

## Memorandum

# Florida Department of Environmental Protection

---

To: Trina Vielhauer, Bureau of Air Regulation  
Through: Jeff Koerner, New Source Review Section *JK*  
From: Bruce Mitchell, New Source Review Section *BM*  
Date: July 28, 2009  
Subject: Draft Minor Source Air Construction Permit  
Project No. 0990234-015-AC/PSD-FL-108H  
Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility  
Municipal Solid Waste Combustor Units 1 and 2, Refurbishment Project

Attached for your review is a draft minor air construction permit package for the North County Resource Recovery Facility, which is located in Palm Beach County at 6501 North Jog Road in West Palm Beach, Florida. Briefly, the draft permit authorizes the following: replacement of the existing electrostatic precipitators with fabric filters to control particulate matter; installation of selective non-catalytic reduction systems to reduce NO<sub>x</sub> emissions; installation of new activated carbon injection systems to enhance the removal of metal emissions; improvement of the over-fire air system to optimize combustion; installation of new automated combustion control systems; construction of other related maintenance, replacement and repairs. In addition, the applicant requested the following revisions to the original air construction permit: clarification of the permitted unit capacity; replacement of the maximum operating temperature at the dry scrubber outlet with the federal requirements for monitoring the temperature of the particulate matter control device; and removal of the 1-hour emissions standard for carbon monoxide. The Department approved the first two requests, but did not remove the 1-hour emissions standard for carbon monoxide. Instead, the Department increased the averaging period for the carbon monoxide standard from 1-hour to 4-hours to be consistent with other similar municipal waste combustor units. The project is expected to improve the removal of many air pollutants. Actual emissions are not expected to increase above the significant emissions rates; therefore, the project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. The project is based on an analysis that compared baseline actual emissions with projected actual emissions. The attached Technical Evaluation and Preliminary Determination provides a detailed description of the project and the rationale for permit issuance. Day 90 of the permitting time clock is October 4, 2009. I recommend your approval of the attached draft permit package.

Attachments

TLV/jfk/rbm

## P.E. CERTIFICATION STATEMENT

### PERMITTEE

Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, Florida 33412

Draft Permit No. 0990234-015-AC-AC  
North County Resource Recovery Facility  
Units 1 and 2 Refurbishment Project  
Palm Beach County, Florida

### PROJECT DESCRIPTION

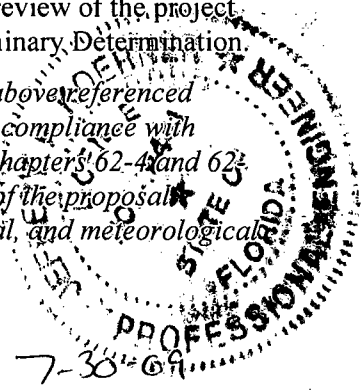
The Solid Waste Authority of Palm Beach County operates an existing large municipal waste combustor plant, the North County Resource Recovery Facility, located at 6501 North Jog Road in West Palm Beach, Palm Beach County, Florida. The proposed project is to refurbish Municipal Solid Waste Combustors Nos. 1 and 2 by: replacing the existing electrostatic precipitators with fabric filters to control particulate matter; installing selective non-catalytic reduction systems to reduce nitrogen oxide emissions; installing new activated carbon injection systems to enhance the removal of metal emissions; improving the over-fire air system to optimize combustion; installing new automated combustion control systems; constructing other related maintenance, replacement and repairs. In addition, the applicant requested the following revisions to the original air construction permit: clarification of the permitted unit capacity; replacement of the maximum operating temperature at the dry scrubber outlet with the federal requirements for monitoring the temperature of the particulate matter control device; and removal of the 1-hour emissions standard for carbon monoxide. The Department approved the first two requests, but did not remove the 1-hour emissions standard for carbon monoxide. Instead, the Department increased the averaging period for the carbon monoxide standard from 1-hour to 4-hours to be consistent with other similar municipal waste combustor units.

The project is expected to improve the removal of many air pollutants. Actual emissions are not expected to increase above the significant emissions rates; therefore, the project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. The project is based on an analysis that compared baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. Although the project is considered a minor modification to a major facility, the draft permit revises the averaging period for the carbon monoxide, which was a determination of the best available control technology. Therefore, the Department requires a 30-day comment period for the draft permit. The Department's full review of the project and rationale for issuing the draft permit 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, and Florida Administrative Code 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 (including, but not limited to, the electrical, mechanical, structural, hydrological, geological, and meteorological features).*



Jeffery F. Koerner, P.E.  
Registration Number 49441



(Date)



# Florida Department of Environmental Protection

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

Charlie Crist  
Governor

Jeff Kottkamp  
Lt. Governor

Michael W. Sole  
Secretary

July 31, 2009

*Electronically Sent - Received Receipt Requested*

Mr. Mark Hammond  
Executive Director  
Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, Florida 33412

Re: Project No. 0990234-015-AC/PSD-FL-108H  
Siting's Conditions of Certification No. PA 84-20  
North County Resource Recovery Facility  
Project to Refurbish Units 1 and 2

Dear Mr. Hammond:

On March 9, 2009, an application was submitted requesting authorization to refurbish municipal solid waste combustors Nos. 1 and 2 at the existing North County Resource Recovery Facility. The facility is located at 6501 North Jog Road in West Palm Beach, Palm Beach County, Florida. Enclosed are the following documents: the Technical Evaluation and Preliminary Determination; the Draft Permit and Appendices; the Written Notice of Intent to Issue Air Permit; and the Public Notice of Intent to Issue Air Permit.

The Public Notice of Intent to Issue Air Permit 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. If you have any questions, please contact the project engineer, Bruce Mitchell, at 850/413-9198.

Sincerely,

Trina Vielhauer, Chief  
Bureau of Air Regulation

TRV  
//

Enclosures

TLV/jfk/bm

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

---

*In the Matter of an  
Application for Air Permit by:*

Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, Florida 33412

Project No. 0990234-015-AC/PSD-FL-108H  
North County Resource Recovery Facility  
Refurbish Units 1 and 2  
Palm Beach County, Florida

*Authorized Representative:*

Mr. Mark Hammond, Executive Director

**Facility Location:** The Solid Waste Authority of Palm Beach County operates an existing large municipal waste combustor plant, the North County Resource Recovery Facility, located in Palm Beach County at 6501 North Jog Road in West Palm Beach, Florida.

**Project:** The proposed project is to refurbish Municipal Solid Waste Combustors (MSWC) Nos. 1 and 2 by: replacing the existing electrostatic precipitators with fabric filters to control particulate matter; installing selective non-catalytic reduction systems to reduce nitrogen oxide emissions; installing new activated carbon injection systems to enhance the removal of metal emissions; improving the over-fire air system to optimize combustion; installing new automated combustion control systems; constructing other related maintenance, replacement and repairs. In addition, the applicant requested the following revisions to the original air construction permit: clarification of the permitted unit capacity; replacement of the maximum operating temperature at the dry scrubber outlet with the federal requirements for monitoring the temperature of the particulate matter control device; and removal of the 1-hour emissions standard for carbon monoxide. The Department approved the first two requests, but did not remove the 1-hour emissions standard for carbon monoxide. Instead, the Department increased the averaging period for the carbon monoxide standard from 1-hour to 4-hours to be consistent with other similar municipal waste combustor units.

The project is expected to improve the removal of many air pollutants. Actual emissions are not expected to increase above the significant emissions rates; therefore, the project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. The project is based on an analysis that compared baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. Although the project is considered a minor modification to a major facility, the draft permit revises the averaging period for the carbon monoxide, which was a determination of the best available control technology. Therefore, the Department requires a 30-day comment period for the draft permit.

**Permitting Authority:** 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 an air permit is required to perform the proposed work. The Bureau of Air Regulation 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 850/488-0114.

**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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, 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 contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

---

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue an air permit to the applicant for the project described 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, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice 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 applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (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 above address or phone number. Pursuant to Rules 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 proposed Draft Permit and requests for a public meeting for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. In addition, 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 comments result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

**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 Permit. 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 Permit, 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

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


---

or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (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 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 Permit. 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.

Executed in Tallahassee, Florida.



*For*  
//

\_\_\_\_\_  
Trina Vielhauer, Chief  
Bureau of Air Regulation

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

---

**CERTIFICATE OF SERVICE**

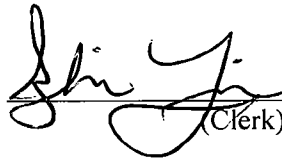
The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Air Permit package (including the Public Notice, the Technical Evaluation and Preliminary Determination, and the Draft Permit), was sent by electronic mail (or a link to these documents made available electronically on a publicly accessible server) with received receipt requested before the close of business on

7/31/09 to the persons listed below.

- Mr. Mark Hammond, Solid Waste Authority of Palm Beach County (mhammond@swa.org)
- Mr. Christopher Tilman, P.E., Malcolm Pirnie, Inc. (ctilman@pirnie.com)
- Mr. Don Elias, RTP Environmental (elias@rtpenv.com)
- Mr. Michael Halpin, Siting Coordination Office (mike.halpin@dep.state.fl.us)
- Mr. James Stormer, Palm Beach County Health Department (james\_stormer@doh.state.fl.us)
- Mr. Lennon Anderson, Southeast District Office (lennon.anderson@dep.state.fl.us)
- Ms. Heather Abrams, EPA Region 4 (abrams.heather@epamail.epa.gov)
- Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epamail.epa.gov)
- Ms. Catherine Collins, Fish and Wildlife Service (catherine\_collins@fws.gov)
- Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

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

  
\_\_\_\_\_  
(Clerk)

7/31/09  
\_\_\_\_\_  
(Date)

## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

Florida Department of Environmental Protection  
Division of Air Resource Management, Bureau of Air Regulation  
Project No. 0990234-015-AC/PSD-FL-108H  
Solid Waste Authority of Palm Beach County – North County Resource Recovery Facility  
Palm Beach County, Florida

**Applicant:** The applicant for this project is the Solid Waste Authority of Palm Beach County. The applicant's authorized representative and mailing address is: Mr. Mark Hammond, Executive Director, Solid Waste Authority of Palm Beach County, North County Resource Recovery Facility, 7501 North Jog Road, West Palm Beach, Florida 33412.

**Facility Location:** The Solid Waste Authority of Palm Beach County operates an existing large municipal waste combustor plant, the North County Resource Recovery Facility, located at 6501 North Jog Road in West Palm Beach, Palm Beach County, Florida.

**Project:** The proposed project is to refurbish Municipal Solid Waste Combustors Nos. 1 and 2 by: replacing the existing electrostatic precipitators with fabric filters to control particulate matter; installing selective non-catalytic reduction systems to reduce nitrogen oxide emissions; installing new activated carbon injection systems to enhance the removal of metal emissions; improving the over-fire air system to optimize combustion; installing new automated combustion control systems; constructing other related maintenance, replacement and repairs. In addition, the applicant requested the following revisions to the original air construction permit: clarification of the permitted unit capacity; replacement of the maximum operating temperature at the dry scrubber outlet with the federal requirements for monitoring the temperature of the particulate matter control device; and removal of the 1-hour emissions standard for carbon monoxide. The Department approved the first two requests, but did not remove the 1-hour emissions standard for carbon monoxide. Instead, the Department increased the averaging period for the carbon monoxide standard from 1-hour to 4-hours to be consistent with other similar municipal waste combustor units.

The project is expected to improve the removal of many air pollutants. Actual emissions are not expected to increase above the significant emissions rates; therefore, the project is not subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality. The project is based on an analysis that compared baseline actual emissions with projected actual emissions. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project. Although the project is considered a minor modification to a major facility, the draft permit revises the averaging period for the carbon monoxide, which was a determination of the best available control technology. Therefore, the Department requires a 30-day comment period for the draft permit.

**Permitting Authority:** 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, F.A.C. The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Bureau of Air Regulation 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 32301. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/488-0114.

**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 address indicated above for the Permitting Authority. The complete project file includes the Draft Permit, 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 contact the Permitting Authority's project review engineer for additional information at the address and phone number listed above. In addition, electronic copies of these documents are available on the following web site: <http://www.dep.state.fl.us/air/emission/apds/default.asp>.

**Notice of Intent to Issue Air Permit:** The Permitting Authority gives notice of its intent to issue an air permit

(Public Notice to be Published in the Newspaper)



## PUBLIC NOTICE OF INTENT TO ISSUE AIR PERMIT

to the applicant for the project described above. The applicant has provided reasonable assurance that operation of 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, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S., or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Comments:** The Permitting Authority will accept written comments concerning the proposed Draft Permit and requests for a public meeting for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the Permitting Authority by close of business (5:00 p.m.) on or before the end of this 30-day period. In addition, 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 comments result in a significant change to the Draft Permit, the Permitting Authority shall revise the Draft Permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection.

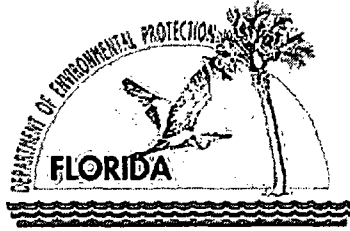
**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's 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 this 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 state; (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 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 Permit. 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.

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



**TECHNICAL EVALUATION  
&  
PRELIMINARY DETERMINATION**

**APPLICANT**

Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, Florida, 33412

North County Resource Recovery Facility  
Facility ID No. 0990234

**PROJECT**

Project No. 0990234-015-AC/PSD-FL-108H  
Application for Minor Source Air Construction Permit  
Municipal Solid Waste Combustors Nos. 1 and 2 Refurbishment Project

**COUNTY**

Palm Beach County, Florida

**PERMITTING AUTHORITY**

Florida Department of Environmental Protection  
Division of Air Resource Management  
Bureau of Air Regulation  
New Source Review Section  
2600 Blair Stone Road, MS #5505  
Tallahassee, Florida 32399-2400

July 31, 2009

## **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 Chapters 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.

### **Glossary of Common Terms**

Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of this permit.

### **Facility Description and Location**

The Solid Waste Authority of Palm Beach County's (Authority's) North County Resource Recovery Facility is an existing large municipal solid waste combustor (MSWC) plant, which is categorized under Standard Industrial Classification Code No. 4953, Refuse Systems. The facility receives municipal solid waste (MSW), which is processed into refuse-derived fuel (RDF). The RDF is combusted in the facility's two MSWC Nos. 1 and 2 to create steam and generate electricity. The existing facility is located in Palm Beach County at 6501 North Jog Road in the West Palm Beach, Florida. The UTM coordinates of the existing facility are Zone 17, 585.82 km East, and 2960.474 km North. With regard to the state and federal Ambient Air Quality Standards (AAQS), this site is in an area that is in attainment for particulate matter (PM) with an aerodynamic diameter equal to or less than 10 microns (PM<sub>10</sub>), carbon monoxide (CO), sulfur dioxide (SO<sub>2</sub>) and nitrogen oxides (NO<sub>x</sub>), and classified as a maintenance area for ozone [the surrogate is volatile organic compounds (VOC)] pursuant to Rule 62-204.340, F.A.C.

### **Facility Regulatory Categories**

- The facility is a major source of hazardous air pollutants (HAP).
- The facility operates one or more units subject to NESHAP of 40 CFR 63.
- The facility operates one or more units subject to NSPS of 40 CFR 60.
- The facility has no 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 a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility is subject to power plant siting certification PA84-20.

### **Project Description**

The primary purpose of the project is to refurbish Municipal Solid Waste Combustors (MSWC) Nos. 1 and 2 by adding or replacing some air pollution control (APC) systems, as well as maintenance, repair and in-kind

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

replacement of other components of the facility (see Attachment A). Actual pollutant emissions are projected to decrease. The facility began commercial operations in the 1990's.

In order to enhance the Authority's ability to continuously comply with applicable U.S. Environmental Protection Agency (EPA) and Department regulations, the new state-of-the-art APC systems that are proposed to be installed on each MSWC are as follows:

- The existing electrostatic precipitators (ESP) will be removed and replaced with new fabric filters. The new fabric filters will improve the ability to collect and remove PM, as well as any heavy metals, dioxins, furans and mercury that are attached to the PM.
- New selective non-catalytic reduction (SNCR) systems will be installed, which will enhance the ability to reduce NOx emissions.
- Activated carbon injection (ACI) systems will be installed, which will improve the ability to remove mercury emissions.
- New combustion control systems and improved overfire air (OFA) systems will be installed, which will improve the ability to reduce CO emissions and may further reduce NOx emissions.

In addition, the applicant requested: 1) specify the permitted capacity as the maximum steam production (324,000 lbs/hr, 4-hour block average) rather than municipal solid waste (MSW) throughput or heat input and (if necessary) increase the heat input rating from 412.5 to 450.8 MMBtu/hour to accurately reflect the permitted steaming rate of 324,000 lbs/hr, 4-hour block average; 2) eliminate the short-term CO limit of 400 parts per million by volume dry (ppmvd) @ 7% oxygen and retain only the one limit pursuant to 40 CFR 60, Subpart Cb, which would require a revision of the BACT limit; and 3) remove the temperature limit of the exhaust gas of 300° F and retain and operate in accordance with the temperature requirement pursuant to 40 CFR 60, Subpart Cb.

### Processing Schedule

March 9, 2009 Received application for a minor source air pollution construction permit;  
March 26, 2009 Received supplemental information;  
April 8, 2009 Requested additional information; and  
July 6, 2009 Received additional information and deemed application complete.

## 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. The Department first must determine if a project is subject to the 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

**TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION**

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: CO; NO<sub>x</sub>; SO<sub>2</sub>; PM; PM<sub>10</sub>; 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 particulate matter; 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 mercury (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 projected actual emissions exceed the baseline actual emissions by 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**

As provided in the application, the following table summarizes the baseline and projected actual emissions and PSD applicability for the project.

Table A. PSD Applicability Summary for Project, Tons/Year (TPY)

Pollutant	Project Baseline Actual Emissions (TPY)	Project Projected Actual Emissions (TPY) <sup>1</sup>	Net Change (TPY)	Significant Emissions Rate (TPY)	Subject To PSD?
CO	336.4	329.7	-6.7	100	No
NO <sub>x</sub>	1304.8	971.9	-332.9	40	No
PM	29.1	28.5	-0.6	25	No
PM <sub>10</sub>	29.1	28.5	-0.6	15	No
SO <sub>2</sub>	225.0	196.5	-28.5	40	No
VOC	16.5	17.3	+0.8	40	No
Pb	0.88	0.788	-0.092	0.6	No
Hg	2.62E <sup>-2</sup>	2.39E <sup>-2</sup>	-0.23E <sup>-2</sup>	0.1	No
Be <sup>2</sup>	2.87E <sup>-4</sup>	2.56E <sup>-4</sup>	-0.31E <sup>-4</sup>	N/A	No
HF	1.9	2.1	+0.2	3.0	No
Cd <sup>2</sup>	2.96E <sup>-2</sup>	2.65E <sup>-2</sup>	-0.31E <sup>-2</sup>	N/A	No
HCl <sup>3</sup>	65.0	66.2	+1.2	N/A	No
<i>PSD Pollutants from Municipal Waste Combustors</i>					
Metals	29.1	28.5	-0.6	15	No
Organics, Dioxin/Furans	5.06E <sup>-5</sup>	4.27E <sup>-5</sup>	-7.90E <sup>-6</sup>	3.5 x 10 <sup>-6</sup>	No
Acid Gases, HCl and SO <sub>2</sub>	290.0	262.7	-27.3	40	No

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

- <sup>1</sup> The projected actual emissions are based on an activity factor of 93.5%, which is the maximum activity factor during the years 2004 – 2008.
- <sup>2</sup> There is no specific PSD significant emission rate - included with the MWC metals.
- <sup>3</sup> There is no specific PSD significant emission rate - included with the MWC acid gases.

As shown in the above table, the net emission changes do not exceed the PSD significant emissions rates; therefore, the project is not subject to PSD preconstruction review.

### **Annual Emissions Reporting**

The project emissions increases are based on an analysis that compared baseline actual emissions with projected actual emissions and avoided the requirements of subsection 62-212.400(4) through (12), F.A.C., for several pollutants. Pursuant to Rule 62-212.300(1)(e), F.A.C., the permittee is required to submit reports characterizing the actual emissions for a period of five years after completing the project.

### **3. DEPARTMENT REVIEW**

#### **Brief Discussion**

The facility began commercial operations in the 1990's at which time state-of-the-art air pollution control systems were installed, which included an ESP for the control of particulate matter and visible emissions and a spray dryer absorber for the control of acid gases. The project is subject to the provisions of Rule 62-210.300(1)(a), F.A.C. (Permits Required) because of the proposed refurbishment of MSWC Nos. 1 and 2 and the addition and replacement of air pollution control systems and components of the units. With the proposed changes and additions of new control systems, the applicant contends that actual pollutant emissions should decrease.

#### **State Requirements**

The existing permits capture the applicable provisions for Rule 62-296.416, F.A.C., Waste-to-Energy Facilities, for mercury. The project does not trigger new requirements.

#### **Federal NSPS Provisions**

The EPA establishes air quality regulations in Title 40 of the Code of Federal Regulations (CFR). Part 60 identifies the NSPS for a variety of industrial activities. The Department adopts these federal regulations in Rule 62-204.800, F.A.C. MSWC Nos. 1 and 2 are subject to the applicable provisions of 40 CFR 60, Subpart Cb, Emission Guidelines and Timeframes for Large Municipal Waste Combustors that are Constructed On or Before September 20, 1994, and the associated and applicable provisions of 40 CFR 60, Subpart Eb, Standards of Performance for Large Municipal Waste Combustors that are Constructed On or Before September 20, 1994. The project does not trigger any new requirements. However, certain provisions will be reviewed with regard to the applicant's requests related to the maximum operating temperature and the CO emission limit averaging time.

#### **Federal NESHAP Provisions**

MSWC Nos. 1 and 2 are not subject to any NESHAP provisions. The new combustion control systems and improved OFA systems will not approach 50% of the cost for a new MSWC unit. Therefore, the project is not considered reconstruction and does not trigger any new requirements.

#### **Proposed Control Systems and Associated Changes**

The following describes the proposed additional or replacement control systems at the existing facility. The permittee will be required to submit the final designs of each control system to the Permitting and Compliance Authorities once these are complete.

#### **Fabric Filters Control Systems**

The existing ESP's will be removed and replaced with new fabric filters. The new fabric filters will improve the ability to collect and remove PM as well as any heavy metals, dioxins, furans and mercury that are attached to the

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

PM. Each MSWC will be outfitted with a new fabric filters system that will be located downstream of the dry scrubber as the final treatment stage before the gases are exhausted to the atmosphere.

- Each fabric filters system will be designed to treat 100% of the flue gas leaving the dry scrubber. Each fabric filters system is designed for a maximum flow rate of 115,000 dry standard cubic feet per minute (dscfm) and an outlet particulate loading of 16 milligrams per dry standard cubic meter (mg/dscm), which is equivalent to an outlet grain (gr) loading of 0.0070 gr/dscf.
- The new systems will be pulse-jet fabric filters with six compartments and be designed to operate with one compartment off-line for cleaning and one compartment off-line for maintenance. The pulse-jet cleaning system will be independent from the exhaust gas flow and will have pneumatically actuated isolation valves to permit off-line cleaning and maintenance on any isolated compartment during full load operation of the plant.
- Each compartment will be furnished with one pyramid-shaped hopper to promote collection of the captured particulate. The fabric filters systems shall be designed for non-combustibility, abrasion and corrosion resistance and overall durability.

### SNCR Systems

New SNCR systems will be installed on each MSWC to enhance the ability to reduce NO<sub>x</sub> emissions. The new SNCR system will inject urea directly into each unit at a location with an optimum temperature range for a urea-based system, typically 1650° F to 2100° F. The reaction must take place within the specified temperature range or it is possible to generate additional NO<sub>x</sub> emissions or excess ammonia slip. Increasing the residence time available for mass transfer and chemical reactions generally improves NO<sub>x</sub> reduction. SNCR systems can achieve NO<sub>x</sub> reductions of 50% on some applications. However, a by-product of the process is ammonia slip, which can react with hydrogen chloride (HCl) in the flue gas to form ammonium chloride and form a detached white plume near the stack. With the injection of activated carbon in front of the fabric filters and the dust layer on the bags, slipped ammonia and ammonium chloride are expected to be captured or reduced, thus reducing the potential formation of ammonium chloride in the stack and any associated opacity. The preliminary design target for ammonia slip is 15 parts per million by volume dry (ppmvd) corrected to 15% oxygen.

The number of injection ports, locations and the overall piping layout within each MSWC will be designed by the contractor. In the preliminary design, the SNCR injection system will consist of up to three levels of injectors and up to ten injection nozzles per level. The final location, quantity and elevation of injection points will be determined by the SNCR equipment supplier by performing a computational fluid dynamic (CFD) model of the combustion and temperature profiling within each MSWC. The CFD modeling will be used to determine the temperature zone for ideal introduction of the urea mixture for varying fuel conditions. The SNCR system will be designed for startup, shutdown and monitoring via the MSWC control system. The preliminary design is for a urea storage system with 14-day supply and a 150% capacity containment dike. To provide system robustness, there will be a 100% redundancy in all pumping systems. The preliminary design target for ammonia slip is 10 ppm by volume.

### ACI Systems

ACI systems will be installed to inject activated carbon into each unit for the control of metal emissions, particularly mercury. The ACI system will be designed to inject powdered activated carbon (PAC) into the flue gas ductwork just upstream of the dry scrubber, which is also known as a spray dryer absorber. The PAC acts as a sorbent for heavy metals, specifically mercury, present in the exhaust gas stream. The carbon particulates and the attached heavy metals will be removed from the exhaust gas stream by the fabric filter system downstream of the dry scrubber.

Each injection system will consist of the feeding device with air lock, seals, an air supply and pneumatic pipes and/or hoses. The projected PAC injection rate is in the range of 0.3 to 1.5 lb/ton of RDF combusted. The optimum injection rate will be determined during the initial performance tests. The PAC injection will be

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

controlled using a rotary valve feeder, which will meter a specific volume of PAC into the blower and injection piping. The controls and feedback signals from the PAC injection system will be integrated into the distributed control system (DCS) and the continuous emissions monitoring system (CEMS). Sufficient blow-out connections will be provided to allow the lines to be quickly cleared should plugging occur. A volumetric feeder with dosage counts (calibrated for weight) or gravimetric feeder will be provided for each MSWC and one spare feeder system will be installed to provide redundancy.

The PAC will be stored in a single silo and fed to the injection point via a pneumatic injection train that will be installed for each MSWC. The silo will be pneumatically loaded from a truck at approximately 20 tons/hour (design fill rate) and is considered to be a batch loading operation. The silo will be equipped with a baghouse to remove entrained carbon from the air vented during loading operations. Filling operations will cease upon any observance of any visible emissions. The expected particulate control efficiency is 99.9+% and the vendor guarantee is an outlet grain loading of 0.01 gr/dscf. The potential particulate emissions are 0.58 tons/year. The draft permit will require the design of each baghouse system to meet the design specification of 0.01 gr/dscf and establish a visible emissions standard of 5% opacity as determined by EPA Method 9.

### Combustion Controls and OFA System

New combustion control systems and improved OFA systems will be installed on each unit to improve the ability to reduce CO emissions and possibly NOx emissions prior to control by the proposed SNCR systems. Staged OFA combustion will be added to enhance complete combustion of the RDF while maintaining low temperatures to prevent excessive thermal NOx formation. Each new combustion control system will be designed with 14 overfire air ports located on two injection levels. A combination of proprietary adjustable and fixed nozzles with independent control of air mixing volumes will optimize the combustion process resulting in lower CO and NOx emissions. An additional RDF transport fan is being added to convey the RDF into the MSWC providing a separation between the combustion air system and the transport air system that should allow an additional level of combustion control.

### **Permit Changes Requested**

In addition to the refurbishment project, the applicant requested the following revisions to Permit PSD-FL-108 in addition to the proposed refurbishment project. If text is being added, it will be double-underlined. If text is being deleted, it will be single-lined strike-through.

1. Applicant Request: Original Permit No. PSD-FL-108 (as modified) specifies the maximum design rating of existing MSWC Nos. 1 and 2 as 412.5 MMBtu/hour with a maximum steam rating of 324,000 lb/hour. The applicant claims that the maximum permitted steam production rate should define the "permitted capacity", since it can be measured directly. In contrast, the heat input rate depends on the heating value of the MSW, which is inherently variable and difficult to measure at a given moment. Also, limiting the steam production rate is generally consistent with other waste-to-energy facility air operation permits in Florida. Therefore, the applicant requests a revision of original Permit No. PSD-FL-108 (as modified) to clarify the permitted capacity as 324,000 lb/hour of maximum steam production (4-hour block average). The applicant requests the heat input rate be removed, but believes that the initial maximum heat input rate was low and should be recognized as 450.8 MMBtu/hour based on a heating value of 5700 Btu/lb.

Department Response: The Department's review indicates that EPA issued the original PSD permit (PSD-FL-108) in December of 1986. At the request of the applicant in 1992, the Department modified the permit (PSD-FL-108A) from:

Plant Capacity: The incinerator boilers shall not be loaded in excess of their rated capacity of 58,333 pounds of RDF per hour each or 360 MMBtu/hour each.

To:

*(2<sup>nd</sup> paragraph on placard page)*: The North County Regional Resource Recovery Facility is authorized to operate the two (2) existing RDF boilers to their maximum design input rating of 412.5 MMBtu per



## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

hour with a maximum steam rating of 324,000 lbs/per hour, subject to the General and Specific Conditions stated herein.

In addition, the placard page of the permit clearly identifies the purpose of the modification: "Enclosed is Permit Modification Number PSD-FL-108A to allow the two (2) existing RDF boilers to operate at their maximum design input rating of 412.5 MMBtu's per hour, at the North County Regional Resource Recovery Facility in Palm Beach County, Florida, issued pursuant to sections(s) 403, Florida Statutes." Note that this modification was made at the request of the applicant who specifically defined the maximum heat input rate for the existing units already in operation. Also, the 6<sup>th</sup> paragraph on the placard page further explains:

The boiler plant includes two B&W boilers, each designed to combust up to 900 TPD of RDF with a reference heating value of 5,500 Btu/lb (412.5 MMBtu/hr). Actual RDF heating values typically range from 4,500 to 6,200 Btu/lb respectively.

The Department also notes that the federal regulations §60.51b (NSPS Subpart Eb) define the following terms:

"Maximum demonstrated municipal waste combustor unit load" means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified under Sec. 60.52b(c).

"Municipal waste combustor unit capacity" means the maximum charging rate of a municipal waste combustor unit expressed in tons per day of municipal solid waste combusted, calculated according to the procedures under Sec. 60.58b(j). Section 60.58b(j) includes procedures for determining municipal waste combustor unit capacity for continuous and batch feed municipal waste combustors.

"Municipal waste combustor unit load" means the steam load of the municipal waste combustor unit measured as specified in Sec. 60.58b(i)(6)."

In Permit No. PSD-FL-108A, note that the "900 tons/day" of RDF was a 28.5% increase from the previously defined rate of "58,333 pounds of RDF per hour" (equivalent to 700 tons/day of RDF). Based on the applicant's contention that the RDF fuel heating value is approximately 5700 Btu/lb, the Department calculates the maximum heat input rate for the unit design capacity of 900 tons/day as:

$$\begin{aligned}\text{Heat Input rate} &= (900 \text{ tons RDF/day})(2000 \text{ lb/ton})(\text{day}/24 \text{ hours})(5700 \text{ Btu/lb RDF}) (\text{MMBtu}/10^{+06} \text{ Btu}) \\ &= 427.5 \text{ MMBtu/hour (24-hour average)}\end{aligned}$$

Finally, Condition 13 of Permit No. PSD-FL-108A requires continuous monitoring of the steam production.

The lbs/hr of steam produced, corrected for pressure and temperature, shall be continuously monitored and recorded on a 4 hour block average. This monitor and data record shall be properly calibrated and maintained at all times.

Based on the permitting history, the information provided by the applicant, and consistency with the federal regulations, the Department will revise the permitted capacity as follows:

The North County Regional Resource Recovery Facility is authorized to operate the two (2) existing RDF boilers to their maximum ~~design input rating of 412.5 MMBtu per hour with a maximum~~ production rating of 324,000 lbs. per hour per unit based on a 4-hour block average, subject to the General and Specific Conditions stated herein. At the municipal waste combustor unit capacity of 900 tons per day and a reference heating value of 5,700 Btu/lb of RDF, the maximum heat input rate is 427.5 MMBtu/hour (24-hour average).

2. Applicant Request: The applicant requested deletion of the CO BACT limit of 400 ppmvd @ 7% oxygen based on a 1-hour average established in Permit No. PSD-FL-108A. Because installation of a new combustion control system is intended to optimize the combustion efficiency of the boilers, the applicant

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

requests that the boilers only be subject to the existing CO limit of 200 ppmvd @ 7% oxygen based on a 24-hour average, which is similar to the CO emission limit specified §60.34b(a).

**Department Response:** In the application Permit No. PSD-FL-108A, the applicant proposed the 1-hour and 24-hour limits for CO as valid criteria to demonstrate good combustion practices. CO emissions are generally accepted as an indicator of combustion efficiency. Limiting the emissions of CO provides reasonable assurances that good combustion is taking place and organic emissions are being controlled. For CO BACT limits, it is not uncommon to establish both a short-term and a long-term emission level to allow for fluctuations in fuel feed and combustion. With the installation of a new combustion control system, the Department believes it is appropriate to retain both emissions limits to ensure good combustion as well as the stringency of the BACT. However, because of fluctuations in the fuel (e.g., heating value, moisture, etc.), the Department believes it is reasonable to relax the short-term CO averaging period in Condition 3c of Permit No. PSD-FL-108 (as modified) from a 1-hour to a 4-hour average as follows:

3. Stack emissions from each unit shall not exceed the following limits.

- c. Carbon Monoxide: 400 ppmvd corrected to 7% O<sub>2</sub> (~~1~~ 4-hour average); 200 ppmvd corrected to 7% O<sub>2</sub> (24-hour average).

This is consistent with: the short-term CO averaging period for some of the MSWC types specified in Table 3 of §60.34b(a) for the NSPS Subpart Cb Guidelines; the short-term CO averaging period for some of the MSWC types specified in Table 1 of §60.53b(a) for the NSPS Subpart Eb Guidelines; Permit No. PSD-FL-105B for the Wheelabrator South Broward facility; and Permit No. PSD-FL-112B for the Wheelabrator North Broward Facility. The Department also notes that the numerical portion of these standards is also much lower than that for the units at the North County Resource Recovery Facility. The 4-hour averaging period will afford time for operators to respond to furnace conditions resulting in high CO levels. Although there will be no increase in CO emissions from this change, it is considered a modification of the PSD permit. Therefore, a 30-day comment period will be required in the draft permit package.

3. **Applicant Request:** The applicant requested removal of the temperature limit (300° F) at the dry scrubber outlet specified in Condition 6 of Permit No. PSD-FL-108 (as modified). The applicant states that NSPS Subpart Cb in 40 CFR 60 also specifies the following applicable operating temperature in §60.34b(b), "... at least as protective as those listed in §60.53b(b) and (c) of NSPS Subpart Eb, 40 CFR 60." §60.53b(c) states, "No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17° C above the maximum demonstrated particulate matter control device temperature as defined in §60.51b, except as specified in paragraphs (c)(1) and (c)(2) of §60.53b(c). The averaging time is specified under §60.58b(i) ..." §60.58b(i) states, "Temperature shall be calculated in 4-hour block arithmetic averages." The federal requirements do not impose an upper temperature limit, but try to ensure that a unit will be operated in a manner similar to the operation during the most recent stack test that demonstrated compliance with the dioxin/furan emissions limits.

**Department Response:** The temperature limit (300° F) at the dry scrubber outlet in the PSD permit appears to be an attempt to minimize metal vapor emissions or perhaps dioxin/furan emissions. Since the permittee is installing an activated carbon injection system, emissions of these pollutants will be greatly reduced and the temperature limit (300° F) at the dry scrubber outlet is likely unnecessary for this purpose. In addition, the applicant is changing the dry scrubber system collection device from an ESP to a fabric filter system. Therefore, the Department will replace the temperature limit (300° F) at the dry scrubber outlet specified in Condition 6 of Permit No. PSD-FL-108 (as modified) with a requirement to continuously monitor temperature at the inlet of each new fabric filter system as required by and consistent with §60.58b(i)(7). If the existing continuous temperature monitoring devices do not satisfy this requirement after installation of the new fabric filters systems, then the permittee shall install such equipment. The Department will revise Condition No. 6 as follows:

---

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

6. ~~The temperature at the exit of the dry scrubber shall not exceed 300 °F (4 hour block average). Appropriate instrumentation shall be installed, if not already installed, within 180 days of issuance of this permit, at a proper location to continuously monitor and record these operating temperatures. In accordance with the provisions of §60.53b(c), the owner or operator shall operate each unit in compliance with the specified particulate matter control device temperatures. In accordance with the provisions of §60.58b(i)(7), the owner or operator shall install, calibrate, maintain and operate equipment to continuously monitor and record the particulate matter control device temperature of each unit. The existing monitoring equipment shall comply with these requirements or the owner or operator shall install new monitoring equipment to comply with the federal regulations.~~

#### 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. Bruce Mitchell is the project engineer responsible for reviewing the application and drafting the permit. The draft permit package was reviewed and approved by Jeff Koerner. Additional details of this analysis may be obtained by contacting the project engineer at the Department's Bureau of Air Regulation at Mail Station #5505, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400.

Air Pollution Control System Upgrade

The components, equipment and materials for the refurbishment project related to the air pollution control system (APC) upgrade consist of:

- Two fabric filter systems
- Induced draft (ID) fans
- Fabric filter and Spray Dryer Absorber (SDA) ash conveying system, per line, connecting to the existing fly ash conveying system
- Double flap valves and instillation for all fabric filter hoppers
- Plumbing – roof drains and installation
- Heating, Ventilating and Air Conditioning (HVAC) – ventilation equipment and installation
- Plant air system (including air dryers, receivers, enclosure and installation)
- Fire protection system
- 4.16 kilovolt (kV) switchgear and conductors for new ID fan motors [approximately 1,000 horsepower (hp) motors]
- Two 480 volt (V) Motor Control Centers (MCC) – one for each APC train
- 480 V Electrical Distribution System (EDS) with separate feeds for each MCC
- 5 kV EDS
- Fabric filter, SNCR systems and ACI systems electrical work
- One SNCR system for each boiler, including common urea feed tank
- One ACI system for each boiler, with a redundant feeder and blower, fed from a common carbon silo
- Two refurbishments of the upper and lower SDA internals, including upper cones, turning vanes, diffusers, internal stiffeners for the supports and 3-foot (conical and cylindrical) bands at the hopper to cylinder weld

Municipal Waste Combustor (MWC) Components

The MWC work will consist of the following activities:

- Replace 12 fuel chutes
- Replace 12 air swept spouts with air supplies
- Replace 2 ash diverters
- Replace two Inconel 625-clad furnaces (with front, rear and side walls with upper and lower headers and drains/vents, stoker seals, supply tubes, buck stays, access doors and new furnace roofs)
- Replace four auger feed conveyors
- Install two new transport air fans, supports, ducts and expansion joints
- Refurbish two of the existing forced draft fans
- Refurbish two of the existing overfire air fans
- Replace two bottom ash conveyors (horizontal portions only)
- Refurbish eight natural gas auxiliary burners with isolation dampers, hoses and igniters, and relocated valve racks

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

### Attachment A

- replace two superheaters (310HSS and SA210) with headers, hangers, cross over piping, saturated connections, rapper hammers, outlet piping and drains/vents
- Replace two attemptors
- Replace two sets of steam drum internals, including sixteen (16) steam-water separators and related drum baffles and internals
- Replace two generating banks (loose tubes and side wall tubes)
- Replace two sets of boiler trim
- Replace two sets of feed water piping from flow control valves to steam drums
- Replace two modular economizers
- Replace two modular tubular air heaters
- Install air heater bypass ducts and dampers
- Replace two Corten flue systems including expansion joints, supports and hoppers from the boiler to stack
- Replace two sets of Corten boiler casing
- Replace two penthouse casings and install two (2) new penthouse trolley beams
- Upgrade two sets of boiler instrumentation, excluding drum instrumentation
- Replace two closed circuit televisions for furnace grates
- Install two sets of boiler platforms (interior to the building)

#### Balance of Plant/Facility Materials or Equipment

The components, equipment and materials for the Refurbishment Project related to the balance of the plant/facility consist of the following activities:

- Replace two 15 kV interrupter switches
- Replace two 13.9 kV/480 V transformers
- Refurbish existing ID fan 4.16 kV motor starters and provide to the Operator as spares
- Cleaning and re-insulation of non-segregated metal bus duct
- Re-insulation of 13.9 kV switchgear
- Refurbish existing precipitator MCC to be provided to the Operator as spares
- Install one uninterruptible power supply and AC instrument transformer
- Install one Distributed Control System (DCS) and associated wiring for the boiler islands, RDF buildings and water treatment plant
- Install one fire protection monitoring system
- Install one fire protection system data logger
- Install one fire protection system (FM200) for turbine generator cable room, DCS and Engineering Work Station (EWS) rooms to replace existing Halon systems
- Install one set of boiler laboratory instrumentation
- Install one Sensidyne combustion gas detection system

## TECHNICAL EVALUATION AND PRELIMINARY DETERMINATION

---

### Attachment A

- Refurbish four drum magnets (overhaul only)
- Replace one bulk acid storage tank
- Replace two bucket elevators
- Install Manufacturing Building tipping floor cap, but no floor capping in the storage building
- Refurbish boiler building elevator
- Install one air compressor system for RDF buildings, including foundation/skid, utilities, MCC, local piping, air compressors with coolers, air dryers, receivers and tie-in to existing air system
- Install one emergency egress from the boiler house control room. The new egress door will be equipped with a window and exiting to a new stairway leading to ground level.

# DRAFT

## PERMITTEE

Solid Waste Authority of Palm Beach County  
7501 North Jog Road  
West Palm Beach, FL 33412

*Authorized Representative:*

Mark Hammond, Executive Director

North County Resource Recovery Facility  
Units 1 and 2 Refurbishment Project

Facility ID No. 0990234

SIC No. 4953

Air Permit No. 0990234-015-AC/PSD-FL-108H

Permit Expires: December 31, 2011

## PROJECT AND LOCATION

This permit authorizes the following for existing municipal solid waste combustors Units 1 and 2 at the existing North County Resource Recovery Facility: installation of new selective non-catalytic reduction (SNCR) systems; installation of new activated carbon injection (ACI) systems; replacement of the existing electrostatic precipitator systems with new fabric filter systems; installation of new combustion control systems; installation of improved over-fire air (OFA) systems; and maintenance, replacement and repair of other components. The permit also makes the following revisions to original Permit No. PSD-FL-108 (as modified): clarifies the permitted capacity as the maximum steam production rate; revises the short-term averaging period for the carbon monoxide standard from a 1-hour to a 4-hour average; and replaces the maximum temperature at the dry scrubber outlet with the federal temperature monitoring requirements in Subpart Eb of Part 60, Title 40, Code of Federal Regulations. The existing facility is located at 6501 North Jog Road in West Palm Beach, Palm Beach County, Florida. The map coordinates are: Zone 17; 585.82 km East; and 2960.474 km North.

## STATEMENT OF BASIS

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

## CONTENTS

- Section 1. General Information
- Section 2. Administrative Requirements
- Section 3. Emissions Units Specific Conditions
- Section 4. Appendices

(DRAFT)

---

Joseph Kahn, Director  
Division of Air Resource Management

---

(Date)

## SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

### FACILITY AND PROJECT DESCRIPTION

The existing facility is a municipal solid waste combustor (MSWC) plant designed to process 2,000 tons per day of municipal solid waste. The facility burns processed MSW that is called "refuse derived fuel" (RDF). The RDF plant is equipped with three MSW processing lines, any two of which can handle the 2,000 tons per day of incoming MSW. The boiler plant includes two Babcock & Wilcox boilers (Units 1 and 2), each designed with a steam flow rating of 324,000 lb/hour based on a unit design rate of 900 tons/day of RDF. Currently, emissions from each boiler are controlled by a Babcock & Wilcox spray dryer absorber followed by a Babcock & Wilcox 4-field electrostatic precipitator (ESP). Each ESP has a gas flow rating of 198,000 acfm and is designed to operate in compliance with three of the four fields in service. The turbine-generator rating of 62 MW matches the full output of the boilers.

A Class I Landfill and a Class III Landfill are also located on this property: Each landfill operates its own landfill gas collection system with associated flares. Additional facilities include storage and handling facilities for RDF waste as well as storage and handling facilities for ash and ash treatment. The following units are affected by this air construction permit.

ARMS ID	Emission Unit Description
001	Municipal Solid Waste Boiler Unit 1
002	Municipal Solid Waste Boiler Unit 2

### REGULATORY CLASSIFICATIONS

- The facility is a major source of hazardous air pollutants (HAP).
- The facility has no 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 a major stationary source in accordance with Rule 62-212.400, F.A.C., for the Prevention of Significant Deterioration (PSD) of Air Quality.
- The facility is subject to power plant siting certification PA84-20.
- The facility operates one or more units subject to applicable subparts of the New Source Performance Standards (NSPS) in Part 60, Title 40 of the Code of Federal Regulations. (40 CFR 60).
- The facility operates one or more units subject to applicable subpart of the National Emission Standards for Hazardous Air Pollutants (NESHAP) of 40 CFR 63.



## SECTION 2. ADMINISTRATIVE REQUIREMENTS (DRAFT)

---

1. Permitting Authority: All documents related to applications for permits to construct, modify, or operate emissions units at this facility shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection (DEP) at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all permit applications shall also be sent to the Compliance Authority.
2. Compliance Authority: All documents related to compliance activities such as reports, tests and notifications shall be submitted to the Department's Southeast District Office at 400 North Congress Avenue, West Palm Beach, Florida 33401.
3. Appendices: The following Appendices are attached as part of this permit:
  - a. Appendix A. Citation Formats and Glossary of Common Terms;
  - b. Appendix B. General Conditions; and
  - c. Appendix C. Common Conditions.
4. Applicable Regulations, Forms and Application Procedures: Unless otherwise indicated in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state or local permitting regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C., and follow the application procedures in Chapter 62-4, F.A.C. [Chapter 62-4 and Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]
7. Construction and Expiration: The permit expiration date includes sufficient time to complete construction, perform required testing, submit test reports and submit an application for a Title V air operation permit revision to the Department. Approval to construct shall become invalid if construction is not completed within a reasonable time. The Department may extend the expiration date upon a satisfactory showing that an extension is justified. Such a request shall be submitted to the Department's Bureau of Air Regulation at least 60 days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080 and 62-210.300(1), F.A.C.]
8. Application for Title V Permit: This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V air operation permit revision is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V air operation permit revision at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit revision, the applicant shall submit the appropriate application form, compliance test results and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

## SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

### A. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)

This section of the permit addresses the following emissions units.

#### MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)

*Description:* Units 1 and 2 are identical Babcock & Wilcox MSWC units that began commercial operation on November 15, 1989. The following descriptions include the changes being made in this permit.

*Boiler Type:* The boiler use a moving grate to burn the RDF fuel.

*Fuel:* RDF

*Supplementary Fuel:* Natural gas is used for startup, shutdown and during combustion of low Btu waste to maintain combustor temperature.

*Capacity:* The permitted capacity is 324,000 pounds per hour of steam (4-hour block average) based on a unit design capacity of 900 tons per day of RDF.

*Generator Nameplate Rating:* 62 Megawatts (MW).

*Spray Dryer Absorber (SDA):* Each unit uses lime injection to control acid gas emissions.

*Fabric Filter System:* Each unit uses a fabric filter system to control particulate matter (PM) emissions.

*Combustion Control System and OFA System:* Each unit optimizes furnace conditions with an automated control system and OFA system for proper combustion while minimizing carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>) and volatile organic compounds (VOC).

*SNCR System:* Each unit injects urea with an SNCR system to control NO<sub>x</sub> emissions.

*ACI System:* Each unit injects activate carbon to adsorb metal and dioxin/furan emissions, which are then collected by the fabric filter system.

*Continuous Monitors:* Each unit uses the following equipment to continuously monitor the following pollutants and parameters: continuous emissions monitoring systems (CEMS) for CO, carbon dioxide (CO<sub>2</sub>), NO<sub>x</sub> and sulfur dioxide (SO<sub>2</sub>); continuous opacity monitoring system (COMS) for opacity; and continuous monitoring systems (CMS) for the temperature of the flue gas stream at the fabric filter inlet, the stack gas flow and urea injection rate.

*Stack Parameters:* Units 1 and 2 each have a stack that is 250 feet tall with a diameter of 8 feet and are both surrounded by a single stack shell. The volumetric flow rates of each MSWC at permitted capacity are approximately 191,494 actual cubic feet per minute (acfm) and 116,274 dry standard cubic feet per minute (dscfm) @7% oxygen (O<sub>2</sub>).

*Exit Temperature:* Approximately 310 °F, as measured downstream of the SDA.

*Primary Regulatory Requirements:* Based on the current Title V air operation permit, Units 1 and 2 are regulated under: NSPS Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) of Air Quality and Permit No. PSD-FL-108 (as modified); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Also, note that conditions in NSPS Subpart Cb refer to provisions NSPS Subpart Eb. These emissions units are also subject to Compliance Assurance Monitoring (CAM), adopted and incorporated by reference in Rule 62-204.800, F.A.C.

#### PREVIOUS APPLICABLE REQUIREMENTS

1. Other Permits: The conditions of this permit supplement all previously issued air construction and operation permits for these emissions units. Unless otherwise specified, these conditions are in addition to all other applicable permit conditions and regulations. [Rule 62-4.070, F.A.C.]

#### EQUIPMENT AND CONSTRUCTION

2. Final Design Specifications: Upon entering into a contractual commitment with a control equipment vendor, the permittee shall submit the final design specifications for each control equipment system to the Permitting Authority and the Compliance Authority. [Rule 62-4.070(3), F.A.C.]
3. Updated Control Equipment Designs: As necessary, the permittee shall update the Permitting Authority

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

#### A. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)

and the Compliance Authority with final design specifications and any substantial changes made to the final design specifications during the actual construction phase. [Rule 62-4.070(3), F.A.C.]

4. **SNCR System:** The permittee shall construct, tune, operate and maintain a new SNCR system for each MSWC to reduce NO<sub>x</sub> emissions. The new SNCR system will inject urea directly into each unit at a location with an optimum temperature range for a urea-based system, typically 1650° F to 2100° F. The reaction must take place within the specified temperature range or it is possible to generate additional NO<sub>x</sub> emissions or excess ammonia slip. Increasing the residence time available for mass transfer and chemical reactions generally improves NO<sub>x</sub> reduction. The following is based on the preliminary design information and is subject to change.

*SNCR systems can achieve NO<sub>x</sub> reductions of 50% on some applications. The number of injection ports, locations and the overall piping layout within each MSWC will be designed by the contractor. The SNCR injection system will consist of up to three levels of injectors and up to ten injection nozzles per level. The final location, quantity and elevation of injection points will be determined by the SNCR equipment supplier by performing a computational fluid dynamic (CFD) model of the combustion and temperature profiling within each MSWC. The CFD modeling will be used to determine the temperature zone for ideal introduction of the urea mixture for varying fuel conditions. The SNCR system will be designed for startup, shutdown and monitoring via the MSWC control system. The urea storage system will be designed with 14-day supply and a 150% capacity containment dike. To provide system robustness, there will be a 100% redundancy in all pumping systems. The preliminary design target for ammonia slip is 15 parts per million by volume dry (ppmvd) corrected to 15% oxygen.*

The permittee shall update the Permitting and Compliance Authorities with revised information as necessary during final design and installation. [Application, Design and Rule 62-4.070(3), F.A.C.]

5. **ACI System:** The permittee shall construct, tune, operate and maintain a new ACI system for each MSWC to reduce emissions of heavy metals with mercury as the primary target. The ACI system will be designed to inject powdered activated carbon (PAC) into the flue gas ductwork just upstream of the dry scrubber, which is also known as a spray dryer absorber. The PAC acts as a sorbent for heavy metals, specifically mercury, present in the exhaust gas stream. The carbon particulates and the attached heavy metals will be removed from the exhaust gas stream by the fabric filter system downstream of the dry scrubber. The following is based on the preliminary design information and is subject to change.

*Each injection system will consist of the feeding device with air lock, seals, an air supply and pneumatic pipes and/or hoses. The projected PAC injection rate is in the range of 0.3 to 1.5 lb/ton of RDF combusted. The optimum injection rate will be determined during the initial performance tests. The PAC injection will be controlled using a rotary valve feeder, which will meter a specific volume of PAC into the blower and injection piping. The controls and feedback signals from the PAC injection system will be integrated into the distributed control system (DCS) and the CEMS. Sufficient blow-out connections will be provided to allow the lines to be quickly cleared should plugging occur. A volumetric feeder with dosage counts (calibrated for weight) or gravimetric feeder will be provided for each MSWC and one spare feeder system will be installed to provide redundancy.*

*The PAC will be stored in a single silo and fed to the injection point via a pneumatic injection train that will be installed for each MSWC. The silo will be pneumatically loaded from a truck at approximately 20 tons/hour (design fill rate) and is considered to be a batch loading operation. The silo will be equipped with a fabric filter to remove entrained carbon from the air vented during loading operations.*

The permittee shall update the Permitting and Compliance Authorities with revised information as necessary during final design and installation. [Application, Design and Rule 62-4.070(3), F.A.C.]

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

#### A. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)

6. **Fabric Filter System:** The permittee shall construct, operate and maintain a new fabric filter system for each MSWC to reduce PM. The existing electrostatic precipitators will be removed and replaced with new fabric filter systems, which will improve the ability to collect and remove PM as well as any heavy metals, dioxins, furans and mercury that are attached to the PM. Each MSWC will be outfitted with a new fabric filter system that will be located downstream of the dry scrubber as the final treatment stage before the gases are exhausted to the atmosphere. The following is based on the preliminary design information and is subject to change.

*Each fabric filter system will be designed to treat 100% of the flue gas leaving the dry scrubber. Each fabric filter system is designed for a maximum flow rate of 115,000 dry standard cubic feet per minute (dscfm) and an outlet particulate loading of 16 milligrams per dry standard cubic meter (mg/dscm), which is equivalent to an outlet grain (gr) loading of 0.0070 gr/dscf.*

*The new systems will be pulse-jet fabric filters with six compartments and be designed to operate with one compartment off-line for cleaning and one compartment off-line for maintenance. The pulse-jet cleaning system will be independent from the exhaust gas flow and will have pneumatically actuated isolation valves to permit off-line cleaning and maintenance on any isolated compartment during full load operation of the plant.*

*Each compartment will be furnished with one pyramid-shaped hopper to promote collection of the captured particulate. The fabric filter systems shall be designed for non-combustibility, abrasion and corrosion resistance and overall durability.*

The permittee shall update the Permitting and Compliance Authorities with revised information as necessary during final design and installation. [Application, Design and Rule 62-4.070(3), F.A.C.]

7. **Combustion Control and OFA Air System:** The permittee shall install new combustion control systems and improved OFA systems on each unit to optimize combustion performance while minimizing the products of combustion. Staged OFA combustion will be added to enhance complete combustion of the RDF while maintaining relatively low temperatures to prevent excessive thermal NO<sub>x</sub> formation. An additional RDF transport fan will be added to convey the RDF into the MSWC providing a separation between the combustion air system and the transport air system to minimize related emissions. The following is based on the preliminary design information and is subject to change.

*Each new combustion control system will be designed with 14 OFA air ports located on two injection levels. A combination of proprietary adjustable and fixed nozzles with independent control of air mixing volumes will optimize the combustion process and lower CO and NO<sub>x</sub> emissions.*

The permittee shall update the Permitting and Compliance Authorities with revised information as necessary during final design and installation. [Application, Design and Rule 62-4.070(3), F.A.C.]

8. **Activate Carbon Silo Baghouse:** The permittee shall construct, operate, and maintain a new baghouse system to control PM emissions from the activated carbon silo. The equipment shall be designed for an outlet grain loading of 0.01 gr/acf. After the final design is selected, the permittee shall submit vendor information for the baghouse demonstrating compliance with the design outlet grain loading specifications. New and replacement bags shall meet the design outlet grain loading specifications. [Application and Design; and Rule 62-4.070(3), F.A.C.]
9. **CAM Plans:** As part of the applications to incorporate this air construction permit into a revised Title V air operation permit, the permittee shall include a revised CAM plan as necessary to address each modified and new air pollution control system. [Rule 62-204.800, F.A.C.]

---

### SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

---

#### A. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)

#### EMISSIONS STANDARDS

10. Activated Carbon Silo Baghouse: Visible emissions from the baghouse vent on the activated carbon silo shall not exceed 5% opacity as determined by EPA Method 9. [Rules 62-4.070(3) and 62-297.620(4), F.A.C.]
11. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002): These emissions units remain subject to all applicable requirements of valid air construction and operation permits. [Rule 62-4.070(3), F.A.C.]

#### CONTINUOUS MONITORING REQUIREMENTS

12. Urea Injection Rate: The permittee shall install, calibrate, operate and maintain a CMS to continuously monitor and record the urea injection rate of each SNCR system. [Rule 62-4.070(3), F.A.C.]
13. ACI Rate: The permittee shall install, calibrate, operate and maintain a CMS to continuously monitor and record the ACI injection rate of each ACI system. [Rule 62-4.070(3), F.A.C.]

#### EMISSIONS PERFORMANCE TESTING

14. Tests, Notifications and Reports: When conducting tests required by this permit, the permittee shall follow the test, notification, monitoring and reporting procedures specified in the current Title V air operation permit. [Permit No. 0990234-013-AV]
15. Activated Carbon Silo Baghouse: In accordance with EPA Method 9, the permittee shall conduct initial and annual compliance tests to demonstrate compliance with the visible emissions standard. Initial tests shall be conducted when the activated carbon silo is initially loaded. Annual tests shall be conducted during each fiscal year (October 1st to September 30th). Each test shall be conducted for at least 30 minutes or for the complete loading cycle if less than 30 minutes. The permittee shall notify the Compliance Authority at least 15 days prior to the schedule compliance test date. Test reports shall be submitted within 45 days of completing the test. In addition to the information required in Rule 62-297.310(8), F.A.C., each test report shall include the activated carbon loading rate, the total amount of activated loaded and the line pressure for pneumatic loading. [Rules 62-4.070(3), 62-297.310(7) and 62-297.310(8), F.A.C.]
16. MSWC Units 1 and 2: The permittee shall conduct initial compliance test on MSWC units 1 and 2 using the test methods and procedures described in the current Title V air operation permit.
  - a. Within 60 days of completing construction of each new combustion control system, OFA system, ACI system and fabric filter system for a MSWC unit, the permittee shall conduct stack tests to determine compliance with the cadmium, dioxin/furan, hydrochloric acid, lead, mercury, PM and VOC emissions standards in the current Title V air operation permit. Subsequent compliance tests shall be conducted in accordance with the frequencies specified in the current Title V air operation permit.
  - b. Within 60 days of completing construction of each new SNCR system for a MSWC unit, the permittee shall conduct performance tests to determine the ammonia slip emissions in accordance with EPA method CTM-027 or EPA Method 320 or other Methods approved by the Department. Subsequent performance tests to determine the ammonia slip emissions shall be conducted during each federal fiscal year (October 1st to September 30th).
  - c. Compliance tests for beryllium and fluorides may be conducted at the next regularly scheduled test deadline as specified in the current Title V air operation permit.
  - d. Compliance with the emissions standards for CO, NO<sub>x</sub> and SO<sub>2</sub> shall be demonstrated by data collected from the required CEMS.

**SECTION 3. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)**

**A. MSWC Unit 1 (EU-001) and MSWC Unit 2 (EU-002)**

- e. Compliance with the opacity standards shall be demonstrated by data collected from the required COMS.

[Rule 62-4.070(3), F.A.C. and Permit No. 0990234-013-AV]

- 17. **Test Reports:** The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Rule 62-297.310(8), F.A.C. As part of the reports, the permittee shall also provide:

- a. For each required test run, the permittee shall record and report the actual steam production rate, heat input rate, CO emissions, NO<sub>x</sub> emissions, SO<sub>2</sub> emissions and opacity data.
- b. For each required cadmium, dioxin/furan, lead, mercury and PM test run, the permittee shall also record and report the actual ACI rate, lime injection rate and temperature data for the fabric filter system.
- c. For each required VOC and ammonia slip test run, the permittee shall also record and report the actual urea injection rate.
- d. For each required hydrochloric acid test run, the permittee shall also record and report the actual lime injection rate. [Rule 62-297.310(8), F.A.C.]

[Rule 62-4.070(3), F.A.C.]

**REVISED CONDITIONS TO PREVIOUS PERMITS**

- 18. **Revised Permit Conditions:** The following revise specific conditions in Permit No. PSD-FL-108 (as modified). All other permit conditions remain unchanged.

**Placard Page, 2<sup>nd</sup> Paragraph**

The North County Regional Resource Recovery Facility is authorized to operate the two (2) existing RDF boilers to their maximum design input rating of 412.5 MMBtu per hour with a maximum steam production rating of 324,000 lbs. per hour per unit based on a 4-hour block average, subject to the General and Specific Conditions stated herein. At the municipal waste combustor unit capacity of 900 tons per day and a reference heating value of 5,700 Btu/lb of RDF, the maximum heat input rate is 427.5 MMBtu/hour (24-hour average). [PSD-FL-108A; and Project No. 0990234-015-AC/PSD-FL-108H]

**Specific Condition 3.c.**

Carbon Monoxide: 400 ppmvd corrected to 7% O<sub>2</sub> (± 4-hour average); 200 ppmvd corrected to 7% O<sub>2</sub> (24-hour average). [PSD-FL-108A; and Project No. 0990234-015-AC/PSD-FL-108H]

**Specific Condition 6.**

~~The temperature at the exit of the dry scrubber shall not exceed 300 °F (4 hour block average). Appropriate instrumentation shall be installed, if not already installed, within 180 days of issuance of this permit, at a proper location to continuously monitor and record these operating temperatures~~ In accordance with the provisions of §60.53b(c), the owner or operator shall operate each unit in compliance with the specified particulate matter control device temperatures. In accordance with the provisions of §60.58b(i)(7), the owner or operator shall install, calibrate, maintain and operate equipment to continuously monitor and record the particulate matter control device temperature of each unit. The existing monitoring equipment shall comply with these requirements or the owner or operator shall install new monitoring equipment to comply with the federal regulations. [PSD-FL-108A; Project No. 0990234-015-AC/PSD-FL-108H; and 40 CFR 60.58b(i)(7)]

**SECTION 4. APPENDICES**  
**CONTENTS**

---

Appendix A. Citation Formats and Glossary of Common Terms

Appendix B. General Conditions

Appendix C. Common Conditions

**SECTION 4. APPENDIX A**  
**CITATION FORMATS AND GLOSSARY OF COMMON TERMS**

---

*The following examples illustrate the format used in the permit to identify applicable permitting actions and regulations.*

**REFERENCES TO PREVIOUS PERMITTING ACTIONS**

Old Permit Numbers

*Example:* Permit No. AC50-123456 or Air Permit No. AO50-123456

*Where:* “AC” identifies the permit as an Air Construction Permit  
“AO” identifies the permit as an Air Operation Permit  
“123456” identifies the specific permit project number

New Permit Numbers

*Example:* Permit Nos. 099-2222-001-AC, 099-2222-001-AF, 099-2222-001-AO, or 099-2222-001-AV

*Where:* “099” represents the specific county ID number in which the project is located  
“2222” represents the specific facility ID number  
“001” identifies the specific permit project  
“AC” identifies the permit as an air construction permit  
“AF” identifies the permit as a minor federally enforceable state operation permit  
“AO” identifies the permit as a minor source air operation permit  
“AV” identifies the permit as a Title V Major Source Air Operation Permit

PSD Permit Numbers

*Example:* Permit No. PSD-FL-317

*Where:* “PSD” means issued pursuant to the Prevention of Significant Deterioration of Air Quality  
“FL” means that the permit was issued by the State of Florida  
“317” identifies the specific permit project

**RULE CITATION FORMATS**

Florida Administrative Code (F.A.C.)

*Example:* [Rule 62-213.205, F.A.C.]

*Means:* Title 62, Chapter 213, Rule 205 of the Florida Administrative Code

Code of Federal Regulations (CFR)

*Example:* [40 CFR 60.7]

*Means:* Title 40, Part 60, Section 7

**GLOSSARY OF COMMON TERMS**

**° F:** degrees Fahrenheit

**acfm:** actual cubic feet per minute

**ARMS:** Air Resource Management System  
(Department’s database)

**BACT:** best available control technology

**Be:** Beryllium

**Btu:** British thermal units

**CAM:** compliance assurance monitoring

**Cd:** Cadmium

**CEMS:** continuous emissions monitoring system



## SECTION 4. APPENDIX A

### CITATION FORMATS AND GLOSSARY OF COMMON TERMS

<b>cfm:</b> cubic feet per minute	<b>NESHAP:</b> National Emissions Standards for Hazardous Air Pollutants
<b>CFR:</b> Code of Federal Regulations	<b>NO<sub>x</sub>:</b> nitrogen oxides
<b>CO:</b> carbon monoxide	<b>NSPS:</b> New Source Performance Standards
<b>COMS:</b> continuous opacity monitoring system	<b>O&amp;M:</b> operation and maintenance
<b>DEP:</b> Department of Environmental Protection	<b>O<sub>2</sub>:</b> oxygen
<b>Department:</b> Department of Environmental Protection	<b>Pb:</b> lead
<b>dscfm:</b> dry standard cubic feet per minute	<b>PM:</b> particulate matter
<b>EPA:</b> Environmental Protection Agency	<b>PM<sub>10</sub>:</b> particulate matter with a mean aerodynamic diameter of 10 microns or less
<b>ESP:</b> electrostatic precipitator (control system for reducing particulate matter)	<b>ppmvd:</b> parts per million by volume dry
<b>EU:</b> emissions unit	<b>PSD:</b> prevention of significant deterioration
<b>F.A.C.:</b> Florida Administrative Code	<b>psi:</b> pounds per square inch
<b>F.D.:</b> forced draft	<b>PTE:</b> potential to emit
<b>F.S.:</b> Florida Statutes	<b>RACT:</b> reasonably available control technology
<b>FGR:</b> flue gas recirculation	<b>RATA:</b> relative accuracy test audit
<b>F:</b> fluoride	<b>SAM:</b> sulfuric acid mist
<b>ft<sup>2</sup>:</b> square feet	<b>scf:</b> standard cubic feet
<b>ft<sup>3</sup>:</b> cubic feet	<b>scfm:</b> standard cubic feet per minute
<b>gpm:</b> gallons per minute	<b>SIC:</b> standard industrial classification code
<b>gr:</b> grains	<b>SNCR:</b> selective non-catalytic reduction (control system used for reducing emissions of nitrogen oxides)
<b>HAP:</b> hazardous air pollutant	<b>SO<sub>2</sub>:</b> sulfur dioxide
<b>Hg:</b> mercury	<b>TPH:</b> tons per hour
<b>I.D.:</b> induced draft	<b>TPY:</b> tons per year
<b>ID:</b> identification	<b>UTM:</b> Universal Transverse Mercator coordinate system
<b>kPa:</b> kilopascals	<b>VE:</b> visible emissions
<b>lb:</b> pound	<b>VOC:</b> volatile organic compounds
<b>MACT:</b> maximum achievable technology	
<b>MMBtu:</b> million British thermal units	
<b>MSDS:</b> material safety data sheets	
<b>MW:</b> megawatt	

**SECTION 4. APPENDIX B**  
**GENERAL CONDITIONS**

---

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

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

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the F.S. or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, F.S.. Such evidence

**SECTION 4. APPENDIX B**  
**GENERAL CONDITIONS**

---

shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

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

**SECTION 4. APPENDIX C**  
**COMMON CONDITIONS**

---

Unless otherwise specified in the permit, the following conditions apply to all emissions units and activities at the facility.

**EMISSIONS AND CONTROLS**

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

*{Permitting Note: The Excess Emissions Rule at Rule 62-210.700, F.A.C., cannot vary any requirement of a NSPS or NESHAP provision.}*

**RECORDS AND REPORTS**

10. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least 5 years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rule 62-213.440(1)(b)2, F.A.C.]
11. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(3), F.A.C.]

## Livingston, Sylvia

---

**From:** Livingston, Sylvia  
**Sent:** Friday, July 31, 2009 1:18 PM  
**To:** mhammond@swa.org  
**Cc:** ctilman@pirnie.com; elias@rtpenv.com; Halpin, Mike; james\_stormer@doh.state.fl.us; Anderson, Lennon; abrams.heather@epamail.epa.gov; forney.kathleen@epamail.epa.gov; catherine\_collins@fws.gov; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR); Mitchell, Bruce  
**Subject:** Solid Waste Authority of Palm Beach County - North County Resource Recovery Facility; 0990234-015-AC/ PSD-FL-108H

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** 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).*

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

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0990234.015.AC.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990234.015.AC.D_pdf.zip)

**Owner/Company Name:** SOLID WASTE AUTHORITY OF PBC

**Facility Name:** SOLID WASTE AUTHORITY OF PBC/NCRRF

**Project Number:** 0990234-015-AC/ PSD-FL-108H

**Permit Status:** DRAFT

**Permit Activity:** CONSTRUCTION

**Facility County:** PALM BEACH

**Processor:** Bruce Mitchell

The Bureau of Air Regulation is issuing electronic documents for permits, notices and other correspondence in lieu of hard copies through the United States Postal System, to provide greater service to the applicant and the engineering community. 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/eproducts/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, Bureau of Air Regulation

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

## Livingston, Sylvia

---

**From:** Mark Hammond [mhammond@swa.org]  
**Sent:** Monday, August 03, 2009 2:31 PM  
**To:** Livingston, Sylvia  
**Subject:** RE: Solid Waste Authority of Palm Beach County - North County Resource Recovery Facility; 0990234-015-AC/ PSD-FL-108H

I received the documents.

Mark Hammond

---

**From:** Livingston, Sylvia [mailto:Sylvia.Livingston@dep.state.fl.us]  
**Sent:** Friday, July 31, 2009 1:18 PM  
**To:** Mark Hammond  
**Cc:** ctilman@pirnie.com; elias@rtpenv.com; Halpin, Mike; james\_stormer@doh.state.fl.us; Anderson, Lennon; abrams.heather@epamail.epa.gov; forney.kathleen@epamail.epa.gov; catherine\_collins@fws.gov; Gibson, Victoria; Koerner, Jeff; Walker, Elizabeth (AIR); Mitchell, Bruce  
**Subject:** Solid Waste Authority of Palm Beach County - North County Resource Recovery Facility; 0990234-015-AC/ PSD-FL-108H

Dear Sir/ Madam:

Attached is the official **Notice of Intent to Issue** 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).*

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

[http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf\\_permit\\_zip\\_files/0990234.015.AC.D\\_pdf.zip](http://ARM-PERMIT2K.dep.state.fl.us/adh/prod/pdf_permit_zip_files/0990234.015.AC.D_pdf.zip)

**Owner/Company Name:** SOLID WASTE AUTHORITY OF PBC

**Facility Name:** SOLID WASTE AUTHORITY OF PBC/NCRRF

**Project Number:** 0990234-015-AC/ PSD-FL-108H

**Permit Status:** DRAFT

**Permit Activity:** CONSTRUCTION

**Facility County:** PALM BEACH

**Processor:** Bruce Mitchell