draft permit documents are specifically shown as follows: deletions are noted in ~~striketrough~~ and additions are noted in double underline. The changes will not be shown in the final permit documents.



## STATEMENT OF BASIS

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### Permit

- MWC Unit 4 Inclusion. Incorporated the applicable specific terms and conditions from the previously issued air construction permit No. 0570261-010-AC/PSD-FL-369B for MWC Unit 4. New Subsections III.G., H. & I. were added to the permit.
- Hg CEMS Revisions. The applicant also requested the concurrent processing of an air construction permit revision to change air construction/PSD permit conditions related to the mercury (Hg) continuous emission monitoring system (CEMS) provisions for Unit 4 (Emissions Unit Identification number (E.U. ID No.) 107). See Permit No. 0570261-013-AC/PSD-FL-369C for the changes made. The Technical Evaluation and Preliminary Determination summarizes the requested changes, the Department's responses identify the changes made to the underlying air construction permit conditions. These changes have been reflected within the Title V air operation permit.

### Department Initiated Changes to Permit

- The layout of the Title V air operation permit was changed; for example, new headers and footers were added.
- As a result of a rule change to Rule 62-213.420(1)(a)2., F.A.C., the "Renewal Application Due Date" as shown on the placard page of the permit is changed from: November 30, 2011 to: October 16, 2011. {The rule change requires the renewal application to be submitted 225 days prior to expiration instead of the previous 180 days.}
- The address and telephone number for the Risk Management Plan (RMP) Reporting Center was updated in Facility-wide Specific Condition **II.4.a.** in Section II.
- Added the May 10, 2006, federal municipal waste combustor (MWC) regulation amendments to the permit. Specific condition **C.97. - C.100.** in Subsection III.C. of the permit which incorporates all of 40 CFR 60, Subpart Cb, as Appendix 40 CFR 60, Subpart Cb. The amendments apply to the MWC Nos. 1, 2 and 3 (Emissions Unit ID Nos. 001, 002 and 003). {Note: The body of Subsection III.C. of the permit contains text from the federal regulations that does not reflect the May 10, 2006 federal amendment language}. For convenience, an Appendix 40 CFR 60 Subpart 60 is also added within this incorporation.
- Added the May 10, 2006, federal municipal waste combustor (MWC) regulation amendments to the permit. Specific condition **G.33. - G.34.** in Subsection III.G. of the permit which incorporates all of 40 CFR 60, Subpart Eb, as Appendix 40 CFR 60 Subpart Eb. The amendments apply to the MWC No. 4 (Emissions Unit ID No. 107). {Note: The body of Subsection III.G. of the permit may contain text from the federal regulations that do not reflect the May 10, 2006 federal amendment language}. For convenience, an Appendix 40 CFR 60 Subpart A is also added within this incorporation.
- Added "Appendix ATP, U.S. EPA Alternative Test Procedure Approval dated June 3, 2004." This alternative test procedure had been previously granted by U.S. EPA and applies to the MWC units.

## STATEMENT OF BASIS

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### CONCLUSION

This project revises Title V air operation permit No. 0570261-006-AV, which was effective May 29, 2007. This Title V air operation permit is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Chapters 62-4, 62-210 and 62-213, Florida Administrative Code (F.A.C.).

**Hillsborough County Resource Recovery Facility**

