

# Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

RECEIVED

AUG 20 2003

BUREAU OF AIR REGULATION

## I. APPLICATION INFORMATION

**Air Construction Permit** – Use this form to apply for an air construction permit for a proposed project:

- subject to prevention of significant deterioration (PSD) review, nonattainment area (NAA) new source review, or maximum achievable control technology (MACT) review; or
- where the applicant proposes to assume a restriction on the potential emissions of one or more pollutants to escape a federal program requirement such as PSD review, NAA new source review, Title V, or MACT; or
- at an existing federally enforceable state air operation permit (FESOP) or Title V permitted facility.

**Air Operation Permit** – Use this form to apply for:

- an initial federally enforceable state air operation permit (FESOP); or
- an initial/revised/renewal Title V air operation permit.

**Air Construction Permit & Revised/Renewal Title V Air Operation Permit (Concurrent Processing Option)** – Use this form to apply for both an air construction permit and a revised or renewal Title V air operation permit incorporating the proposed project.

To ensure accuracy, please see form instructions.

### Identification of Facility

|   |  |
|---|--|
| 1. Facility Owner/Company Name: Pinellas County Board of County Commissioners   |  |
| 2. Site Name: Pinellas County Resource Recovery Facility  |  |
| 3. Facility Identification Number: 1030117  |  |
| 4. Facility Location...:<br>Street Address or Other Locator: 3095 114 <sup>th</sup> Avenue North<br>City: St. Petersburg                      County: Pinellas                      Zip Code: 33716 |  |
| 5. Relocatable Facility?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | 6. Existing Title V Permitted Facility?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

### Application Contact

|   |  |
|---|--|
| 1. Application Contact Name: Donald F. Elias  |  |
| 2. Application Contact Mailing Address...<br>Organization/Firm: RTP Environmental Associates, Inc.<br>Street Address: 239 US Highway 22 East<br>City: Green Brook                      State: NJ                      Zip Code: 08812 |  |
| 3. Application Contact Telephone Numbers...<br>Telephone: (732) 968-9600                      ext.                      Fax: (732) 968-9603   |  |
| 4. Application Contact Email Address: elias@rtpeva.com  |  |

### Application Processing Information (DEP Use)

|                                    |                |
|------------------------------------|----------------|
| 1. Date of Receipt of Application: |                |
| 2. Project Number(s):              | 1030117-005-AV |
| 3. PSD Number (if applicable):     |                |

1  
002-AV I 11/16/00  
003-AC 12/21/00-12/21/05  
004-AV APC 9/11/11 10/22/15  
001 002-203

**APPLICATION INFORMATION**

|                                   |  |
|-----------------------------------|--|
| 4. Siting Number (if applicable): |  |
|-----------------------------------|--|

## APPLICATION INFORMATION

### Purpose of Application

**This application for air permit is submitted to obtain: (Check one)**

#### **Air Construction Permit**

- Air construction permit.

#### **Air Operation Permit**

- Initial Title V air operation permit.  
 Title V air operation permit revision.  
 Title V air operation permit renewal.  
 Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.  
 Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.

#### **Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)**

- Air construction permit and Title V permit revision, incorporating the proposed project.  
 Air construction permit and Title V permit renewal, incorporating the proposed project.

**Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:**

- I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

### Application Comment

The initial Title V permit for the Pinellas County Resource Recovery Facility was issued on November 16, 2000. Based on experience gained during the first two years of operation under the Title V permit, Pinellas County would like to request revisions to the Title V permit. These revisions will remove obsolete language, add clarifying language where appropriate, correct typographical errors, simplify recordkeeping and reporting requirements as allowed by the regulations, include recent regulatory changes, incorporate subsequent permit revisions, and make other changes consistent with Title V permits for other large Municipal Waste Combustors (MWCs) in Florida.

These permit application forms (Sections I and II) are submitted in quadruplicate at the request of the Department. In addition, the cover letter, report and corrected Title V permit pages submitted previously on April 15, 2003 are included, also in quadruplicate.

**APPLICATION INFORMATION**

**Scope of Application**

| <b>Emissions Unit ID Number</b> | <b>Description of Emissions Unit</b>                          | <b>Air Permit Type</b> | <b>Air Permit Proc. Fee</b> |
|---------------------------------|---|------------------------|-----------------------------|
| -001                            | Municipal Waste Combuster & Auxiliary Burners - Unit 1        | N/A                    | N/A                         |
| -002                            | Municipal Waste Combuster & Auxiliary Burners - Unit 2        | N/A                    | N/A                         |
| -003                            | Municipal Waste Combuster & Auxiliary Burners - Unit 3        | N/A                    | N/A                         |
| -004                            | Hydrated Lime Storage Silo (dust collector, to be deleted)    | N/A                    | N/A                         |
| -005                            | Metal Recovery System (wet scrubber)                          | N/A                    | N/A                         |
| -006                            | Activated Carbon Storage Silo (dust collector, to be deleted) | N/A                    | N/A                         |
| -007                            | Lime Storage Silo (dust collector, to be deleted)             | N/A                    | N/A                         |
| -008                            | Ash Conditioning Building (wet scrubber)                      | N/A                    | N/A                         |
| -009                            | Municipal Solid Waste Landfill                                | N/A                    | N/A                         |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |
|                                 |   |                        |                             |

**Application Processing Fee**

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

# APPLICATION INFORMATION

## Owner/Authorized Representative Statement

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

|  |
|--|
| 1. Owner/Authorized Representative Name :  |
| 2. Owner/Authorized Representative Mailing Address...<br>Organization/Firm:<br>Street Address:<br>City: State: Zip Code:   |
| 3. Owner/Authorized Representative Telephone Numbers...<br>Telephone: ( ) - ext. Fax: ( ) -  |
| 4. Owner/Authorized Representative Email Address:  |
| 5. Owner/Authorized Representative Statement:<br><br><i>I, the undersigned, am the owner or authorized representative of the facility addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other requirements identified in this application to which the facility is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit.</i><br><br>_____<br>Signature<br><br>_____<br>Date |



**APPLICATION INFORMATION**

**Professional Engineer Certification**

|   |
|---|
| 1. Professional Engineer Name: Ronald D. Larson, P.E.<br>Registration Number: PE27310   |
| 2. Professional Engineer Mailing Address...<br>Organization/Firm: HDR Engineering, Inc.<br>Street Address: 2202 N. Westshore Blvd., Suite 250<br>City: Tampa State: FL Zip Code: 33607  |
| 3. Professional Engineer Telephone Numbers...<br>Telephone: (813) 282-2398 ext. Fax: (813) 282-2440   |
| 4. Professional Engineer Email Address: Ron.Larson@hdrinc.com   |
| 5. Professional Engineer Statement:<br><i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i><br><i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i><br><i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i><br><i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i><br><i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i><br><i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i><br><br>Signature: <u>Ronald D. Larson</u> Date: <u>8/15/03</u><br>PE 27310<br>No. 27310<br>STATE OF FLORIDA<br>Professional Engineer |

## **APPLICATION INFORMATION**

\* Attach any exception to certification statement.





## FACILITY INFORMATION

### Facility Regulatory Classifications

Check all that would apply *following* completion of all projects and implementation of all other changes proposed in this application for air permit. Refer to instructions to distinguish between a “major source” and a “synthetic minor source.”

|     |   |                                  |
|-----|---|----------------------------------|
| 1.  | <input type="checkbox"/> Small Business Stationary Source   | <input type="checkbox"/> Unknown |
| 2.  | <input type="checkbox"/> Synthetic Non-Title V Source   |                                  |
| 3.  | <input checked="" type="checkbox"/> Title V Source  |                                  |
| 4.  | <input checked="" type="checkbox"/> Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)  |                                  |
| 5.  | <input type="checkbox"/> Synthetic Minor Source of Air Pollutants, Other than HAPs  |                                  |
| 6.  | <input checked="" type="checkbox"/> Major Source of Hazardous Air Pollutants (HAPs)   |                                  |
| 7.  | <input type="checkbox"/> Synthetic Minor Source of HAPs   |                                  |
| 8.  | <input checked="" type="checkbox"/> One or More Emissions Units Subject to NSPS (40 CFR Part 60)  |                                  |
| 9.  | <input checked="" type="checkbox"/> One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)   |                                  |
| 10. | <input checked="" type="checkbox"/> One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)   |                                  |
| 11. | <input type="checkbox"/> Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))   |                                  |
| 12. | <p><b>Facility Regulatory Classifications Comment:</b></p> <p>The municipal waste combustors (MWCs, Emissions Unit ID Nos. 001-003) are subject to NSPS Subpart E and Emission Guidelines (EG) Subpart Cb. The Subpart Db, Ea, and Eb NSPS standards do NOT apply to the MWCs since they were all constructed prior to June 19, 1984. The landfill (Emissions Unit ID No. 009) is subject to EG Subpart Cc and MACT (NESHAP 40 CFR 63) Subpart AAAA (promulgated in the January 16, 2003 Federal Register at 68 FR 2227). The landfill is the first MACT source at the Pinellas County complex, hence item 10 above is being checked for the first time.</p> <p>PSD and PPSA Permits for the Facility are described in Section II.A.7 above. The landfill adjacent to the PCRRF is considered the same facility for PSD and Title V purposes since it has the same SIC code (4953), same owner (Pinellas County), and is contiguous. A small water treatment plant was permitted under AC52-259351/AO52-268853. Except for the CRP project permitted in 12/21/00 (PSD Modification PSD-FL-011B and -098B and 1030117-003-AC), all the above permit conditions and other minor sources at the Pinellas County complex were incorporated into the initial Title V Permit effective 10/23/00 (1030117-002-AV). Finally, an Administrative Correction to the Title V Permit was issued by the Department 9/17/01.</p> |                                  |

**FACILITY INFORMATION**

**List of Pollutants Emitted by Facility**

| 1. Pollutant Emitted       | 2. Pollutant Classification | 3. Emissions Cap<br>[Y or N]? |
|----------------------------|-----------------------------|-------------------------------|
| CO                         | A                           |                               |
| PB                         | B                           |                               |
| NOX                        | A                           |                               |
| PM (& MWC Metals)          | A                           |                               |
| PM10                       | A                           |                               |
| SO2 (& MWC Acid Gases)     | A                           |                               |
| H106 (HCl&MWC Acid Gases)  | A                           |                               |
| DIOX (MWC Organics)        | B                           |                               |
| H027 (Cd)                  | B                           |                               |
| H114 (Hg)                  | B                           |                               |
| H021 (Be-request deletion) | B                           |                               |
| FL (HF-request deletion)   | B                           |                               |
| NMOC (Landfill Emissions)  | B                           |                               |
| HAPS (Total HAPs)          | A                           |                               |
|                            |                             |                               |



**FACILITY INFORMATION**

**C. FACILITY ADDITIONAL INFORMATION**

**Additional Requirements for All Applications, Except as Otherwise Stated**

|  |
|--|
| 1. Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>3/99 and 6/96</u>  |
| 2. Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>3/99 and 6/96</u>   |
| 3. Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Previously Submitted, Date: <u>3/99 and 6/96</u> |

**Additional Requirements for Air Construction Permit Applications**

|   |
|---|
| 1. Area Map Showing Facility Location:<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (existing permitted facility)                                      |
| 2. Description of Proposed Construction or Modification:<br><input type="checkbox"/> Attached, Document ID: _____   |
| 3. Rule Applicability Analysis:<br><input type="checkbox"/> Attached, Document ID: _____  |
| 4. List of Exempt Emissions Units (Rule 62-210.300(3)(a) or (b)1., F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable (no exempt units at facility) |
| 5. Fugitive Emissions Identification (Rule 62-212.400(2), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable  |
| 6. Preconstruction Air Quality Monitoring and Analysis (Rule 62-212.400(5)(f), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                   |
| 7. Ambient Impact Analysis (Rule 62-212.400(5)(d), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable   |
| 8. Air Quality Impact since 1977 (Rule 62-212.400(5)(h)5., F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                                       |
| 9. Additional Impact Analyses (Rules 62-212.400(5)(e)1. and 62-212.500(4)(e), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                    |
| 10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):<br><input type="checkbox"/> Attached, Document ID: _____ <input checked="" type="checkbox"/> Not Applicable                                     |



**FACILITY INFORMATION**

**TITLE V COMPLIANCE REPORT  
PINELLAS COUNTY RESOURCE RECOVERY FACILITY  
PERMIT APPLICATION FOR TITLE V REVISIONS**

**Emission Limits**

The Pinellas County Resource Recovery Facility (PCRRF) performs annual testing and continuous monitoring for the three Municipal Waste Combustors (MWCs) as required by the PPSA Conditions of Certification, PSD and Title V Permits, and Emission Guidelines (EG) Requirements (40 CFR 60 Subpart Cb). Annual compliance testing of the MWC units has been performed since at least 1988, reports of which are submitted to the Southwest District Office in accordance with the Department's rules and permit requirements. Annual or periodic stack testing of other minor sources at the PCRRF not covered by the EG (i.e., wet scrubbers and storage silo dust collectors) have also been performed in accordance with the Title V permit requirements. Quarterly Excess Emission and Monitoring System Performance reports for the PCRRF are submitted by the facility operator (Wheelabrator Pinellas, Inc.) to the Southwest District Office based on continuous monitoring data. Exceedances of opacity, CO, SO<sub>2</sub>, and NO<sub>x</sub> emission limits as measured by the continuous emission monitor systems (CEMS) are rare and occur during startup/shutdown/malfunction (S/S/M) events, which are allowed for by the EG requirements and the Title V permit. Therefore, the PCRRF has been in compliance with all permit emission limits and is expected to comply in the future with all current permit limits.

**Monitoring, Recordkeeping, Reporting and Other Requirements**

The Title V permit includes monitoring, recordkeeping, and reporting permit conditions as required by the EG (Subpart Cb). EG monitoring requirements include initial compliance tests (upon completion of the EG improvements) and annual compliance tests thereafter for dioxins, metals, PM, opacity, and HCl; CEMS for opacity, CO, SO<sub>2</sub>, and NO<sub>x</sub> emissions; and continuous monitoring of baghouse inlet temperature, steam load, and carbon injection rate. Records of these data are required to be maintained for a period of at least five years, as well as other information such as operator training and certification; raw and processed CEM data, calibrations, and performance tests; and copies of all reports and other information required to be submitted to the appropriate agencies. MWC reporting requirements in the EG (Subpart Cb) include the quarterly reports mentioned above and Semi-annual and Annual MWC Operating Reports.

The Title V permit also requires other non-EG requirements such as minor source stack testing requirements, monthly monitoring and recording of solid waste charging rates, Annual Operating Reports as required by State rules and Annual Compliance Statements as required by Title V. Non-EG operational requirements in the Title V permit include restrictions on the types and amounts of solid wastes that can be processed, lists of insignificant and unregulated sources, general standards such as reasonable precautions to prevent unconfined particulate emissions, and maintaining O&M plans, maintenance records, and documentation logs. The PCRRF has complied with all operating, monitoring, recordkeeping, and reporting conditions in the Title V permit.

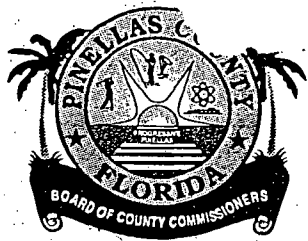


**TITLE V COMPLIANCE REPORT  
PINELLAS COUNTY RESOURCE RECOVERY FACILITY  
PERMIT APPLICATION FOR TITLE V REVISIONS**

**Compliance Plan Requirements**

As noted above, the PCRRF is in compliance with all permit limits and requirements. Therefore, no corrective actions necessitating the preparation of a Compliance Plan are required. The state regulations at FAC 62-204.800(8) include the MWC EG from 40 CFR 60 Subpart Cb and the Municipal Waste Landfill (MWL) EG from 40 CFR 60 Subpart Cc. Pinellas County submitted a formal Compliance Schedule/Plan for the MWC EG requirements in 1996, a copy of which were provided in the March 1999 Title V permit application. In accordance with the Compliance Schedule/Plan, the ESPs at the facility were replaced with spray dry scrubbers, baghouses, activated carbon injection systems, and selective non-catalytic reduction systems. The improvements and initial compliance tests were completed prior to the required dates, thus fulfilling the MWC Compliance Schedule/Plan.

Pinellas County landfills MWC ash and some municipal solid waste at the Bridgeway Acres landfill. Since the landfill is contiguous to the MWC facility, has the same owner (Pinellas County), and same 2-digit SIC code (49) as the PCRRF, the resource recovery facility and landfill are considered to be the same facility for PSD purposes and are included in the same Title V permit. As required by the MWL EG (Subpart Cc) and State Plan, Pinellas County submitted an initial design capacity report and NMOC emissions estimate in 1996 and provided annual updates thereafter (including an initial Tier II analysis in 1998 and a revised Tier II analysis in 2003). These submittals have demonstrated that landfill NMOC emissions have not yet exceeded 50 Mg/yr. Therefore, a Compliance Plan documenting design information for the collection and control of landfill gas has not been required. Thus, the facility has no current obligations under the MWC and MWL EGs for preparing any Compliance Plans.



*"Serving You Every Day"*

**BOARD OF COUNTY COMMISSIONERS  
PINELLAS COUNTY, FLORIDA**

**PINELLAS COUNTY UTILITIES  
SOLID WASTE OPERATIONS**

3095 - 114<sup>TH</sup> AVENUE NORTH

ST. PETERSBURG, FLORIDA 33716

PHONE: (727) 464-7500

FAX: (727) 464-7713

COMMISSIONERS:

KAREN WILLIAMS SEEL - CHAIRMAN

SUSAN LATVALA - VICE CHAIRMAN

CALVIN D. HARRIS

JOHN MORRONI

ROBERT B. STEWART

BARBARA SHEEN TODD

KENNETH T. WELCH

April 15, 2003

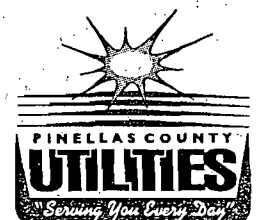
Mr. Scott M. Sheplak, P.E.  
Florida Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

**Re: Pinellas County Resource Recovery Facility  
Revisions to Initial Title V Permit No. 1030117-002-AV**

Dear Mr. Sheplak:

The initial Title V permit for the Pinellas County Resource Recovery Facility was issued on November 16, 2000. Based on experience gained during the first two years of operation under the Title V permit, Pinellas County would like to request revisions to the Title V permit. These revisions will remove obsolete language, add clarifying language where appropriate, correct typographical errors, simplify record keeping and reporting requirements as allowed by the regulations, include recent regulatory changes, incorporate subsequent permit revisions, and make other changes consistent with Title V permits for other large Municipal Waste Combustors (MWCs) in Florida.

The proposed revisions are discussed in detail in the enclosed report, which includes a markup copy of the current Title V permit as Appendix A. Signed certifications are also attached in Appendix C for the Professional Engineer (Ron Larson) and Responsible Official (Pick Talley), as required by Florida rules.

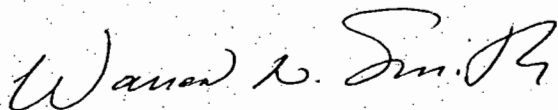


Mr. Sheplak, FDEP  
April 15, 2003  
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If you have any questions, please contact me at (727) 464-7500. Questions of a technical nature may be referred directly to Mr. Donald F. Elias of RTP Environmental Associates, Inc. at (732) 968-9600.

Sincerely,

PINELLAS COUNTY UTILITIES



Warren N. Smith  
Director, Solid Waste Operations

Enclosures

cc: P. Talley - Utilities  
R. Hauser - DSWO  
K. Oswald - DSWO  
P. Hessling - DEM  
~~R. Pearson~~ - HDR  
M. Santella - WPI  
D. Dee - Landers and Parsons  
D. Elias - RTP  
File

*Mailed 4/15/03 - J*

**AIR PERMIT APPLICATION FOR  
PINELLAS COUNTY  
RESOURCE RECOVERY FACILITY**

**REVISIONS TO INITIAL TITLE V  
PERMIT NO. 1030117-002-AV**

Prepared for:

**Pinellas County Board of County Commissioners  
Pinellas County Utilities  
14 South Fort Harrison Avenue  
Clearwater, Florida 33756**

Prepared by:

**HDR Engineering, Inc.  
2202 N. Westshore Boulevard, Suite 250  
Tampa, Florida 33607**

and

**RTP Environmental Associates, Inc.  
239 US Highway 22 East  
Green Brook, NJ 08812**

March 2003

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## 1.0 INTRODUCTION

The Florida Department of Environmental Protection (FDEP) issued the initial Title V permit for the Pinellas County Resource Recovery Facility (PCRRF) on November 16, 2000. Based on experience gained during the first two years of operation under the Title V permit, Pinellas County would like to request revisions to the Title V permit. These revisions will correct typographical errors, add clarifying language where appropriate, remove obsolete language, simplify recordkeeping and reporting requirements as allowed by the regulations, incorporate recent rule changes and permit amendments, and make other changes consistent with Title V permits for other large Municipal Waste Combustors (MWCs) in Florida. The proposed revisions are discussed in detail below. A markup copy of the current Title V permit with the proposed revisions is included as Appendix A.

None of the proposed revisions require any construction or modification to any of the actual physical equipment of the PCRRF. The changes are meant to correct or clarify language in the Title V permit, sometimes in order to be consistent with Title V permits for other large MWCs in Florida. These include changes for malfunctions described in Sections 6.1 and 8.2, changes to insignificant/unregulated source lists described in Sections 5.1, 8.1, and 9.1, and deleting insignificant PSD pollutant emission limits as described in Section 9.2. The County requests that the enclosed be treated concurrently as both a construction and operating permit application if deemed necessary by the Department.

## 2.0 CORRECT TYPOGRAPHICAL ERRORS

Changes between the draft Title V permit issued May 26, 2000 and the final Title V permit issued on November 16, 2000 resulted in some typographical errors (e.g., dangling phrases) in the current Title V permit. Some errors were also noted during the initial and recent reviews of the Title V permit. The proposed revisions to correct the typographical errors are as follows:

- 1) Permit Condition B.75: Either (1)-(3) should be noted as reserved (consistent with the Code of Federal Regulations [CFR]) or (4) should be changed to (1).
- 2) Following Permit Condition B.9: Between the draft and final Title V permits, Conditions B.11 and B.12 were moved to B.12 and B.13. Therefore, the parenthetical permitting note after Condition B.9 should be change from "*Nothing in the following three conditions...*" to "*Nothing in conditions B.10, B.12, or B.13...*"
- 3) Permit Conditions B.17: This Condition gives the Emissions Guidelines (EG) operating requirements, which are listed in Subpart Eb of the New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60) at 40 CFR 60.58b(i). The operating requirements include 4-hour carbon monoxide (CO) emission limits for continuously-fed mass-burn waterwall MWC units. Much of the inappropriate language for other types of MWC units was removed in the final Title V permit (for example, 40 CFR 60.58b(i)(2) was deleted and the remaining paragraphs were renumbered). However, the beginning of Permit Condition B.17(3) should be changed from "*The 4-hour block and 24-hour daily arithmetic averages specified in paragraphs (1) and (2) shall be calculated...*" to "*The 4-hour block arithmetic averages specified in paragraph (1) shall be calculated...*" This is shown on Page 31 in Appendix A. The

phrase "or 24-hour daily" should also be deleted from Permit Condition B.82(2)(ii)(c) as shown on page 55 in Appendix A.

- 4) Permit Conditions B.62 and C.19: Either the listed items under section (a) (i.e., 3, 4, 5, and 9) should be renumbered or items 1, 2, 6-8, and 10 should be inserted as "[reserved]" consistent with Rule 62-297.310(7), F.A.C.
- 5) Permit Condition B.93: Either section (c) should be re-lettered or (b) should be inserted as "[reserved]" consistent with Rule 62-297.310(8), F.A.C.
- 6) Permit Condition D.1: Either section (d) should be re-lettered or (c) should be inserted as "[reserved]" consistent with 40 CFR 60.32c.
- 7) Section II, Permit Condition 8: The "Permitting Note" on page 5 refers to Condition No. 58 of Appendix TV-3. In the 4/30/99 version of TV-3, Title V Conditions, attached to the original Title V permit, there is no Condition No. 58. We believe that the condition should refer to Condition No. 57 of Appendix TV-3 as shown in Appendix A.
- 8) Section II, Permit Condition 10: Please correct the Southwest District Office address from "8497 Laurel Fair Circle, Tampa, Florida 33619" to "8407 Laurel Fair Circle, Tampa, Florida 33610" as shown in Appendix A.
- 9) Please revise the number of roof ventilation fans on the Ash Storage and Processing Building from four to two in the facility description given on page 64 of the Title V Permit as part of Emissions unit -005 as shown in Appendix A.

### 3.0 ADD CLARIFYING LANGUAGE

Pinellas County proposes to add clarifying language to the permit as follows:

- 1) Permit Condition B.29: All of the emission limitations expressed in the Title V permit, other than this one, specify an appropriate averaging time. The following should be added after the first sentence to express the appropriate averaging time for the EG nitrogen oxides (NO<sub>x</sub>) emission limit: "*Compliance with this emission limit is based on a 24-hour daily arithmetic mean.*" This is shown in Appendix A at page 34.
- 2) Permit Condition B.16: The EG requirement for particulate matter (PM) control device inlet temperature is listed at Condition B.16. However, as currently written the permit condition could imply that the EG requirement on inlet temperature is applicable to all PM control devices at the PCRRF, which might include the silo vent dust collectors and wet scrubbers controlling fugitive ash emissions. To avoid any confusion, the end of the first paragraph in this condition should be revised from "*These requirements apply to each particulate matter control device at the affected facility.*" to "*These requirements apply to each particulate matter control device utilized for MWC flue gas treatment at the affected facility.*" This is shown in Appendix A at page 30.
- 3) Permit Condition B.11: We believe that the conjunction "or" should be inserted between B.11(2)(b)(i) and (ii). Consistent with the language in B.11(2)(b), the County also requests that the phrase "shall not be" be changed to "shall not knowingly be" in Permit Conditions B.11(6)(g) and B.11(8) as shown on page 29 in Appendix A.

## 4.0 REMOVE OBSOLETE LANGUAGE

Several changes are proposed to the Title V permit to remove obsolete language. For example, all three units have been retrofit as required by the EG at 40 CFR 60, Subpart Cb, which affects one subsection and numerous conditions in the Title V permit. The proposed changes to remove the obsolete language are given in the following sections.

### 4.1 Emissions Guidelines Improvements

Subsection A of Section III in the initial Title V permit contains conditions for Unit 1 prior to EG improvements. Since all of the EG improvements at the PCRRF have been completed, Pinellas County proposes that all of the text in Subpart A be deleted and the Subpart be reserved for future use, perhaps for the Prevention of Significant Deterioration (PSD) Permit Modification issued for the Capital Replacement Project (CRP) as described later in Section 7.2.

When the facility was first constructed without acid gas controls, there was some concern over ambient sulfur dioxide (SO<sub>2</sub>) concentrations. Hence, the original PSD permit contained a post-construction monitoring requirement carried over as Title V Permit Condition A.21. The Pinellas County Department of Solid Waste Operations is requesting that the FDEP, in consultation with the Pinellas County Department of Environmental Management (PCDEM), determine whether any SO<sub>2</sub> monitoring currently being conducted under this condition can or should be discontinued.

If the text in Subpart A is not deleted as requested, there are several typographical errors that should be corrected. The County's consultant, RTP Environmental Associates, Inc. (RTP), will provide these corrections if necessary at a later date. In addition to Subsection A, some language in the introduction to Subsection B reflects the pre-EG requirements and needs to be corrected. Proposed revisions are included in Appendix A at pages 25 and 26.

Finally, Permit Condition B.91 in Section III on page 59 is a permit condition from the original PSD permit for MWC Unit 3 that requires: *"For Unit 3, CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for carbon monoxide and opacity."* This condition is essentially the same as what is presently required for all three units under the EG/NSPS regulations, not only for CO and opacity but also for SO<sub>2</sub> and NO<sub>x</sub>. CEM data under the EG/NSPS requirements during start-up/shutdown/malfunction (S/S/M) periods are measured and recorded and, if greater than the permit limits, reported as exceedances according to state and federal requirements. However, they are excluded from the applicable averaging periods for the purposes of determining violations in accordance with the EG/NSPS regulations and applicable permit conditions provided certain conditions are met. Therefore, the County proposes that the text in this permit condition be deleted and replaced with *"(reserved)"* as shown in Appendix A.

### 4.2 Florida Mercury Emissions Inventory Requirements

Acid gas control equipment has been installed and mercury stack tests are now performed annually in accordance with EG requirements. Therefore, the County is requesting that Permit



Conditions B.22, B.23, B.24, and B.48 in Section III be deleted (i.e., reserved for later use). These conditions from Rule 62-296.416, Florida Administrative Code (F.A.C.) are only applicable to MWCs without EG retrofits or acid gas controls and/or annual EG mercury stack test requirements, which are now required under Rule 62-204.800(8), F.A.C. for all large MWCs.

#### 4.3 MWC Design Capacity and EG Applicability

The definition of the PCRRF boilers as large MWC units subject to the requirements of 40 CFR 60 Subpart Cb is based on their individual design capacities exceeding 250 tons of municipal solid waste (MSW) per day per unit according to 40 CFR 60.32b(a). This capacity calculation is described in 40 CFR 60.58b(j), which is part of Permit Condition B.9. The PCRRF units are mass-burn waterwall combustors that combust MSW on a continuous basis and are designed based on maximum heat capacity rather than MSW throughput. However, much of the language in Permit Condition B.9 is applicable to other types of MWCs. Therefore, revisions are proposed to remove the inappropriate language as shown in Appendix A on page 27 (as was done for Title V Permit Condition C.2 for the Hillsborough County Resource Recovery Facility [RRF]).

#### 4.4 Operator Training and Certification

Since more than 6 months has passed since facility EG retrofits were completed and more than 12 months has passed since the United States Environmental Protection Agency (USEPA) approved the FDEP State Plan for large MWCs, the operator training and certification language can be simplified at Permit Conditions B.97 through B.100. Proposed improvements to these conditions are shown in Appendix A at pages 60-62.

### 5.0 SIMPLIFY RECORDKEEPING/REPORTING REQUIREMENTS

#### 5.1 Unregulated Sources

The initial Title V permit lists several internal combustion (IC) engines as unregulated sources in Appendix U-1 (Emission Units 10, 11, and 12). The IC engines consist of:

- one (1) 115-horsepower (hp) diesel-fired portable yard waste trommel<sup>a</sup>;
- two (2) diesel-fired emergency fire pumps (235 and 115 hp);
- three (3) diesel-fired emergency generators (totaling about 335 hp); and
- one (1) very small gasoline-fired generator (about 4 hp).

Each year, emissions estimates for these sources must be included in the Annual Operating Report (AOR) despite the fact that emissions from each of the three emission units are always less than the reporting thresholds. Total combined annual emissions for all these sources were less than 2.4, 0.6, 0.2, 0.2, and 0.2 tons per year (tpy) for NO<sub>x</sub>, CO, SO<sub>2</sub>, particulate matter (PM), and volatile organic compounds (VOC), respectively, for both the 2000 and 2001 AORs.

In the Title V permit application submitted under the provisions of Rule 62-213.420(3)(n), F.A.C., the County requested that all of the IC engines (other than the yard waste trommel) be regulated as insignificant sources since they met the requirements of Rule 62-210.300(3)(a)20

<sup>a</sup> In 2002, the existing trommel with a 115-hp John Deere engine was replaced with a Fecon unit with a functionally equivalent 125-hp John Deere engine.

and 21, F.A.C. for full exemption from permitting and AOR reporting requirements (i.e., total fuel consumption less than a prorated amount of 32,000 gallons per year of diesel fuel or 4000 gallons per year of gasoline). A calculation of the annual fuel consumption rates based on the 2000 and 2001 AORs is included in Table 1. As can be seen, annual fuel consumption is less than the prorated threshold amounts. The emergency fire pumps and generators are tested at most about one hour per week. The trommel is run about 1000 hours per year and, at most, can only be operated during weekday daylight hours (about 3000 hours per year).

However, FDEP listed these sources as unregulated sources rather than insignificant sources in the Title V permit. The County now respectfully requests that all of the unregulated sources currently listed in Appendix U-1 be changed to insignificant sources and moved to Appendix I-1 as shown later in Section 8.1. As required in Rule 62-213.430(6)(b), F.A.C.:

- 1) The proposed insignificant emission units are not subject to unit-specific requirements (eventual MACT standards are unlikely to apply to units less than 500 hp).
- 2) All insignificant emission units and activities combined would not cause the facility to exceed major source thresholds (100 tpy of NO<sub>x</sub>, CO, SO<sub>2</sub>, PM, VOC, or other regulated pollutant; 5 tpy of lead [Pb]; 10 tpy of any hazardous air pollutant [HAP]; and 25 tpy of total HAPs). As listed on Table 1-1 of the Title V permit, potential facility emissions exceed the major source thresholds for NO<sub>x</sub>, CO, SO<sub>2</sub>, PM, hydrogen chloride (HCl), an individual HAP, total HAPs (due primarily to HCl), and MWC acid gases (SO<sub>2</sub> and HCl). Emissions of Pb are about 3 tpy and all the additional regulated insignificant sources would not increase facility emissions beyond 5 tpy. PCRRF emissions of VOC and all other regulated pollutants are well below the major threshold levels and including the insignificant sources would not cause a change in the facility's major source status.
- 3) None of the insignificant emission units or activities would emit or have the potential to emit 500 lbs/year of Pb; 1000 lbs/year of any HAP; 2500 lbs/year of total HAPs; or 5.0 tpy of any other regulated pollutant). As noted above for the 2000 and 2001 AORs, emissions have always been less than these reporting thresholds.

This would eliminate the necessity to continually report emissions each year that are less than the reporting thresholds for each of these emission units.

## 5.2 MWC Operating Capacity and Segregated Loads

FDEP included limits in the initial Title V permit on the amount and types of MSW combusted at the facility that were not present as enforceable limits in the original PSD permits. The facility operating capacity was limited to 3000 tons per day based on rolling 12-month averages as described in Conditions B.9(a) and B.95. This is in addition to the maximum demonstrated MWC load limits required by the EG based on 4-hour block averages of steam production. The daily monthly charging rate must be determined on a monthly basis for each calendar month based on scale data, refuse pit inventory data, and operating data. Over the County's objections, FDEP also limited the types of MSW combusted and the total amount of segregated loads processed (as a percentage of the total MSW combusted) in Conditions B.11 and B.96. Compliance with the percentage limits (3% for tires and 5% for certain types of segregated loads) is based on rolling 30-day averages.

**TABLE 1**  
**Pinellas County RRF/Bridgeway Acres Landfill - Unregulated Sources**

**Engine Sizes and Operating Schedules**

| Equipment                               | Rated Engine Size |     |               |      | Gross Heat Input<br>MMBtu/hr | Typical Operating Schedule |         |       |
|---|-------------------|-----|---------------|------|------------------------------|----------------------------|---------|-------|
|   | kW(net)           | kVa | Disp(liter)   | hp   |                              | hrs/day                    | days/wk | wk/yr |
| <b>Unit 010 Diesel-fired Engines</b>    |                   |     |               |      |                              |                            |         |       |
| Yard Waste Trommel (a)                  | 86                |     |               | 115  | 0.805                        | 4                          | 5       | 52    |
| RRF Emergency Firepump                  |                   |     |               | 235  | 1.645                        | 1                          | 1       | 52    |
| Lift Station Emer. Firepump             |                   |     | 6.128         | 115  | 0.805                        | 1                          | 1       | 52    |
| <b>Unit 011 Diesel-fired Generators</b> |                   |     |               |      |                              |                            |         |       |
| Chlorine Treatment                      |                   |     |               | 120  | 0.840                        | 1                          | 1       | 52    |
| Scale Station (b)                       |                   |     | 5.95          | ~110 | 0.770                        | 1                          | 1       | 52    |
| Maintenance Service Bldg                | 80                | 100 |               |      | 0.747                        | 1                          | 1       | 52    |
| <b>Unit 012 Gas-fired Generators</b>    |                   |     |               |      |                              |                            |         |       |
| Mosquito Control Area (c)               | ~3                | 3.5 |               |      | 0.028                        | 1                          | 1       | 52    |
| Maintenance Service Bldg                |                   |     | Doesn't Exist |      |                              |                            |         |       |

(a) kW and hp size from John Deere 1-800-535-1979 for S/N T04045T416321 manufactured in 1993. Trommel conservatively estimated to operate 8 hrs/day @ 50% capacity (4 hrs/day) and 5 days/week, equal to 1040 hrs/yr at full capacity. In reality, the engine operated less than 800 hrs/year during the past two years at less than full capacity (or probably less than 50% of the numbers presented herein). In 2002, the trommel with a 115-hp engine was replaced with a Fecon unit with a functionally equivalent 125-hp John Deere engine.

(b) hp ratioed from engine displacement based on lift station firepump.

(c) Small portable typical of residential use. kW ratioed from kVa based on MSB generator.

Gross heat input based on 7000 Btu/hp-hr (AP-42, Table 3.3-1) and 0.75 kW/hp (AP-42, p. A-14).

**Engine Fuel Usage**

| Equipment                      | Gross Heat Input<br>MMBtu/hr | Operating Rate<br>hrs/yr | Fuel Heat Value<br>Btu/gal | Fuel Use         |                 | % of Allowable<br>gal/yr |
|--------------------------------|------------------------------|--------------------------|----------------------------|------------------|-----------------|--------------------------|
|                                |                              |                          |                            | by Eng<br>gal/yr | Total<br>gal/yr |                          |
| <b>General Purpose Engines</b> |                              |                          |                            |                  |                 |                          |
| Yard Waste Trommel             | 0.805                        | 1040                     | 137,000                    | 6,110.9          | 6,110.9         | 19% of<br>32,000         |
| <b>Generators/Diesel</b>       |                              |                          |                            |                  |                 |                          |
| RRF Emergency Fire pump        | 1.645                        | 52                       | 137,000                    | 624.4            |                 |                          |
| Lift Station Emer. Fire pump   | 0.805                        | 52                       | 137,000                    | 305.5            |                 |                          |
| Chlorine Treatment             | 0.840                        | 52                       | 137,000                    | 318.8            |                 |                          |
| Scale Station                  | 0.770                        | 52                       | 137,000                    | 292.3            |                 | 6% of                    |
| Maintenance Service Bldg       | 0.747                        | 52                       | 137,000                    | 283.5            | 1,824.5         | 32,000                   |
| <b>Generators/Gasoline</b>     |                              |                          |                            |                  |                 |                          |
| Mosquito Control Area          | 0.028                        | 52                       | 130,000                    | 11.2             | 11.2            | 0.28% of<br>4,000        |

Calculate fuel usage from AP-42 value for diesel fuel of 137,000 Btu/gal (p. A-5)

Calculate fuel usage from AP-42 value for gasoline of 130,000 Btu/gal (p. A-5)

These two new permit requirements are not internally consistent. While the weights of the segregated loads must be computed daily for rolling 30-day averages (the numerator in the percentage), the Title V permit only requires that the total amount of MSW combusted (the denominator in the percentage) be computed on a monthly basis for rolling 12-month averages. Therefore, the County requests that 3% and 5% limits be applied on a monthly basis as required for two more recent Title V permits -- Pasco County RRF (Conditions A.7.1.8, A.7.1.9, and A.85) and Hillsborough County RRF (Conditions C.6.6, C.6.7, and C.86). Proposed revisions to Permit Conditions B.11(5), B.11(6), B.96(2), and B.96(3) consistent with the Pasco County and Hillsborough County RRF Title V permits are shown in Appendix A at pages 28, 29, and 60. In addition, since the limits on the types and percentages of MSW materials were imposed by FDEP in the absence of any previous PSD permit requirements or federal regulatory requirements, the County requests that Permit Conditions B.11(2)-(6), B.96(2), and B.96(3) be listed as *"Not Federally Enforceable."*

## 6.0 INCLUDE RECENT REGULATORY CHANGES

### 6.1 15-Hour CO Malfunctions

Condition B.38 of the current Title V permit gives relief for start-up/shutdown/malfunction (S/S/M) conditions according to the MWC EG/NSPS (40 CFR 60.58b(a)), restricted to one occurrence per 24-hour period according to Rule 62-210.700, F.A.C. As described later in Section 8.2, Pinellas County is requesting authorization to modify the condition to be fully consistent with the MWC S/S/M requirements. Pinellas County also requests relief from the carbon monoxide emission standard under the Subpart Eb NSPS during periods of malfunction for up to 15 hours per occurrence as provided in the November 16, 2001 Federal Register.

On November 16, 2001, the USEPA proposed and promulgated through a direct final rule, amendments to the Subpart Eb NSPS concerning compliance with the CO emissions standards during S/S/M periods (66 Fed. Reg. 57824-57828, November 16, 2001). Prior to the USEPA action, the CO emissions standards in the NSPS were not enforced during periods of S/S/M, but those periods were limited to a maximum duration of three hours. The November 2001 amendment extends this malfunction time period for CO emissions if the malfunction is caused by a loss of boiler water level control or combustion air control.

Loss of boiler water level control, from a rupture of a boiler tube for example, exposes the metal tubes to increases in temperatures. Boiler tube metal must be kept at or below about 800°F (427°C) to prevent damage or burnout. Proper boiler water level assists in regulating tube metal temperatures, and failure of the water level control will allow temperatures to rise above this 800°F (427°C) mark and increase damage to the remaining boiler tubes. Temperatures above this level and failure to maintain correct temperature profiles can lead to boiler damage from heat stress. Increases in CO formation normally are overcome by using auxiliary fuel burners to provide additional combustion. However, the use of the fuel burners during the failure of boiler water level will increase the temperature of the boiler water tubes and increase the potential for MWC unit failure. Indeed, the National Fire Protection Association (NFPA) prohibits the use of auxiliary fuel burners during periods of boiler tube malfunctions. Therefore, additional time is

needed to return the boiler to proper operating conditions and CO emission levels to the EG emission limits without causing excessive boiler damage.

A second type of malfunction covered under the amended NSPS is loss of combustion air control due to such events as loss of control or malfunction of combustion air fan, loss of control or malfunction of induced draft fan, or a failure or malfunction of the grate system. Loss of combustion air control prevents control of the MWC unit to provide for complete combustion and results in increased CO formation as well as significantly increases the risk for a catastrophic explosion. The increased CO formation can be remedied by using auxiliary fuel burners to provide for additional oxidation of CO into carbon dioxide (CO<sub>2</sub>). However, the use of auxiliary fuel burners can worsen the problem by decreasing the amount of air available for combustion. Again, additional time is needed to return the boiler to safe operating conditions and CO emission levels to the EG emission limits without causing excessive boiler damage.

The amended NSPS requires MWCs to develop and implement operation and maintenance programs and allows CO emissions to increase during these periods of S/S/M and limits the event to 15 hours per occurrence. The PCRRF has an operation and maintenance program in place to ensure that the MWC unit is operated properly and is compliant under the amended NSPS. This revision was deemed necessary by USEPA for safe operation of MWCs and to be consistent with NFPA requirements. Therefore, the County requests that Permit Conditions B.37 and B.38 be revised as shown in Appendix A at pages 36 and 37, which is consistent with recent final/proposed changes to the Title V permits for Broward County's RRFs (North and South).

## **7.0 INCORPORATE PERMIT REVISIONS**

Pinellas County requests that the following PSD and Title V permit amendments be incorporated into the revised Title V permit.

### **7.1 September 17, 2001 Administrative Correction**

On September 17, 2001, FDEP issued a notice of "administratively corrected" Title V permit wherein the required number of stack test reports required to be submitted to the Southwest District Office was revised from two to one. Please correct Condition B.92 as shown on page 59 in Appendix A. A copy of the notice from FDEP is included in Appendix B.

### **7.2 December 21, 2000 PSD Permit Modification**

On December 21, 2000, FDEP issued a PSD permit modification that authorized the construction of the Capital Replacement Project (CRP). On August 22, 2001, the County's consultant RTP sent a letter to FDEP noting that CRP construction activities had commenced as of June 1, 2001 and providing an estimate of actual facility emissions prior to the CRP project. The County is requesting that FDEP incorporate the permit modification and emissions estimates into the Title V permit. The County would respectfully suggest that Subpart A could be used for this purpose since the current language in Subpart A should be removed as discussed earlier in Section 4.1. A copy of the PSD permit modification and August 22, 2001 letter from the County's representative is included in Appendix B.

The County wishes to stress that the CRP facility "limits" issued under the WEPCO rules and proposed for inclusion as Subsection III.A are not emission limits per se. Facility emissions exceeding these values are not permit violations but would require Pinellas County to determine whether PSD significant increases were due to the CRP and not unrelated causes (i.e., population growth) and, if so, to perform BACT review for the pollutant(s) with PSD significant increase(s).

## **8.0 MAKE PERMIT CONSISTENT WITH OTHER LARGE MWCs**

Pinellas County requests that certain conditions be changed to be consistent with Title V permits for other large MWCs in Florida. These are discussed below (other revisions requested to be consistent with other Florida MWC Title V permits are discussed in Sections 4.3, 5.2, and 6.1).

### **8.1 Insignificant/Unregulated Sources**

A large number of insignificant sources are currently listed in the Appendix I-1 to the Title V permit. As described earlier in Section 5.1, Pinellas County requests that several small engines and emergency generators currently listed as unregulated sources be moved to the insignificant source list pursuant to Rules 62-213.420(3)(n), 62-213.430(6)(b), and 62-210.300(3)(a)20 and 21, F.A.C. As described later in Section 9.2, Title V permit revisions are requested for three storage silos currently regulated as Emission Units 004, 006, and 007 to allow them to be regulated as insignificant sources under the same rules since these silos have PM emissions less than applicable thresholds.

In addition, Pinellas County requests that the list of current insignificant sources be revised to be more consistent with other MWC permits. The current PCRRF list was derived from a laundry list of sources submitted in the initial permit application, which included the number and sizes of many of the units. For example, for diesel storage tanks, the current list of insignificant emission units for PCRRF shows 500 & 250 gallon diesel oil storage tanks in Resource Recovery Facility area, 500 gallon diesel oil storage tank at chlorine treatment area, 500 gallon in-ground diesel oil storage tank at scale station, 12000 gallon in-ground diesel storage tank at mosquito control area, (2) 1000 gallon aboveground diesel storage tanks at landfill contractor, and 100 gallon aboveground diesel storage tank at mulch area. Other MWC permits offer more flexibility by typically only including the type of equipment (e.g., vs. "fuel storage tanks" in the City of Tampa McKay Bay permit). Attached on Table 2 are proposed revisions to the current list of insignificant sources that will allow more flexibility to the facility.

In addition, other classes of insignificant sources are proposed on Table 2 and the suggested changes in Appendix A for addition to the insignificant source list for PCRRF. These include such things as fire and safety equipment, paint usage, vehicular traffic, and the refuse pit which are included on the insignificant source lists for most other MWC facilities in Florida. It is also proposed that the cooling tower be added to the unregulated source list consistent with most other MWC facilities in Florida. Finally, the proposed changes from Sections 5.1 and 9.2 are also included on Table 2 and in the proposed permit revisions included in Appendix A.

TABLE 2  
**PROPOSED REVISIONS TO APPENDIX I-1,** ATP ENVIRONMENTAL ASSOCIATES INC.®  
**LIST OF INSIGNIFICANT EMISSION UNITS AND/OR ACTIVITIES**

**RESOURCE RECOVERY FACILITY AREA**

1. 500 & 250 Gallon Diesel Oil Storage Tanks.
2. 250 Gallon Unleaded Gasoline Storage Tanks.
3. 250 Gallon Hydraulic Oil Storage Tank(s).
4. (2) 2000 Gallon Turbine Oil Storage Tanks.
5. 2000 Gallon Turbine Oil Collection Tank(s).
6. Welding Station Vent in Maintenance Building Operations.
7. 20,000 & 7800 Gallon Phosphoric Acid Storage Tanks.
8. 5200 Gallon Caustic Storage Tank(s).
9. 5200 & 5000 Gallon Sulfuric Acid Storage Tanks.
10. 8000 Gallon Sodium Carbonate Storage Tank(s).
11. 25,000 Gallon Urea Storage Tank(s).
12. (5) 1-ton Chlorine Cylinders.

~~(Blank Line)~~

**LANDFILL, MULCHING, AND OTHER AREAS AT THE PINELLAS COUNTY COMPLEX**

1. ~~500 Gallon Diesel Oil Storage Tank at Chlorine Treatment Area~~
2. ~~500 Gallon In-ground Diesel Oil Storage Tank at Scale Station~~
3. ~~12,000 Gallon In-ground Gasoline Storage Tank at Mosquito Control Area.~~
4. ~~12,000 Gallon In-ground Diesel Storage Tank at Mosquito Control Area.~~
- 5-13. ~~(2) 1000 Gallon Pesticide Storage Tanks.~~
6. ~~(2) 1000 Gallon Aboveground Diesel Storage Tanks at Landfill Contractor.~~
- 7-14. ~~1000 Gallon Waste Oil Storage Tank(s) at Landfill Contractor.~~
8. ~~275 Gallon Gasoline Storage Tank at Landfill Contractor.~~
9. ~~275 Gallon Oil Storage Tank at Landfill Contractor.~~
10. ~~275 Gallon Hydraulic Oil Storage Tank at Landfill Contractor.~~
11. ~~(7) 1-ton Chlorine Cylinders.~~
12. ~~100 Gallon Above Ground Diesel Storage Tank At Mulch Area.~~
- 13-15. ~~250 Gallon Mixed Waste Gasoline Storage Tank(s) At Landfill Contractor Area.~~
16. Fire and Safety Equipment.
17. Paint Usage Less than 6.0 Gallons per Day.
18. Vehicular Traffic and Mobile Equipment Onsite.
19. Storage Drums and Use of Cooling Tower and Boiler Chemicals.
20. Laboratory Vents/Hoods.
21. Refuse Pit.
22. Flanges and Valves.
23. Makeup Water Treatment Plant.
24. Solvent Degreasers.
25. Plant Road Fugitive Emissions.
26. Emergency Generators and Fire Pumps Provided None of the Sources is Subject to the Federal Acid Rain Program and Total Prorated Fuel Consumption is Limited to 32,000 Gallons per Year of Diesel Fuel or 4000 Gallons per Year of Gasoline.
27. Yard Waste Trommel and Other General Purpose Internal Combustion Engines, Heating Units, and Other Combustion Devices Not Listed Elsewhere Provided None of the Sources is a Pollution Control Device Nor Subject to the Federal Acid Rain Program and Total Prorated Fuel Consumption is Limited to 32,000 Gallons per Year of Diesel Fuel or 4000 Gallons per Year of Gasoline.
28. Hydrated Lime Storage Silo (for water treatment).
29. Pebble Lime Storage Silo (for spray dry absorbers).
30. Activated Carbon Storage Silo (for carbon injection systems).

## 8.2 Start-up/Shutdown/Malfunction Periods

Condition B.38 of the current Title V permit gives relief for start-up/shutdown/malfunction (S/S/M) conditions according to the MWC EG/NSPS (three hours) except that excess emissions are restricted to three hours in any 24-hour period according to Rule 62-210.700(1), F.A.C., which states:

*“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.”* (emphasis ours)

While the MWC EG/NSPS at 40 CFR 60.58b(a)(1)(i) states that:

The NSPS emission “...standards under this subpart apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, except as provided...” in 40 CFR 60.68b(a)(1)(iii) for 15-hour CO exceedances (which were discussed earlier in Section 6.1).

Thus, the current permit conditions restricts excess emissions during any S/S/M period to three hours in any 24-hour period while EG/NSPS only restricts excess emissions to 3 hours per occurrence for conditions other than the recognized types of 15-hour CO excess emission periods.

USEPA has recognized that the stringent emission standards for MWCs can only be met under steady state conditions and by employing "Good Combustion Practices (GCP)." These exclusionary S/S/M periods were excluded from MWC emission standards since operation during these periods is unstable, transitory in nature, and outside the normal control range of the equipment. Malfunctions occur at MWCs due to the heterogeneity of MSW, the complexity of the MWC units and the air pollution control equipment (i.e., spray dry absorber, fabric filter baghouse, selective non-catalytic reduction, and activated carbon injection). Due to this complexity and the problems of tramp air in the furnace, malfunctions and excess emissions sometimes occur during startup of a MWC unit. Therefore, in order to avoid the possibility of excess emissions exceeding three hours in any 24-hour period, the facility would have to delay restarting a MWC for 24 hours after any malfunction shutdown that resulted in excess emissions of any appreciable duration. This would eliminate MWC “hot starts” and result in the combustion of an appreciable amount of natural gas or propane to bring the unit online after the resulting necessary “cold start.” The 24-hour restriction is also inconsistent with recent USEPA regulatory changes for 15-hour periods for certain types of CO malfunctions.

Therefore, the County requests that FDEP revise Permit Conditions B.37 and B.38 to be consistent with the EG/NSPS language, which should be allowed by the language underlined above in Rule 62-210.700(1), F.A.C. The proposed changes are shown in Appendix A at pages 36 and 37. These changes are consistent with the language in the Title V permits for



Hillsborough County RRF (Conditions C.34 and C.35), (City of Tampa) McKay Bay RRF (Conditions A.32 and A.33), (Palm Beach) North County RRF (Conditions E.3.a and E.4), and Lee County RRF (Condition A.41).

### 8.3 Not-to-Exceed Permit Limits

Pinellas County wishes to remove the "not-to-exceed" permit limits for the pollutants with "either-or" limitations in the EG/NSPS – namely, SO<sub>2</sub>, HCl, and Hg. The EG/NSPS regulations require MWC emissions to achieve either a concentration limit or a percent removal limit whichever is least restrictive. "Not-to-exceed" concentration limits for SO<sub>2</sub>, HCl, and Hg under the percent removal portion of the emission limits were added to the PCRRF Title V permit (as a result of the EG retrofit) which were not included in Title V permits for other retrofit facilities, for example (City of Tampa) McKay Bay RRF (Conditions A.23, A.24, and A.18) and Hillsborough County RRF (Conditions C.23, C.24, and C.18), or for MWCs permitted under similar NSPS requirements, for example Lee County RRF (Conditions A.30, A.31, and A.24). The County is therefore requesting that the changes to Permit Conditions B.26, B.27, and B.21 in Section III at pages 34 and 33 be revised as shown in Appendix A.

## 9.0 PERFORM MISCELLANEOUS REVISIONS

Finally, County requests other additional revisions to the Title V permit as discussed here in Section 9.0.

### 9.1 Storage Silo Dust Collectors

There are three storage silos at the facility that are regulated emission units. These are the hydrated lime silo (Emissions Unit -004), the activated carbon silo (Emissions Unit -006), and the pebble lime silo (Emissions Unit -007). Each silo is fitted with a fabric filter dust collector. The dust collector fan is turned on during filling operations to minimize emissions. Because of the fan, dust collector emissions depend on outlet grain loading and flow rate and are independent of the filling rate. Unlike VOC storage tanks, there are essentially no breathing or operating losses (emissions) from the storage silos other than during filling operations. Due to the minor amount of PM emissions produced by filling operations of these storage silos, the County is proposing to eliminate the PM emission limits for these units. This would eliminate the costly PM testing requirements for these units prior to permit renewals.

Hydrated lime is used for water softening in the water treatment plant. The hydrated lime silo is filled on average less than once per month. Filling the silo with 21-22 tons of hydrated lime takes slightly more than one hour (about 1½ hours when setup and finishing operations are included). These totals match well with the 175 tons delivered during the first 10 months of 2002 (eight 22 ton loads). Activated carbon is used by the mercury control system. The activated carbon silo is filled about once every two weeks with about 20 tons of carbon (operating time similar to the hydrated lime silo). The 233 tons of carbon delivered during the first three quarters of 2002 equals twelve (12) deliveries of 19.4 tons, or almost exactly one delivery every two weeks. Finally, one 25-ton load of pebble lime is delivered each day to the

facility. This agrees well with the 7400 tons purchased during the first 10 months of 2002 (25 tons/day x 304 days = 7600 tons).

A conservative estimate of short-term emissions would be the 1980s RACT limit of 0.03 gr/dscf (see discussion below), giving silo-filling emissions based on the design flow rates of:

Hydrated Lime Silo = 0.257 lb/hr = 0.03 gr/dscf x 60 min/hr x 1000 acf/min / 7000 gr/lb  
 Pebble Lime Silo = 0.3086 lb/hr = 0.03 gr/dscf x 60 min/hr x 1200 acf/min / 7000 gr/lb  
 Carbon Silo = 0.3086 lb/hr = 0.03 gr/dscf x 60 min/hr x 1200 acf/min / 7000 gr/lb

A conservative estimate of long-term emissions would be to assume that each silo was filled every day for 2 hours per day, giving annual emissions of:

Hydrated Lime Silo = 0.094 tpy = 0.257 lb/hr x 2 hrs/day x 365 days/yr / 2000 lb/ton  
 Pebble Lime Silo = 0.113 tpy = 0.3086 lb/hr x 2 hrs/day x 365 days/yr / 2000 lb/ton  
 Carbon Silo = 0.113 tpy = 0.3086 lb/hr x 2 hrs/day x 365 days/yr / 2000 lb/ton

Actual long-term emissions would be very much less than the estimated 188 and 225 lbs/yr for the hydrated and carbon storage silos, respectively, because filling operations actually only take place about 12 and 26 hours per year, respectively, as discussed above.

Air quality permits for the hydrated lime storage silo were obtained Southwest District Office in 1995 (AC52-259351 and AO52-268853). Approval for the other two storage silos (to store lime and activated carbon for the new air pollution control (APC) required by the EG) were also obtained in 1995 as part of the PSD permit amendment for the EG retrofits (PSD-FL-011A and PSD-FL-098A). At the time the permits were obtained, it was believed by both the applicant and the Department that the storage silos and filling emissions were subject to RACT requirements at Rule 62-296.700 and 711, F.A.C., since the PCRRF is located within the "area of influence" (i.e., 50 kilometers) of a nearby TSP maintenance area established in Rule 62-204.340(4)(b)1. The RACT limits at Rule 62-296.711, F.A.C., require 0.03 gr/dscf and 5% opacity (Rule 62-296.711(2)(b) and (a), respectively). The hydrated lime silo was originally exempted from RACT by specifying emissions less than 15 tpy and 5 lb/hr (i.e., 14.9 tpy and 4.9 lb/hr at Condition 3) in accordance with Rule 62-296.700(2)(a). In addition, an alternate permit limit of 5% opacity was established in lieu of particulate stack tests under Rule 62-297.620(4), F.A.C. For the other two storage silos permitted as part of the EG retrofit, controlled PM emissions were estimated as 0.005 gr/acf. Again, an alternate permit limit of 5% opacity was established in lieu of PM stack tests.

During the Title V permitting, it was discovered that RACT was not applicable to these units (December 14, 1999 memo from Larry George to Wendy Alexander) since it applied only to sources in existence or permitted between early 1981 and May 30, 1988. As a result, permit conditions in the Title V permit were revised to specify an opacity limit of 20%. However, other permit conditions based on RACT were maintained, most noticeably a required filling rate during testing and particulate emission limits. Due to the fact that annual emissions are very much less than threshold amounts, the applicant is requesting that these units be regulated as insignificant sources and deleted from the Section III.B of the Title V permit. The requirements

to be deleted are shown in Appendix B and primarily require deleting the PM emission limits that were imposed because of RACT permitting requirements.

Particulate emissions would be expected to be very low based on the annual opacity tests. Annual Method 9 opacity tests of the storage silos during filling operations by certified observers have nearly always been 0% opacity for all of the observed period. Only occasional 5% opacity readings (which represent barely visible emissions) have been observed. For the carbon silo, 8 observations (15-second intervals) of 5% opacity were observed in 2000 (most likely due to background with 232 observations of 0% opacity) and 23 observations (15-second intervals) of 5% opacity in 2002 (with 203 observations of 0% opacity). Annual opacity tests in 2001 and 1999 were always 0% opacity. For the pebble lime silo, 15 observations (15-second intervals) of 5% opacity were observed in 1999 (with 356 observations of 0% opacity). Annual opacity tests in 2000, 2001, and 2002 were always 0% opacity. For the hydrated lime silo, observations were always 0% opacity during the 2000, 2001, and 2002 tests except for four observations in 2002 of 5%, 10%, 15%, and 20% (one observation each). These were due to over-pressuring the silo during filling -- resulting in a brief period of uncontrolled emissions from the normally sealed hatch. The malfunction was quickly corrected and the silo filling completed. As can be seen, only 50 observations (12.5 minutes total) of mostly barely visible emission were seen during more than 10 hours of total observations (about 2%).

Emissions have been shown to be minimal for the three currently permitted storage silos and the currently permitted particulate emission limits were imposed due to RACT requirements. The currently permitted opacity limits of 20% are identical to the general opacity standard for all sources under Rules 62-296.320(4)(b)1 and 4, F.A.C. and included as a facility wide condition in Section II as Permit Condition II.7. Therefore, it is not needed as a specific condition for these emission units. Pinellas County respectfully requests that the current particulate permit limit, as well as other permit conditions, be deleted for the three silos and that they be regulated as insignificant sources as allowed by Rule 62-213.430(6)(b). This would be consistent with two of the Florida Title V permits for other MWCs -- i.e., Lee County RRF (carbon silo) and (Palm Beach) North County RRF (lime storage silos) -- where these types of sources are regulated as insignificant sources. The three storage silos proposed as insignificant sources were added to the lists of revised insignificant sources on Table 2 in this report and Table I-1 in the Title V permit as shown in Appendix A. Finally, Tables 1-1 and 2-1 in the Title V permit would need to be revised as shown in Appendix A.

## 9.2 Non-Criteria PSD Pollutants Less than the Significant Emission Rate

Pinellas County is requesting that permit limits for PSD pollutants with emissions less than the PSD significant emission rates (and which are not regulated by the EG) be deleted. In the original PSD permit for Unit 3, permit limits of 9.0E-5 lb/hr and 0.000394 tpy were imposed for beryllium to insure beryllium emissions were less than the PSD significant emission rate of 0.0004 tpy since a BACT analysis was not performed for beryllium<sup>a</sup>. It should be noted that the ONLY control equipment at that time for Unit 3 was an electrostatic precipitator (ESP) which

<sup>a</sup>The Final PSD Determination and PSD Permit issued by Region IV of the USEPA on May 22, 1987 specifically stated that "An emission limitation is included in the permit to limit these [beryllium] emission to below the PSD significant emissions rate" (page 3).

controlled particulate emissions to 0.030 gr/dscf corrected to 12% CO<sub>2</sub>. The original PSD permit limits for fluorides for Unit 3 were 8.31 lbs/hr and 36.4 tpy. As a result of the EG, spray dry absorbers (SDA), fabric filter (FF) baghouses, activated carbon injection (ACI) systems, and selective non-catalytic reduction (SNCR) control systems were installed. As a result, fluoride emissions are also now expected to be less than the PSD significant emission rate of 3 tpy.

With emissions less than the PSD significant emission rate, the added costs of beryllium and fluoride stack tests now required in the Title V permit are unnecessary. Stack tests for beryllium and fluorides are now required by the Title V permit annually and every five years, respectively, for Unit 3. In the final PSD Permit for Unit 3 issued by USEPA in 1987, only initial compliance tests demonstrating the validity of the emission factors and permit limits were required for beryllium and fluorides. Therefore, deleting the permit limits for these minor pollutants, thereby removing the necessity for performing stack tests, is more in keeping with the intent of the original PSD permit.

Annual stack tests have been performed for beryllium for Unit 3 since the Title V permit was issued. All individual test runs of these stack tests have always shown beryllium to be less than the Method 29 detection limit. Assuming emissions were equal to the detection limit (a very conservative assumption), average measured Unit 3 beryllium emissions (i.e., average of three Method 29 stack test runs) were:

| <u>Year</u> | <u>ug/dscm@7%O<sub>2</sub></u> | <u>lb/hr</u> | <u>tpy(@8760hr/yr)</u> | <u>%Significance</u> |
|-------------|--------------------------------|--------------|------------------------|----------------------|
| 2001        | 0.059                          | 2.06E-5      | 0.00009                | 22.5%                |
| 2002        | 0.071                          | 2.46E-5      | 0.00011                | 27.5%                |

These are less than the PSD significant emission rate of 0.0004 tpy even when using the Method 29 detection limit. If stack test sampling times were increased to gain additional sensitivity, the measured beryllium emission rates would be even less. Based on these low emission levels (less than the detection limit), the current permit limit for Unit 3 of 9.0E-5 lb/hr is unnecessary and continued annual testing is of no particular use. Therefore, Pinellas County requests that Permit Conditions B.33 and B.55 for beryllium emission limits and testing requirements be deleted.

Fluoride testing is required every five years (i.e., prior to operating permit renewal). No fluoride testing has yet been performed at the PCRRF since the Title V permit was issued in November 2000. Therefore, fluoride emission measurements at another Florida MWC facility with similar APC equipment were examined. Available fluoride stack test data for the Lee County RRF (averages for three stack test runs) are shown below (lb/hr based on the maximum predicted PCRRF flow rate of 139792 dscfm@7%O<sub>2</sub> -- see Title V table after Permit Condition B.34):

| <u>Year/Unit</u> | <u>ug/dscm@7%O<sub>2</sub></u> | <u>lb/hr</u> | <u>tpy(@8760hr/yr)</u> | <u>%Significance</u> |
|------------------|--------------------------------|--------------|------------------------|----------------------|
| 2000/1           | <0.19                          | <0.079       | <0.35                  | 11.7%                |
| 1999/1           | <0.10                          | <0.041       | <0.18                  | 6.0%                 |
| 1998/1           | <0.11                          | <0.045       | <0.20                  | 6.7%                 |
| 1997/1           | <0.104                         | <0.043       | <0.19                  | 6.3%                 |
| 1996/1           | 0.18                           | 0.074        | 0.32                   | 10.7%                |
| 1995/1           | <0.0303                        | <0.013       | <0.06                  | 2.0%                 |

|        |         |        |       |       |
|--------|---------|--------|-------|-------|
| 1994/1 | <0.044  | <0.018 | <0.08 | 2.7%  |
| 2000/2 | <0.18   | <0.074 | <0.32 | 10.7% |
| 1999/2 | <0.09   | <0.037 | <0.16 | 5.3%  |
| 1998/2 | <0.11   | <0.045 | <0.20 | 6.7%  |
| 1997/2 | <0.116  | <0.048 | <0.21 | 7.0%  |
| 1996/2 | <0.048  | <0.020 | <0.09 | 3.0%  |
| 1995/2 | <0.0311 | <0.013 | <0.06 | 2.0%  |
| 1994/2 | <0.053  | <0.022 | <0.10 | 3.3%  |

Thus, Unit 3 fluoride emissions are about an order of magnitude or less than the PSD significant emission rate. Further, all but one of the measurements were below the detection limit of the USEPA reference stack test method. Based on these low emission levels, the current permit limit for Unit 3 of 8.31 lb/hr is unnecessary since maximum stack test averages would be expected to be less than 1% of the permit limit. Since all but one of the Lee County RRF stack tests show that fluoride emissions are typically less than the detection limit, stack testing would also be of no particular use. Therefore, Pinellas County requests that Permit Conditions B.34 and B.56 for fluoride emission limits and testing requirements be deleted. Finally, the language in "Emission Limitations and Standards" above Permit Condition B.18 would need to be revised as shown in Appendix A, as well as the Tables 1-1 and 2-1 in the Title V permit.

### 9.3 Landfill Emission "Limits" and Permit Conditions

The County requests that the emission limits in Table 1-1 of the Title V permit for the landfill (Emissions Unit -009) be removed. The 50 Megagram/year (Mg/yr) limit shown for non-methane organic compounds (NMOC) is NOT an emission limit but rather a threshold value from 40 CFR 60 Subparts Cc and WWW that would require the County to install additional controls under the EG/NSPS requirements. The proposed change is shown in Appendix A on Table 1-1 of the Title V permit.

The County is also requesting that FDEP provide a draft of the proposed changes to the Title V permit for the landfill MACT standards (40 CFR Subpart 63 AAAA) that were mentioned in the Department's January 28<sup>th</sup> letter from Cindy Phillips to Pick Talley. If the proposed changes are acceptable to the County, they should be included in this revision of the Title V permit.

### 9.4 Dewatered and Processed Restaurant Grease

The County is submitting a separate request to the Department to add dewatered and processed restaurant grease to the list of other solid waste that may be used as fuel at the PCRRF as listed in Permit Conditions B.11(4) or B.11(6) in Section III on pages 28 and 29. Appendix A shows the proposed addition of restaurant grease to Permit Condition B.11(4). Additional information is included in the separate request.

### 9.5 CERCLA Pollutants

In the April 17, 2002 Federal Register (67 FR 18899), USEPA published guidance on what constitutes a "federally permitted release" for certain air emissions. Briefly, air emissions in a

24-hour period greater by a CERCLA-reportable quantity than the federally enforceable emission limit must be reported to the National Response Center (NRC). Excess emissions (i.e., emissions greater than the permit limits) during startup, shutdown, and malfunctions (S/S/M) events at the facility are considered to be "permitted" in the Title V permit by federal and state regulations under certain circumstances (see Sections 6.1 and 8.2 above). However, such excess emissions are not exempt from CERCLA reporting as long as specific numeric limits are not specified for the excess emissions during malfunctions.

Therefore, the County proposes that malfunction emission limits be included in the Title V permit. The CERCLA pollutants to be addressed (and their CERCLA reportable quantities) are those pollutants at the facility for which tail gas control malfunctions might result in CERCLA reportable emissions – namely, NO<sub>x</sub>, HCl, Hg (10, 5000, and 1 lbs/day from 40 CFR 302.4) and SO<sub>2</sub> (500 lbs/day from 40 CFR 355, Appendix A). The emission limits for SO<sub>2</sub>, HCl, and Hg are based on the "not-to-exceed" limits discussed in Section 8.3 above in the absence of air pollution control equipment:

SO<sub>2</sub>: 488 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> (i.e., 122 ppm/[100%-75%]),  
HCl: 2000 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> (i.e., 100 ppm/[100%-95%]), and  
Hg: 0.67 mg/dscm corrected to 7% O<sub>2</sub> (i.e., 0.10 mg/dscm/[100%-85%]).

A NO<sub>x</sub> malfunction emission limit of 400 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> is proposed that should never be exceeded during a malfunction. Since CO is not a CERCLA pollutant, the averaging time of the malfunction events can be limited to three hours per occurrence based on the EG/NSPS requirements discussed in Section 8.2 above. The proposed addition to Permit Condition B.38 in Section III on page 47 is shown in Appendix A.

**APPENDIX A**

**PROPOSED REVISIONS TO TITLE V PERMIT**

**Section I. Facility Information.**

**Subsection A. Facility Description.**

This facility consists of three municipal solid waste combustors (Unit Nos. 1, 2, and 3) with auxiliary burners, lime storage and processing facilities, an activated carbon storage facility, ash storage and processing facilities, a metals recovery system, a cooling tower (not operated with chromium based water treatment chemicals), ancillary support equipment, and a contiguous municipal solid waste landfill. The gross nominal electric generating capacity of the facility is 75 megawatts (MW), which is sold to Florida Power Corporation (FPC). Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

Based on the initial Title V permit application received June 14, 1996, this facility is a major source of hazardous air pollutants (HAPs).

The use of 'Permitting Notes' throughout this permit are for informational purposes, only, and are not permit conditions.

**Subsection B. Summary of Emissions Unit ID Numbers and Brief Descriptions.**

**REGULATED:**

| E.U. ID No. | Brief Description   |
|-------------|---|
| -001        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1 |
| -002        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2 |
| -003        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3 |
| -004        | Hydrated Lime Storage Silo <i>(reserved)</i>                              |
| -005        | Metals Recovery System  |
| -006        | Activated Carbon Storage Silo <i>(reserved)</i>                           |
| -007        | Lime Storage Silo <i>(reserved)</i>                                       |
| -008        | Ash Conditioning Building   |
| -009        | Municipal Solid Waste Landfill  |

**UNREGULATED:**

| E.U. ID No.     | Brief Description of Emissions Units and/or Activity   |
|-----------------|--|
| -010            | <del>3 Diesel Fuel-Fired Internal Combustion Engines - drive Yard Waste Trommel Mulehing Machine, Resource Recovery Facility Emergency Diesel Fire Pump, and Lift Station Emergency Diesel Fire Pump.</del> <i>Cooling Tower</i> |
| <del>-011</del> | <del>3 Diesel Fuel Fired Generators - at Chlorine Treatment Area, Scale Station, and Maintenance Service Building.</del>   |
| <del>-012</del> | <del>2 Gasoline Fired Generators - at Mosquito Control Area and Maintenance Service Building.</del>  |

*Please reference the Permit Number, the Facility Identification Number, and the appropriate Emissions Unit(s) ID Number(s) on all correspondence, test report submittals, applications, etc.*



**Subsection C. Relevant Documents.**

{Permitting Note: The documents listed below are not a part of this permit; however, they are specifically related to this permitting action.}

These documents are provided to the permittee for informational purposes:

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers (version dated 2/5/97)  
Appendix BW, Biological Waste Definitions  
Appendix H-1, Permit History / ID Number Transfers  
Table 1-1, Summary of Air Pollutant Standards and Terms  
Table 2-1, Summary of Compliance Requirements

These documents are on file with the permitting authority:

Initial Title V Permit Application Received June 14, 1996  
40 CFR 60, Subpart Cb Closure Agreement Received October 25, 1996  
Initial Title V Permit Revised Application Received March 25, 1999  
Department's Request for Additional Information Letter Sent June 21, 1999  
Permittee's Response to Request for Additional Information Letter Received September 15, 1999  
Initial Title V Permit Revised Application Page Received April 26, 2000  
EPA's Proposed Permit Objection Letter Received July 20, 2000  
Department's Response to EPA Objection Letter Sent October 16, 2000  
EPA's Resolution of Objection Letter Dated October 23, 2000

## Section II. Facility-wide Conditions.

### The following conditions apply facility-wide:

1. Appendix TV-3, Title V Conditions, is a part of this permit.  
{Permitting note: Appendix TV-3, Title V Conditions is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided one copy when requested or otherwise appropriate. If desired, a copy of Appendix TV-3, Title V Conditions can be downloaded from the Division of Air Resources Management's Internet Web site located at the following address:  
"http://www.dep.state.fl.us/air/permitting/TitleVperm.htm".}
2. Not federally enforceable. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. The permittee shall not cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor.  
[Rule 62-296.320(2), F.A.C.; and Pinellas County Ordinance 97-05, Section 33, Sec. 58-178]
3. Prevention of Accidental Releases (Section 112(r) of CAA).
  - a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable ; and
  - b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.  
[40 CFR 68]
4. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.  
[Rules 62-213.440(1), 62-213.430(6), and 62-4.040(1)(b), F.A.C.]
5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.  
[Rule 62-213.440(1), F.A.C.]
6. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department.  
  
{Permitting Note: No vapor emission control devices or systems are deemed necessary nor ordered by the Department as of the issuance date of this permit.}  
[Rule 62-296.320(1)(a), F.A.C.]
7. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.  
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

8. Reasonable precautions to prevent emissions of unconfined particulate matter at this facility include:  
Resource Recovery Facility Area

- a) Paving and maintenance of roads and parking areas.
- b) Employment of proper dust-control techniques to prevent fugitive dust emissions during construction activities such as demolition of buildings, grading roads, construction, and land clearing (construction to be experienced during facility improvements to air pollution control equipment to meet the Emission Guideline requirements of 40 CFR 60 Subpart Cb).
- c) Sweeping of roads and periodic washing of roads and other paved areas to remove particulate matter and to prevent reentrainment, and from buildings or work areas, to prevent particulate from becoming airborne.
- d) Landscaping or planting of vegetation.
- e) Wetting of bottom ash and fly ash prior to conveyor systems.
- f) Keeping metal stockpiles damp.

Landfill, Mulching, and Other Areas at the Pinellas County Complex

- a) Operation of the landfill in accordance with all applicable portions of Chapter 62-7, F.A.C.
- b) Putrescible wastes receive a daily cover of a six inch layer of compacted earth or other approved material at the end of each day to prevent odors.
- c) Landscaping or planting of vegetation.
- d) Sweeping of roads and periodic washing of roads.
- e) Covering transport vehicles for ash and metals.

[Rule 62-296.320(4)(c)2., F.A.C.; Proposed by applicant in initial Title V permit application received June 14, 1996; and, Proposed by applicant in initial DRAFT Title permit comments received November 19, 1999]

{Permitting Note: This condition presents the reasonable precautions to be implemented in accordance with Rule 62-296.320(4)(c), F.A.C., in lieu of the requirements of Condition No. 58 of Appendix TV-3.}

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9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.  
[Rule 62-213.440, F.A.C.]

10. The permittee shall submit all compliance related notifications and reports required of this permit to the Department of Environmental Protection, Southwest District Office:

Department of Environmental Protection  
Southwest District Office  
8407 8497 Laurel Fair Circle 33610  
Tampa, Florida 33619  
Telephone: 813/744-6100  
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11. Any reports, data, notifications, certifications, required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency, Region 4  
Air, Pesticides & Toxics Management Division  
Air & EPCRA Enforcement Branch  
Air Enforcement Section  
61 Forsyth Street  
Atlanta, Georgia 30303  
Telephone: 404/562-9155  
Fax: 404/562-9164

Section III. Emissions Units and Conditions.

*change to  
revised or  
put in Appendix B  
materials*

Subsection A. This section addresses the following emissions units.

| E.U. ID No. | Brief Description                  |
|-------------|------------------------------------|
| -001        | Municipal Waste Combustor - Unit 1 |

Emissions unit number -001 is a Riley Stoker manufactured municipal solid waste (MSW) combustor designated as "Unit 1". The unit consists of a mass burn waterwall boiler with a rated capacity of 87,500 pounds (lbs) MSW per hour. The maximum permitted steam production rate of the unit is 275,000 lbs/hr when firing municipal solid waste. Steam flow is the main process throughput parameter to be monitored.

Unit 1 began commercial operation May 4, 1983. Particulate matter emissions from Unit 1 are controlled by an electrostatic precipitator (ESP), while CO and NO<sub>x</sub> emissions are controlled by good combustion practices. Following retrofit to comply with NSPS - 40 CFR 60, Subpart Cb, spray dry absorbers (SDA) and baghouses will be used for control of acid gases and particulates, Selective Non-Catalytic Reduction (SNCR) for control of NO<sub>x</sub>, and activated carbon injection systems (ACI) for control of Hg and certain organic emissions. Odor is controlled by drawing combustion air from the refuse tipping area. Units 1 and 2 share a common turbine. Unit 1 has a separate stack. (Stack height = 161 feet, exit diameter = 10.0 feet, exit temperature = 540 °F; actual volumetric flow rate = 680,000 acfm).

{Permitting notes. This emissions unit is regulated under NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-011(A)); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and, PA 78-11 & 83-18 (A,B,&C).}

The following specific conditions apply to the emissions unit(s) listed above:

{Permitting note: The following specific conditions contained in this subsection (subsection A) shall apply to Unit 1 until the Electrostatic Precipitator Controls (ESPs) are replaced with new air pollution control (APC) systems and compliance testing is completed. Thereafter, the specific conditions contained in subsection B. shall apply and subsection A. shall be obsolete.}

General

A.1. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C. and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(9), F.A.C. shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance or National Emission Standard, shall apply. [Rules 62-204.800(7)(c) and (9)(c), F.A.C.]

A.2. Definitions. For the purposes of Rules 62-204.800(7) and (9), F.A.C., the definitions contained in the various provisions of 40 CFR Parts 60 and 61, adopted herein shall apply except that the term

"Administrator" when used in 40 CFR Parts 60 and 61, shall mean the Secretary or the Secretary's designee except as noted in 40 CFR 61.157.

[40 CFR 60.2; and, Rules 62-204.800(7)(a) and (9)(a), F.A.C.]

**A.3. Circumvention.** No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

**A.4.** The incinerator boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity and certification number.

[PA 78-11(B) & 83-18(B)]

**A.5. Electrostatic Precipitator Controls.** For Unit 1, the three-field electrostatic precipitator (ESP) shall have been designed and constructed to allow the installation of a fourth field in the event that the three-field ESP fails to perform as specified, or if the other parameters of the Facility's operation are subsequently modified, necessitating additional control.

[PA 78-11(B) & 83-18(B)]

**A.6.** Unit 1 is subject to the requirements of 40 CFR 60, Subpart E; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.

[PSD-FL-011]

**Essential Potential to Emit (PTE) Parameters:**

**A.7. Permitted Capacity.**

(1) **Municipal Solid Waste.** Unit 1 shall not be loaded in excess of its rated capacity of 87,500 lbs/hr of municipal solid waste.

(2) **Steam.** Unit 1 shall not exceed the maximum steam production rate of 275,000 lbs/hr.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; PA 78-11(B) & 83-18(B); and, applicant request in Draft Title V comments received November 19, 1999]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

**A.8. Emissions Unit Operating Rate Limitation After Testing.** See specific condition A.47.

[Rule 62-297.310(2), F.A.C.]

**A.9. Methods of Operation - Fuels.**

(1) **Municipal Solid Waste.** The primary fuel for the Resource Recovery Facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S.

(2) **Unauthorized Fuel.** Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in (4), (5), and (6), below. However, the facility

(a) shall not burn:

(i) those materials that are prohibited by state or federal law;

- (ii) those materials that are prohibited by this permit;
  - (iii) lead acid batteries;
  - (iv) hazardous waste;
  - (v) nuclear waste;
  - (vi) radioactive waste;
  - (vii) sewage sludge;
  - (viii) explosives;
  - (ix) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- (b) and shall not knowingly burn:
- (i) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources);
  - (ii) segregated loads of biological waste.

(3) The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

- (a) well mixed with MSW in the refuse pit; or
- (b) alternately charged with MSW in the hopper.

The facility owner or operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below, (5 and 6). For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

(4) Other Solid Waste. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:

- (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
- (b) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
- (c) Wood pallets, clean wood, and land clearing debris;
- (d) Packaging materials and containers;
- (e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
- (f) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.

(5) Waste Tires. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition A.63. below.

(6) Other Solid Waste/Segregated Loads. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average in accordance with specific condition A.63. below.

- (a) Construction and demolition debris.
  - (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
  - (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
  - (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
  - (e) Waste materials that:
    - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
    - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
  - (f) Waste materials that contain oil from:
    - (i) the routine cleanup of industrial or commercial establishments and machinery; or
    - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
  - (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
  - (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.
- (7) Other fuels or wastes, not listed above, shall not be burned in the MSW combustor without prior specific written approval of the Secretary of the Department of Environmental Protection.  
[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PA 78-11(B) & PA 83-18(B)]

**A.10. Hours of Operation.** MWC Unit 1 is allowed to operate continuously, i.e., 8,760 hours/year.  
[Rule 62-210.200(PTE), F.A.C.]

#### Emission Limitations and Standards

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. When subject to different federal, state, local, and/or permit limits, the most stringent limit takes precedence. For PM, meeting the PSD limit assures compliance with 40 CFR 60.52(a) and Rule 62-296.40(2), F.A.C.}

**A.11. Emission Limits.** Stack emissions from Unit 1 shall not exceed the following:

- (1) Particulate Matter – 0.08 gr/dscf, corrected to 12% CO<sub>2</sub>.
  - (2) SO<sub>2</sub> – 170 lbs/hr.
- [PSD-FL-011/40 CFR 60.52(a); and, PA 78-11(B) & 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

**A.12. Visible Emissions.** Visible emissions (VE) from Unit 1 shall not exceed 20 percent opacity.  
[Rule 62-296.320(4)(b)1., F.A.C.; and, PA 78-11(B) & 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

A.13. On and after the date on which the performance test required to be conducted by 40 CFR 60.8 is completed, no owner or operator subject to the provisions of this part shall cause to be discharged into the atmosphere from any affected facility any gases which contain particulate matter in excess of 0.18 g/dscm (0.08 gr/dscf) corrected to 12 percent CO<sub>2</sub>.  
[40 CFR 60.52(a)]

A.14. Particulate Matter. Existing incinerators, other than those which are operated or utilized for the disposal or treatment of biological waste, with a charging rate equal to or greater than 50 tons per day.  
(a) Particulate matter - 0.1 grains per standard cubic foot dry gas corrected to 50 percent excess air.  
[Rule 62-296.401(2), F.A.C.]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

A.15. Mercury Emissions Inventory. For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a), F.A.C. (See Specific Condition B.21.)  
[Rule 62-296.416(3)(c), F.A.C.]

#### Excess Emissions

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

A.16. Excess emissions resulting from startup, shutdown, or malfunction of any emissions unit shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

A.17. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.  
[Rule 62-210.700(4), F.A.C.]

A.18. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.  
[40 CFR 60.11(d)]



### Monitoring of Operations

#### A.19. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

A.20. The permittee shall have installed and shall continuously operate stack monitoring devices for oxygen and opacity. The monitoring devices shall meet the applicable requirements of Chapter 62-297, F.A.C. (see specific conditions A.19. & A.23.) and 40 CFR 60.13 (see specific conditions A.24. - A.29.), including certification of each device.

[PA 78-11(B) & 83-18(B)]

A.21. Ambient Air Monitors. The permittee shall operate two continuous SO<sub>2</sub> monitors and one continuous wind direction and velocity monitor in the immediate vicinity of the site. The monitors shall be specifically located as designated by the DEP and shall conform to 40 CFR 53 (see specific condition A.22.). Monitoring shall have begun upon commencement of operation.

[PA 78-11(B) & 83-18(B)]

#### A.22. Designation of reference and equivalent methods.

(a) A candidate method determined by the Administrator to satisfy the applicable requirements of this part shall be designated as a reference method or equivalent method (as applicable), and a notice of the designation shall be submitted for publication in the Federal Register not later than 15 days after the determination is made.

(b) A notice indicating that the method has been determined to be a reference method or an equivalent method shall be sent to the applicant. This notice shall constitute proof of the determination until a notice of designation is published in accordance with paragraph (a) of this section.

(c) The Administrator will maintain a current list of methods designated as reference or equivalent methods in accordance with this part and will send a copy of the list to any person or group upon request. A copy of the list will be available for inspection or copying at EPA Regional Offices.

[40 CFR 53.8]

A.23. Continuous Monitor Performance Specifications. If continuous monitoring systems are required by rule or permit to be used for demonstrating compliance with the standards of the Department, they must be installed, maintained and calibrated in accordance with the EPA performance specifications listed below. These Performance Specifications are contained in 40 CFR 60, Appendix B, and are adopted by reference in Rule 62-204.800, F.A.C. The EPA performance specifications that are adopted by reference at Rule 62-204.800, F.A.C., are adopted in their entirety except for those provisions referring to approval of alternative procedures by the Administrator. For purposes of this rule, such alternative procedures may only be approved by the Secretary or his or her designee in accordance with Rule 62-297.620, F.A.C.

(1) Performance Specification 1--Specifications and Test Procedures for Opacity Continuous Emission Monitoring Systems in Stationary Sources.

~~(S) Performance Specification 3--Specifications and Test Procedures for O<sub>2</sub> and CO<sub>2</sub> Continuous Emission Monitoring Systems in Stationary Sources.  
[Rule 62-297.520, F.A.C.]~~

~~A.24. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.  
[40 CFR 60.13(a)]~~

~~A.25. If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.~~

~~(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.  
[40 CFR 60.13(c)(1)]~~

~~A.26. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.~~

~~(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.  
[40 CFR 60.13(d)(1) and (2)]~~

~~A.27. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:~~

~~(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.~~

~~(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.~~

~~[40 CFR 60.13(e)(1) and (2)]~~

~~A.28. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.~~

~~[40 CFR 60.13(f)]~~

~~A.29. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.~~

~~[40 CFR 60.13(g)]~~

~~A.30. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).~~

~~[40 CFR 60.13(h)]~~

Required Tests, Test Methods and Procedures

{Permitting Note: The attached Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

~~A.31. Annual Tests Required. Compliance tests shall be performed for PM, SO<sub>2</sub>, and VE for Unit 1 annually.~~

~~[Rule 62-297.310(7), F.A.C.; and, PA 78-11(B) & 83-18(B)]~~

A.32. The following test methods and procedures, or equivalent methods after obtaining prior written Department approval, shall be used for compliance testing:

| Purpose / Substance  | Test Methods |
|--|--------------|
| Selection of sample site and sample traverses  | EPA Method 1 |
| Determining stack gas flow rate  | EPA Method 2 |
| Gas analysis for calculation of percent O <sub>2</sub> and CO <sub>2</sub>   | EPA Method 3 |
| Determining stack gas moisture content to convert the flow rate from actual standard cubic feet (ascf) to dry standard cubic feet (dscf) for use in converting concentrations in dry gases to or from mass emission limits | EPA Method 4 |
| PM and associated moisture content   | EPA Method 5 |
| SO <sub>2</sub>  | EPA Method 6 |
| VE   | EPA Method 9 |

[Rules 62-213.440, 62-296.390(4)(b)4. and 62-297.401, F.A.C.; 40 CFR 60 and 61; and, PA 78-11(B) & 83-18(B)]

A.33. The minimum sample volume for EPA Method 5 shall be 30 dry standard cubic feet.  
 [Rule 62-296.400(2)(c)1., F.A.C.]

A.34. Mercury Emissions Test Method and Procedures. All mercury emissions tests performed pursuant to the requirements of Rule 62-296.416, F.A.C. shall comply with the following provisions.

1. The test method for mercury shall be EPA Method 29 adopted in Chapter 62-297, F.A.C.
2. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

[Rules 62-296.416(3)(d), F.A.C.]

A.35. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

A.36. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of which he has determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)]

A.37. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of

~~The level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.~~

~~[40 CFR 60.8(c)]~~

~~A.38. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:~~

~~(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.~~

~~(2) Safe sampling platform(s).~~

~~(3) Safe access to sampling platform(s).~~

~~(4) Utilities for sampling and testing equipment.~~

~~{Permitting note: See specific condition A.50. and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}~~

~~[40 CFR 60.8(e)]~~

~~A.39. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.~~

~~[40 CFR 60.8(f)]~~

~~A.40. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.~~

~~[40 CFR 60.11(a)]~~

~~A.41. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).~~

~~[40 CFR 60.11(b)]~~

~~A.42. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test~~

required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

A.43. Special provisions set forth under an applicable subpart shall supersede any conflicting provisions in 40 CFR 60.11(a) through (e).

[40 CFR 60.11(f)]

A.44. For the purpose of submitting compliance certifications or establishing whether or not a person has violated or is in violation of any standard in 40 CFR 60, nothing in 40 CFR 60 shall preclude the use, including the exclusive use, of any credible evidence or information, relevant to whether a source would have been in compliance with applicable requirements if the appropriate performance or compliance test or procedure had been performed.

[40 CFR 60.11(g)]

A.45. The owner or operator shall determine compliance with the particulate matter standard in 40 CFR 60.52 (see specific condition A.13.) as follows:

(1) The emission rate ( $c_{12}$ ) of particulate matter, corrected to 12 percent  $\text{CO}_2$ , shall be computed for each run using the following equation:

$$c_{12} = c_s (12/\% \text{CO}_2)$$

where:

$c_{12}$  = concentration of particulate matter, corrected to 12 percent  $\text{CO}_2$ , g/dscm (gr/dscf).

$c_s$  = concentration of particulate matter, g/dscm (gr/dscf).

$\% \text{CO}_2$  =  $\text{CO}_2$  concentration, percent dry basis.

(2) Method 5 shall be used to determine the particulate matter concentration ( $c_s$ ). The sampling time and sample volume for each run shall be at least 60 minutes and 0.85 dscm (30 dscf).

(3) The emission rate correction factor, integrated or grab sampling and analysis procedure of Method 3B shall be used to determine  $\text{CO}_2$  concentration ( $\% \text{CO}_2$ ).

(i) The  $\text{CO}_2$  sample shall be obtained simultaneously with, and at the same traverse points as, the particulate run. If the particulate run has more than 12 traverse points, the  $\text{CO}_2$  traverse points may be reduced to 12 if Method 1 is used to locate the 12  $\text{CO}_2$  traverse points. If individual  $\text{CO}_2$  samples are taken at each traverse point, the  $\text{CO}_2$  concentration ( $\% \text{CO}_2$ ) used in the correction equation shall be the arithmetic mean of all the individual  $\text{CO}_2$  sample concentrations at each traverse point.

[40 CFR 60.54(b)]

### Compliance Test Requirements

A.46. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables

corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

A.47. Operating Rate During Testing.

Unless otherwise stated in the applicable emission limiting standard rule, testing of emissions shall be conducted with the emissions unit operating at permitted capacity, defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

A.48. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

A.49. Applicable Test Procedures.

(a) Required Sampling Time.

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch/cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.
- (b) Minimum Sample Volume. Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.
- (c) Required Flow Rate Range. For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between .5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.
- (d) Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.
- (e) Allowed Modification to EPA Method 5. When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.  
[Rule 62-297.310(4), F.A.C.]

A.50. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.  
[Rule 62-297.310(6), F.A.C.]

A.51. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

- 3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:
  - a. Did not operate; or
  - b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.
- 4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:
  - a. Visible emissions, if there is an applicable standard;
  - b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
  - c. Each NESHAP pollutant, if there is an applicable emission standard.
- 5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.
- 9. The owner or operator shall notify the DEP Southwest District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.



(b) Special Compliance Tests. When the DEP Southwest District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southwest District Office.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; SIP approved; and, PA 78-11(B) & PA 83-18(B)]

### Reporting and Recordkeeping

A.52. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southwest District Office 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 DEP Southwest District Office.

[Rule 62-210.700(6), F.A.C.]

### A.53. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southwest District Office on the results of each such test.

(b) The required test report shall be filed with the DEP Southwest District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.

9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

A.54. The owner or operator of an affected facility shall submit the written reports required under 40 CFR 60, Subpart A, to the DEP Southwest District Office for every calendar quarter. All quarterly reports shall be postmarked by the 30th day following the end of each calendar quarter.

[Rule 62-213.440(b)(3)(a), F.A.C.; and, PA 78-11(B) & 83-18(B)]

A.55. Any owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 50 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

A.56. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

~~A.57. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:~~

- ~~(1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.~~
- ~~(2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.~~
- ~~(3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.~~
- ~~(4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.~~

~~[40 CFR 60.7(c)(1), (2), (3), and (4)]~~

~~A.58. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.~~

~~(1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.~~

~~(2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.~~

~~{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}~~

~~[40 CFR 60.7(d)(1) and (2)]~~

~~A.59. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:~~

- ~~(i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;~~
- ~~(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and~~
- ~~(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).~~

~~(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her~~

intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1),(2), and (3)]

A.60. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks, adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2 b., F.A.C.]

A.61. The owner or operator of any incinerator subject to the provisions of 40 CFR 60 Subpart E shall record the daily charging rates and hours of operation.

[40 CFR 60.53(a); and PSD-FL-011]

A.62. Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the Facility, and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rule 62-213.440, F.A.C.; and, 40 CFR 60.53(a)]

A.63. Segregated Solid Waste Record Keeping. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition A.9.

(1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition A.9., which is received for processing shall be documented as to waste description and

weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

(2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

(3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous 29 days. The resultant 30 day total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[Rule 62-213.440, F.A.C.]

### Miscellaneous

A.64. Compliance Schedule. The following dates shall be/have been met to satisfy measurable progress milestones to come into compliance with 40 CFR 60 Subpart Cb:

| E.U. ID. No. | Milestone   | Milestone Date    |
|--------------|---|-------------------|
| 1, 2, 3      | Submittal of a final control plan to DEP  | January 1, 1997   |
| 1, 2, 3      | Awarding of contracts for emission control systems or process modifications, or issuance of orders for the purchase of component parts to accomplish emission control or process modification | January 1, 1997   |
| 1, 2, 3      | Initiation of on-site construction or installation of emission control equipment or process change  | June 19, 1997     |
| 1            | Completion of on-site construction or installation of emission control equipment or process change.   | June 19, 2000     |
| 2            | Completion of on-site construction or installation of emission control equipment or process change.   | December 19, 1999 |
| 3            | Completion of on-site construction or installation of emission control equipment or process change.   | June 19, 1999     |
| 1            | Final Compliance  | December 19, 2000 |
| 2            | Final Compliance  | June 19, 2000     |
| 3            | Final Compliance  | December 19, 1999 |

[40 CFR 60.21(h); 40 CFR 60.39b; and, State Plan approved 01/12/98]

A.65. Closure Agreement. The permittee shall cease operation of any unit that has not completed on-site construction or installation of emission control equipment and is not involved in performance testing within 36 months after EPA approves the State of Florida's Section 111(d) plan or by December 19, 2000, whichever is earlier. After closure, said units may commence startup, shakedown, and performance/compliance testing per the closure agreement on file with the Department. Performance/compliance tests must be completed within 180 days of startup.

{Permitting Note: The State of Florida's Section 111(d) plan was effectively approved by EPA January 12, 1998.}

[40 CFR 60.39b; and, State Plan approved 01/12/98]

~~A.66. Operation and Maintenance Plans. A separate Operation and Maintenance (O&M) plan shall be on file with DEP Southwest District Office for each MWC unit and associated air pollution control devices. These emissions units and associated control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent 5 years and be made available for inspection upon request.  
[Rule 62-213.440(b), F.A.C.; and, Pinellas County Ordinance 97-05, Section 22, Sec. 58-128]~~

Subsection B. This section addresses the following emissions units.

| E.U. ID No. | Brief Description   |
|-------------|---|
| -001        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 1 |
| -002        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 2 |
| -003        | 1100 TPD (maximum) Municipal Waste Combustor & Auxiliary Burners - Unit 3 |

Emissions unit numbers -001, -002, and -003 are Riley Stoker manufactured municipal solid waste (MSW) combustors designated as "Unit 1", "Unit 2", and "Unit 3", respectively. Each unit consists of a mass burn waterwall boiler with two auxiliary natural gas fired burners. The burners are used to fire the MSW combustors during start-up, shutdown, and at other times when necessary and consistent with good combustion practices.

Each of the three municipal waste combustors (MWCs) shall have a nominal design rate capacity of 1000 tons MSW per day, 417 MMBtu per hour, and 250,000 pounds steam per hour with MSW having a heating value of 5000 Btu per pound. The "operating window" of 110 percent (%) over the nominal design rate of 417 MMBtu heat input corresponds to 458 MMBtu/hr heat input and 275,000 lbs steam/hour per each boiler. Short term capacity is limited by limiting steam production (275,000 lb/hr), which effectively limits heat input. The net design steam enthalpy for useful work is 1,158 Btu/lb.

Units 1 and 2 began commercial operation May 4, 1983; Unit 3 began commercial operation August 1, 1986. Units 2 and 3 exhaust through a common stack with separate flues and Unit 1 currently exhausts through a separate stack. Units 1 and 2 share a common turbine and Unit 3 has a separate turbine. Following retrofit, all three units will exhaust to a common stack consisting of three separate flues. Stack height = 165 feet, exit diameter = 8.5 feet, exit temperature = 270 °F, actual volumetric flow rate = 243,117 acfm. Also, the existing generation equipment will be maintained and operated such that the existing three (3) steam generating units supply the existing two (2) turbine/generator (T/G) sets which have a combined electrical output of 75 MW.

*In order to*  
~~Particulate matter emissions from Unit 1 are controlled by an electrostatic precipitator (ESP), while CO and NO<sub>x</sub> emissions are controlled by good combustion practices. Odor is controlled by drawing combustion air from the refuse tipping area. Following retrofit to comply with NSPS - 40 CFR 60, Subpart Cb, spray dry absorbers and baghouses will be used for control of acid gases and particulates, Selective Non-Catalytic Reduction (SNCR) for control of NO<sub>x</sub>, and activated carbon injection systems (ACI) for control of Hg and certain organic emissions. Units 2 and 3 have already been retrofit with the above air pollution controls and resumed commercial operation July 19, 1999; and September 24, 1998, respectively. Initial compliance was demonstrated December 4, 1998 for retrofitted Unit 3 and September 18, 1999 for retrofitted Unit 2. Unit 1 is still being retrofit.~~

*and June 2, 2000 for retrofitted Unit 1.*

*May 5, 2000*

The new limits imposed in Subpart Cb are more stringent than PA 78-11 and PA 83-18 limits for SO<sub>2</sub>, PM, and VE emissions for Units 1 and 2 and for SO<sub>2</sub>, PM, VE, CO, NO<sub>x</sub>, Pb, and Hg emissions for Unit 3. Pollutants regulated by Subpart Cb that were not regulated in PA 78-11 and PA 83-18 are given below for each unit: CO, NO<sub>x</sub>, Pb, Cd, HCl, Hg, and dioxins/furans for Units 1 and 2; Cd, HCl, and dioxins/furans for Unit 3.

{Permitting notes. These emissions units are regulated under NSPS - 40 CFR 60, 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.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted

and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD) (PSD-FL-011(A) for Units 1 & 2; PSD FL-098(A) for Unit 3); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; Rule 62-296.416, F.A.C., Waste-to-Energy Facilities; and, PA 78-11 & 83-18 (A, B, & C). Also, please note that <sup>some</sup> conditions in 40 CFR 60, Subpart Cb, are contained in 40 CFR 60, Subpart Eb.)

The following specific conditions apply to the emission unit(s) listed above:

{Permitting note: The following specific conditions currently apply to Units 2, and 3 and will apply to Unit 1 following completion of retrofit with new air pollution controls and compliance testing in accordance with the approved compliance schedule (see specific conditions A.64. and A.65.)}

### General

B.1. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., the Emission Guidelines for Existing Sources adopted by reference in Rule 62-204.800(8), F.A.C., and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(9), F.A.C. shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply.

[Rules 62-204.800(7)(c), (8)(a)1., and (9)(c), F.A.C.]

B.2. Definitions. For the purposes of Rules 62-204.800(7), (8), and (9), F.A.C., the definitions contained in the various provisions of 40 CFR Parts 60 and 61, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Parts 60 and 61, shall mean the Secretary or the Secretary's designee except as noted in 40 CFR 61.157.

[40 CFR 60.2; and, Rules 62-204.800(7)(a), (8)(a)2., and, (9)(a), F.A.C.]

B.3. Definitions - Subpart Cb. For purposes of Rule 62-204.800(8)(b), F.A.C., the definitions in 40 CFR 60.51b shall apply except for the term "municipal waste combustor plant" which shall have the same meaning as defined in 40 CFR 60.31b.

[Rule 62-204.800(8)(b)2., F.A.C.]

B.4. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

B.5. Each MWC shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, rated capacity, efficiency (Unit 3 only), and certification number.

[PSD-FL-098; and, PA 78-11(B) & PA 83-18(B)]



B.6. The permittee shall have installed, shall continuously operate, and shall maintain a particulate emission control device for the control of particulates.  
[PSD-FL-098]

B.7. After the modifications to the Resource Recovery Facility are complete, the height of the boiler stack shall not be less than 165 feet above the ground level at the base of the stack.  
[PA 78-11(B) & PA 83-18(B)]

B.8. Units 1, 2, and 3 are subject to the requirements of 40 CFR 60, Subpart E; except that where requirements within this permit are more restrictive, the requirements of this permit shall apply.  
[PSD-FL-011 and PSD-FL-098]

### Essential Potential to Emit (PTE) Parameters

#### B.9. Capacity.

(a) The maximum individual MWC throughput shall not exceed 1100 tons MSW per day (3300 tons per day entire facility), 458 MMBtu per hour and 275,000 pounds steam per hour (on a 4-hour block arithmetic average). The MWCs shall not be loaded in excess of their maximum operating capacity, equivalent to 3300 tons MSW per day total, but no more than 3000 tons MSW per day on a rolling 12 month average (see specific condition B.95.)

(b) The procedures specified in paragraph (1) ~~and (2)~~ shall be used for calculating municipal waste combustor unit capacity as defined under 40 CFR 60.51b.

(1) For municipal waste combustor units capable of combusting municipal solid waste continuously for a 24-hour period, municipal waste combustor unit capacity shall be calculated based on 24 hours of operation at the maximum charging rate. The maximum charging rate shall be determined as specified in paragraph (i) ~~and (ii) as applicable.~~

(i) For combustors that are designed based on heat capacity, the maximum charging rate shall be calculated based on the maximum design heat input capacity of the unit and a heating value of 12,800 kilojoules per kilogram for combustors firing refuse-derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse-derived fuel.

~~(ii) For combustors that are not designed based on heat capacity, the maximum charging rate shall be the maximum design charging rate.~~

~~(2) For batch feed municipal waste combustor units, municipal waste combustor unit capacity shall be calculated as the maximum design amount of municipal solid waste that can be charged per batch multiplied by the maximum number of batches that could be processed in a 24 hour period. The maximum number of batches that could be processed in a 24 hour period is calculated as 24 hours divided by the design number of hours required to process one batch of municipal solid waste, and may include fractional batches (e.g., if one batch requires 16 hours, then 24/16, or 1.5 batches, could be combusted in a 24 hour period). For batch combustors that are designed based on heat capacity, the design heating value of 12,800 kilojoules per kilogram for combustors firing refuse derived fuel and a heating value of 10,500 kilojoules per kilogram for combustors firing municipal solid waste that is not refuse derived fuel shall be used in calculating the municipal waste combustor unit capacity.~~

[40 CFR 60.31b and 40 CFR 60.58b(j); Rules 62-4.160(2), 62-210.200(PTE), and 62-213.440, F.A.C.; PA 78-11(B) & PA 83-18(B); applicant request in Draft Title V comments received November 19, 1999; and, revised Title V application received April 26, 2000]

B.10, B.12, or B.13

{Permitting note: Nothing in the following three conditions shall be construed to imply that maximum capacity, as defined in specific condition B.9., can be exceeded.}

**B.10. Emissions Unit Operating Rate Limitation After Testing.** See specific condition B.58.  
[Rule 62-297.310(2), F.A.C.]

**B.11. Methods of Operation - Fuels.**

(1) Municipal Solid Waste. The primary fuel for the Resource Recovery Facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S.

(2) Unauthorized Fuel. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described below. However, the facility

(a) shall not burn:

- (i) those materials that are prohibited by state or federal law;
- (ii) those materials that are prohibited by this permit;
- (iii) lead acid batteries;
- (iv) hazardous waste;
- (v) nuclear waste;
- (vi) radioactive waste;
- (vii) sewage sludge;
- (viii) explosives;
- (ix) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

(b) and shall not knowingly burn:

- (i) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources); *or*
- (ii) segregated loads of biological waste.

(3) The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

- (a) well mixed with MSW in the refuse pit; or
- (b) alternately charged with MSW in the hopper.

The facility owner or operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below, (5 and 6). For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

(4) Other Solid Waste. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:

- (a) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
- (b) Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;
- (c) Wood pallets, clean wood, and land clearing debris;
- (d) Packaging materials and containers;
- (e) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; *etc*

Not Federally Enforceable

(g) *Desulfured/processed restaurant grease*

(f) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings; *or*

(5) Waste Tires. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a ~~rolling 30 day~~ *calendar month* average in accordance with specific condition B.96. below.

(6) Other Solid Waste/Segregated Loads. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a ~~rolling 30 day~~ *calendar month* average in accordance with specific condition B.96. below.

- Not Federally Enforceable*
- (a) Construction and demolition debris.
  - (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
  - (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
  - (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
  - (e) Waste materials that:
    - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
    - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
  - (f) Waste materials that contain oil from:
    - (i) the routine cleanup of industrial or commercial establishments and machinery; or
    - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
  - (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall ~~not~~ be burned, pursuant to the limitations of 40 CFR 761.20(e).
  - (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

(7) Natural Gas. Auxiliary burners for each MSW unit shall be fired only with natural gas. Natural gas may be used as a supplemental fuel during startups, shutdowns, and at other times when necessary and consistent with good combustion practices.

(8) Other fuels or wastes, not listed above, shall not be burned in the MSW combustors without prior specific written approval of the Secretary of the Department of Environmental Protection.

[Rules 62-4.160(2), 62-210.200, and 62-213.440(1), F.A.C.; PSD-FL-098; and, PA 78-11(B) & PA 83-18(B)]

**B.12. Maximum Demonstrated Municipal Waste Combustor Unit Load.** 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 in specific condition B.28.  
[40 CFR 60.34b(b) and 40 CFR 60.51b]

**B.13. Maximum Demonstrated Particulate Matter Control Device Temperature.** Maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified in specific condition B.28.  
[40 CFR 60.34b(b) and 40 CFR 60.51b]

**B.14. Hours of Operation.** MWC units 1, 2, and 3 are allowed to operate continuously, i.e., 8,760 hours/year, each.  
[Rule 62-210.200(PTE), F.A.C.]

### Operating Practices and Requirements

**B.15.** No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in specific condition B.12., except as specified below. The averaging time is specified in specific condition B.17.

(1) During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no municipal waste combustor unit load limit is applicable.

(2) The municipal waste combustor unit load limit may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

[40 CFR 60.34b(b) and 40 CFR 60.53b(b)]

**B.16.** 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 specific condition B.13., except as specified below. The averaging time is specified in specific condition B.17. These requirements apply to each particulate matter control device utilized at the affected facility.

(1) During the annual dioxin/furan performance test and the two weeks preceding the annual dioxin/furan performance test, no particulate matter control device temperature limitations are applicable.

(2) The particulate matter control device temperature limits may be waived in accordance with permission granted by the Administrator or delegated State regulatory authority for the purpose of evaluating system performance, testing new technology or control technologies, diagnostic testing, or related activities for the purpose of improving facility performance or advancing the state-of-the-art for controlling facility emissions.

[40 CFR 60.34b(b) and 40 CFR 60.53b(c); and, PA 78-11(B) & PA 83-18(B)]

**B.17. Operating Requirements.** The procedures specified in paragraphs (1) through (11) shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.

(1) Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average.

*for MWC flue gas treatment*

- (2) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs (i) through (iii).
- (i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in Appendix B of 40 CFR 60.
  - (ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in Appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).
    - (A) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.
    - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
  - (iii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.
- (3) The 4-hour block ~~and 24-hour daily~~ arithmetic averages specified in paragraphs (1) ~~and (2)~~ shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.
- (4) The owner or operator of an affected facility may request that compliance with the carbon monoxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.53b(b)(6).
- (5) The procedures specified in paragraphs (i) through (v) shall be used to determine compliance with load level requirements under 40 CFR 60.53b(b).
- (i) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feedwater flow meter; measure steam (or feedwater) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feedwater) flow shall be calculated in 4-hour block arithmetic averages.
  - (ii) The method included in the "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 60.17) shall be used for calculating the steam (or feedwater) flow required under paragraph (6)(i). The recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference-see 40 CFR 60.17) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (iii).
  - (iii) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.
  - (iv) All signal conversion elements associated with steam (or feedwater flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.
- (6) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.

(7) The maximum demonstrated municipal waste combustor unit load shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated municipal waste combustor unit load shall be the highest 4-hour arithmetic average load achieved during four consecutive hours during the most recent test during which compliance with the dioxin/furan emission limit was achieved.

(8) For each particulate matter control device employed at the affected facility, the maximum demonstrated particulate matter control device temperature shall be determined during the initial performance test for dioxins/furans and each subsequent performance test during which compliance with the dioxin/furan emission limit specified in 40 CFR 60.52b(c) is achieved. The maximum demonstrated particulate matter control device temperature shall be the highest 4-hour arithmetic average temperature achieved at the particulate matter control device inlet during four consecutive hours during the most recent test during which compliance with the dioxin/furan limit was achieved.

(9) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.

(i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) At a minimum, each carbon monoxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.

(10) All valid continuous emission monitoring system data must be used in calculating the parameters specified under 40 CFR 60.58. (i) even if the minimum data requirements of paragraph (10) are not met. When carbon monoxide continuous emission data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.

(11) Quarterly accuracy determinations and daily calibration drift tests for the carbon monoxide continuous emission monitoring system shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.

[40 CFR 60.38b and 40 CFR 60.58b(i)]

### Emission Limitations and Standards

{Permitting note: Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit. Also, Subpart Cb does not impose limits for Bc and total fluorides, which are limited for Unit 3 by PSD-FL-092}

### Particulate Matter

B.18. The emission limit for particulate matter (PM/PM<sub>10</sub>) contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

[40 CFR 60.33b(a)(1)(i); and, PA 78-11(B) & PA 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Visible Emissions

B.19. The emission limit for opacity exhibited by the gases discharged to the atmosphere is 10 percent (6-minute block average).  
[40 CFR 60.33b(a)(1)(iii); and, PA 78-11(B) & PA 83-18(B)]

Cadmium

B.20. The emission limit for cadmium contained in the gases discharged to the atmosphere is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.  
[40 CFR 60.33b(a)(2)(i)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Mercury

B.21. The emission limit for mercury contained in the gases discharged to the atmosphere is,  
(1) 0.070 milligrams per dry standard cubic meter, corrected to 7 percent oxygen; or  
(2) 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, ~~with a not-to-exceed cap of 0.10 milligrams per dry standard cubic meter, corrected to 7 percent oxygen~~, whichever is less stringent.  
[40 CFR 60.33b(a)(3); Rule 62-296.416(3)(a)1., F.A.C.; and, PA 78-11(B) & PA 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

*(reserved)*  
~~B.22. Facilities with sulfur dioxide and hydrogen chloride control equipment in place or under construction as of July 1, 1993, and which choose to control mercury emissions through the use of mercury control equipment, shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by July 1, 1995. All other facilities choosing to control mercury emissions through the use of mercury control equipment shall comply with the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., by the date that the facility is required to demonstrate compliance with sulfur dioxide and hydrogen chloride emission limits, which limits are established at Rule 62-204.800(8)(b), F.A.C.  
[Rule 62-296.416(3)(a)2., F.A.C.]~~

*(reserved)*  
~~B.23. Facilities subject to the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., shall demonstrate individual emissions unit compliance by the compliance date specified in Rule 62-296.416(3)(a)2., F.A.C., and annually thereafter.  
[Rule 62-296.416(3)(a)3., F.A.C.]~~

*(reserved)*  
~~B.24. Mercury Emissions Inventory. For emissions inventory purposes, all waste-to-energy facilities with charging rates of 40 tons or more per day shall perform annual individual emissions unit mercury emissions tests and report the results to the Department. This testing shall begin during calendar year 1993 and end upon initiation of mercury testing pursuant to Rule 62-296.416(3)(a), F.A.C.  
[Rule 62-296.416(3)(c), F.A.C.]~~

Lead

B.25. The emission limit for lead contained in the gases discharged to the atmosphere is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.  
[40 CFR 60.33b(a)(4)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Sulfur Dioxide

B.26. The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is,  
(1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis); or  
(2) 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), ~~with a not-to-exceed cap of 122 parts per million by volume, corrected to 7 percent oxygen (dry basis),~~ whichever is less stringent. Compliance with this emission limit is based on a 24-hour daily geometric mean.  
[40 CFR 60.33b(b)(3)(i); and, PA 78-11(B) & PA 83-18(B)]

Hydrogen Chloride

B.27. The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere is,  
(1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis); or  
(2) 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), ~~with a not-to-exceed cap of 109 parts per million by volume, corrected to 7 percent oxygen (dry basis),~~ whichever is less stringent.  
[40 CFR 60.33b(b)(3)(ii); and, PA 78-11(B) & PA 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Dioxins/Furans

B.28. The emission limit for dioxins/furans contained in the gases discharged to the atmosphere that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.  
[40 CFR 60.33b(c)(1)(ii); and, PA 78-11(B) & PA 83-18(B)]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Nitrogen Oxides

B.29. The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis. The permittee may request authorization from the Department to conduct nitrogen oxides emissions averaging pursuant to 40 CFR 60.33b.  
[40 CFR 60.33b(d); and, PA 78-11(B) & PA 83-18(B)]

*Compliance with this emission limit is based on a 24-hour daily arithmetic mean.*



Carbon Monoxide

B.30. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis, and calculated as a 4-hour block average. [40 CFR 60.34b(a); and, PA 78-11(B) & PA 83-18(B)]

Fugitive Ash Emissions

B.31. Fugitive Ash Emissions. (a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of Subpart A (see specific condition B.42.), no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.55b(k), except as provided in paragraphs (b) and (c). See specific condition B.53.

(b) The emission limit specified in paragraph (a) does not cover visible emissions discharged inside buildings or enclosures of ash conveying systems; however, the emission limit specified in paragraph (a) does cover visible emissions discharged to the atmosphere from buildings or enclosures of ash conveying systems.

(c) The provisions of paragraph (a) do not apply during maintenance and repair of ash conveying systems.

[40 CFR 60.36b and 40 CFR 60.55b]

B.32. For Unit 3, there shall be a 10% opacity limit for emissions from the refuse bunker and ash handling loadout. The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks and/or scrap piles.

[PSD-FL-098]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

Beryllium

*(revised)*  
~~B.33. Emissions of beryllium to the atmosphere from Unit 3 shall not exceed  $9.0 \times 10^{-5}$  lbs/hr. EPA and the permittee mutually agree that actual test data may demonstrate that a higher emission limit is required because the unit's emission controls are for particulate (PM) control only, without regard to the composition of the particulate matter. Any request for modification shall be in accordance with the requirements of the Florida PSD regulations (Rule 62-212.400, F.A.C.).~~

~~[PSD-FL-098(A)]~~

~~{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}~~

Total Fluorides

*(revised)*

~~B.34. Total fluorides emissions from Unit 3 shall not exceed 8.31 lbs/hr. EPA and the permittee mutually agree that actual test data may demonstrate that a higher emission limit is required. Any request for modification shall be in accordance with the requirements of the Florida PSD regulations (Rule 62-212.400, F.A.C.). [PSD-FL-098(A)]~~

~~{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}~~

{Permitting Note: Listed below are equivalent emissions for the MWC units:

| Pollutant                                 | lbs/MMBtu/unit          | lbs/hr/unit             | tons/year/unit         |
|---|-------------------------|-------------------------|------------------------|
| Particulate Matter (PM/PM <sub>10</sub> ) | 0.631                   | 14.4                    | 63.1                   |
| Cadmium (Cd)                              | 4.6 x 10 <sup>-3</sup>  | 0.021                   | 0.092                  |
| Mercury (Hg)                              | 1.2 x 10 <sup>-4</sup>  | 5.24 x 10 <sup>-2</sup> | 0.23                   |
| Lead (Pb)                                 | 5.0 x 10 <sup>-4</sup>  | 0.230                   | 1.01                   |
| Sulfur Dioxide (SO <sub>2</sub> )         | 0.372                   | 170.0                   | 744.6                  |
| Hydrogen Chloride (HCl)                   | 0.174                   | 79.3                    | 349.5                  |
| Dioxins/Furans                            | 3.44 x 10 <sup>-8</sup> | 1.6 x 10 <sup>-3</sup>  | 6.9 x 10 <sup>-3</sup> |
| Nitrogen Oxides (NO <sub>x</sub> )        | 0.450                   | 205.3                   | 899.2                  |
| Carbon Monoxide (CO)                      | 0.133                   | 61.0                    | 267.2                  |

These values are given in PA 78-11(B,C) & PA 83-18 (B,C) and are determined using a maximum flowrate of 139,792 dscfm @ 7% O<sub>2</sub> and a maximum heat input of 453 MMBtu/hr.}

Excess Emissions

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

B.35. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]

B.36. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source. [40 CFR 60.11(d)]

B.37. Startup, Shutdown and Malfunction. The provisions for startup, shutdown, and malfunction are provided in paragraph (1) and (2).

(1) The standards under 40 CFR 60, Subpart Cb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup, shutdown, or malfunction periods are limited to 3 hours per occurrence, *except as provided in paragraph (2).*

(i) The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other nonmunicipal solid waste fuel, and no municipal solid waste is being fed to the combustor.

(ii) Continuous burning is the continuous, semicontinuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

[Rule 62-204.800(8)(b), F.A.C.; 40 CFR 60.38b; and 40 CFR 60.58b(a)]

*Insert Paragraph (2) as attached*

B.38. Excess emissions resulting from startup, shutdown, or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed three hours in any 24 hour period.

[Rule 62-210.700(1), F.A.C.; PSD FL-098(A); and, authorized by Department on March 27, 2000]

B.39. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

*per occurrence, except as provided by 40 CFR 60.58b(a)(1)(ii)*

*(Specific Condition B.37(2))*

*insert attached*

Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

B.40. Within 60 days after achieving the maximum production rate at which the affected facility will be operated, but not later than 180 days after initial startup of such facility and at such other times as may be required by the Administrator under section 114 of the Act, the owner or operator of such facility shall conduct performance test(s) and furnish the Administrator a written report of the results of such performance test(s).

[40 CFR 60.8(a)]

B.41. Performance tests shall be conducted and data reduced in accordance with the test methods and procedures contained in each applicable subpart unless the Administrator (1) specifies or approves, in specific cases, the use of a reference method with minor changes in methodology, (2) approves the use of an equivalent method, (3) approves the use of an alternative method the results of, which has been determined to be adequate for indicating whether a specific source is in compliance, (4) waives the requirement for performance tests because the owner or operator of a source has demonstrated by other means to the Administrator's satisfaction that the affected facility is in compliance with the standard, or (5) approves shorter sampling times and smaller sample volumes when necessitated by process variables or other factors. Nothing in this paragraph shall be construed to abrogate the Administrator's authority to require testing under section 114 of the Act.

[40 CFR 60.8(b)]

B.42. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of

INSERT AFTER PAGE 37 OF THE MARKUP TITLE V PERMIT IN APPENDIX A

Paragraph (2) for Specific Condition B.37

(2) For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.34b(a), if a loss of boiler water level control (e.g., boiler waterwall tube failure) or a loss of combustion air control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

Additional paragraph for Specific Condition B.38

During malfunctions, uncontrolled MWC emissions are limited to 488 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> for SO<sub>2</sub>, 2000 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> for HCl, 0.67 mg/dscm corrected to 7% O<sub>2</sub> for Hg, and 400 ppm<sub>dv</sub> corrected to 7% O<sub>2</sub> for NO<sub>x</sub>. The duration of any malfunction period resulting in these uncontrolled MWC emissions is limited to three hours per occurrence.

the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

B.43. The owner or operator of an affected facility shall provide the Administrator at least 30 days prior notice of any performance test, except as specified under other subparts, to afford the Administrator the opportunity to have an observer present.

[40 CFR 60.8(d)]

B.44. The owner or operator of an affected facility shall provide, or cause to be provided, performance testing facilities as follows:

(1) Sampling ports adequate for test methods applicable to such facility. This includes (i) constructing the air pollution control system such that volumetric flow rates and pollutant emission rates can be accurately determined by applicable test methods and procedures and (ii) providing a stack or duct free of cyclonic flow during performance tests, as demonstrated by applicable test methods and procedures.

(2) Safe sampling platform(s).

(3) Safe access to sampling platform(s).

(4) Utilities for sampling and testing equipment.

{Permitting note: See specific condition B.61. and Appendix SS-1, Stack Sampling Facilities (version dated 10/7/96) for State of Florida Stack Sampling Requirements.}

[40 CFR 60.8(e)]

B.45. Unless otherwise specified in the applicable subpart, each performance test shall consist of three separate runs using the applicable test method. Each run shall be conducted for the time and under the conditions specified in the applicable standard. For the purpose of determining compliance with an applicable standard, the arithmetic means of results of the three runs shall apply. In the event that a sample is accidentally lost or conditions occur in which one of the three runs must be discontinued because of forced shutdown, failure of an irreplaceable portion of the sample train, extreme meteorological conditions, or other circumstances, beyond the owner or operator's control, compliance may, upon the Administrator's approval, be determined using the arithmetic mean of the results of the two other runs.

[40 CFR 60.8(f)]

#### Particulate Matter and Opacity

B.46. The procedures and test methods specified in paragraphs (1) through (11) shall be used to determine compliance with the emission limits for particulate matter and opacity.

(1) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.

(2) The EPA Reference Method 3, 3A, or 3B, as applicable shall be used for gas analysis.

(3) The EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than  $160 \pm 14$  °C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.

(4) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).

- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the particulate matter emission concentrations from the three test runs is used to determine compliance.
- (6) In accordance with paragraphs (7) and (11), EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(c)
- (7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under 40 CFR 60.8.
- (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified in paragraphs (8)(i) through (8)(iv).
- (i) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.
- (ii) The continuous opacity monitoring system shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
- (iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in Appendix B of 40 CFR 60.
- (iv) The initial performance evaluation shall be completed no later than 180 days after the date of the initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
- (9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).
- (10) [reserved]
- (11) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (6).  
[40 CFR 60.38b and 40 CFR 60.58b(c)]

#### Cadmium, Lead and Mercury

- B.47.** The procedures and test methods specified in paragraphs (1) and (2) shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.
- (1) The procedures and test methods specified in paragraphs (1)(i) through (1)(ix) shall be used to determine compliance with the emission limits for cadmium and lead.
- (i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.
- (ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.
- (iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.
- (iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (1)(iii).
- (v) The owner or operator of an affected facility may request that compliance with the cadmium or lead emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).
- (vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the cadmium or lead emission concentrations from three test runs or more shall be used to determine compliance.

(vii) Following the date of the initial performance test or the date on which the initial performance test is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for compliance with the emission limits for cadmium and lead on an annual basis (no more than 12 calendar months following the previous performance test).

(viii)[reserved]

(ix) [reserved]

(2) The procedures and test methods specified in paragraphs (2)(i) through (2)(xi) shall be used to determine compliance with the mercury emission limit.

(i) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.

(ii) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.

(iii) The EPA Reference Method 29 shall be used to determine the mercury emission concentration. The minimum sample volume when using Method 29 for mercury shall be 1.7 cubic meters.

(iv) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 29 test run for mercury required under paragraph (2)(iii).

(v) The percent reduction in the potential mercury emissions (%PHG) is computed using equation 1:

$$[\%PHG] = \left[ \frac{E_i - E_o}{E_i} \right] \times 100 \quad (\text{equation 1})$$

where:

%PHG = percent reduction of the potential mercury emissions achieved.

$E_i$  = potential mercury emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

$E_o$  = controlled mercury emission concentration measured at the mercury control device outlet, corrected to 7 percent oxygen (dry basis).

(vi) All performance tests shall consist of a minimum of three test runs conducted under representative full load operating conditions. The average of the mercury emission concentrations or percent reductions from three test runs or more is used to determine compliance.

(vii) The owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).

(viii) The owner or operator of an affected facility shall conduct an initial performance test for mercury emissions as required under 40 CFR 60.8.

(ix) Following the date that the initial performance test for mercury is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for mercury emissions on an annual basis (no more than 12 calendar months from the previous performance test).

(x) [reserved]

(xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) (see specific condition B.101.) for measuring and calculating carbon usage.

[40 CFR 60.38b and 40 CFR 60.58b( ) ]

*(reserved)*

~~B.48. Mercury Emissions Test Method and Procedures. All mercury emissions tests performed pursuant to the requirements of this rule shall comply with the following provisions.~~

- ~~1. The test method for mercury shall be EPA Method 29 adopted in Chapter 62-297, F.A.C.~~
- ~~2. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.~~
- ~~(4) Flue Gas Temperature Standard. Waste-to-energy facilities choosing to control mercury emissions through the use of post-combustion control equipment designed to remove mercury from flue gases shall comply with the flue gas temperature standard of Rule 62-296.416(4)(a), F.A.C.  
(a) Temperature Standard. The flue gas temperature standard set forth in 40 CFR 60.53b(c) (see specific condition B.16.), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.  
(b) Temperature Monitoring. The temperature monitoring requirements set forth in 40 CFR 60.58b(i) (see specific condition B.17.), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.~~
- ~~(5) Carbon Usage Rate. The carbon injection rate operating standard and monitoring requirements set forth in 40 CFR 60.58b(m) (see specific condition B.101.), incorporated by reference in Rule 62-204.800, F.A.C. shall apply.  
[Rules 62-296.416(5)(d), (4), and (5), F.A.C.]~~

### Sulfur Dioxide

B.49. The procedures and test methods specified in paragraphs (1) through (14) shall be used for determining compliance with the sulfur dioxide emission.

- (1) The EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.
- (2) The EPA Reference Method 19, section 5.4 shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.
- (3) The owner or operator of an affected facility may request that compliance with the sulfur dioxide emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (4) The owner or operator of an affected facility shall conduct an initial performance test for sulfur dioxide emissions as required under 40 CFR 60.8. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using the continuous emission monitoring system specified in paragraph (5) to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration or a 24-hour daily geometric average percent reduction using EPA Reference Method 19, sections 4.3 and 5.4, as applicable.
- (5) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- (6) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under 40 CFR 60.8, compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour (measured between 12:00 midnight and the following midnight) daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.
- (7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (7)(i) and (7)(ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
  - (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
  - (ii) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.



(8) The 1-hour arithmetic averages required under paragraph (6) shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).

(9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements of paragraph (7) are not met.

(10) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.

(11) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor as specified under 40 CFR 60.8.

(12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in 40 CFR 60 Appendix B.

(i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in 40 CFR 60 Appendix B, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).

(A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C shall be used.

(B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.

(ii) The span value of the continuous emissions monitoring system at the inlet to the sulfur dioxide control device shall be 125 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit. The span value of the continuous emission monitoring system at the outlet of the sulfur dioxide control device shall be 50 percent of the maximum estimated hourly potential sulfur dioxide emissions of the municipal waste combustor unit.

(13) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.

(14) When sulfur dioxide emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained by using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day that the affected facility is operated and combusting municipal solid waste for 90 percent of the days per calendar quarter that the affected facility is operated and combusting municipal solid waste.

[40 CFR 60.38b and 40 CFR 60.58b(e); and, PA 78-11(B) & PA 83-18(B)]

### Hydrogen Chloride

B.50. The procedures and test methods specified in paragraphs (1) through (8) shall be used for determining compliance with the hydrogen chloride emission limit.

(1) The EPA Reference Method 26 or 26A, as applicable, shall be used to determine the hydrogen chloride emission concentration. The minimum sampling time for Method 26 shall be 1 hour.

(2) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 26 test run for hydrogen chloride required by paragraph (1).

(3) The percent reduction in potential hydrogen chloride emissions (% P<sub>HCl</sub>) is computed using equation 2:

$$[\%P_{HCl}] = \left[ \frac{E_i - E_o}{E_i} \right] \times 100 \quad (\text{equation 2})$$

where:

%PHCl=percent reduction of the potential hydrogen chloride emissions achieved.

$E_i$ =potential hydrogen chloride emission concentration measured at the control device inlet, corrected to 7 percent oxygen (dry basis).

$E_o$ =controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

(4) The owner or operator of an affected facility may request that compliance with the hydrogen chloride emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).

(5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the hydrogen chloride emission concentrations or percent reductions from the three test runs is used to determine compliance.

(6) The owner or operator of an affected facility shall conduct an initial performance test for hydrogen chloride as required under 40 CFR 60.8.

(7) Following the date that the initial performance test for hydrogen chloride is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct a performance test for hydrogen chloride emissions on an annual basis (no more than 12 calendar months following the previous performance test).

(8) [reserved]

[40 CFR 60.33b and 40 CFR 60.58b(f)]

### Dioxin/Furan

B.51. The procedures and test methods specified in paragraphs (1) through (9) shall be used to determine compliance with the limits for dioxin/furan emissions.

(1) The EPA Reference Method 1 shall be used for determining the location and number of sampling points.

(2) The EPA Reference Method 3, 3A, or 3B, as applicable, shall be used for flue gas analysis.

(3) The EPA Reference Method 23 shall be used for determining the dioxin/furan emission concentration.

(i) The minimum sample time shall be 4 hours per test run.

(ii) An oxygen (or carbon dioxide) measurement shall be obtained simultaneously with each Method 23 test run for dioxins/furans.

(4) The owner or operator of an affected facility shall conduct an initial performance test for dioxin/furan emissions in accordance with paragraph (3), as required under 40 CFR 60.8.

(5) Following the date that the initial performance test for dioxins/furans is completed or is required to be completed under 40 CFR 60.8, the owner or operator of an affected facility shall conduct performance tests for dioxin/furan emissions in accordance with paragraph (3), according to one of the schedules specified in paragraphs (i) through (iii).

(i) For affected facilities, performance tests shall be conducted on an annual basis (no more than 12 calendar months following the previous performance test.)

(ii) [reserved]

(iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter (total mass), corrected to 7 percent

oxygen, for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., Unit 1, Unit 2, Unit 3, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen, the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen, performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen.

(6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60.59b(g)(4) for reporting the selection of this schedule.

(7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits specified in 40 CFR 60.52b(c) or the dioxin/furan emission level specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60.58b(m) for measuring and calculating the carbon usage rate.

(8) The owner or operator of an affected facility may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).

(9) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the dioxin/furan emission concentrations from the three test runs is used to determine compliance.

[40 CFR 60.38b and 40 CFR 60.58b(g)]

### Nitrogen Oxides

**B.52.** The procedures and test methods specified in paragraphs (1) through (12) shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under 40 CFR 60.52b(d).

(1) The EPA Reference Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission concentration.

(2) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).

(3) The owner or operator of an affected facility subject to the nitrogen oxides limit shall conduct an initial performance test for nitrogen oxides as required under 40 CFR 60.8. Compliance with the nitrogen oxides emission limit shall be determined by using the continuous emission monitoring system specified in paragraph (4) for measuring nitrogen oxides and calculating a 24-hour daily arithmetic average emission concentration using EPA Reference Method 19, section 4.1.

- (4) The owner or operator of an affected facility subject to the nitrogen oxides emission shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system.
  - (5) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8, compliance with the emission limit for nitrogen oxides shall be determined based on the 24-hour (measured between 12:00 midnight and the following midnight) daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.
  - (6) At a minimum, valid continuous emission monitoring system hourly averages shall be obtained as specified in paragraphs (i) and (ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
    - (i) At least 2 data points per hour shall be used to calculate each 1-hour arithmetic average.
    - (ii) Each nitrogen oxides 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
  - (7) The 1-hour arithmetic averages required by paragraph (5) shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
  - (8) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements of paragraph (6) are not met.
  - (9) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system. The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
  - (10) The owner or operator of an affected facility shall operate the continuous emission monitoring system according to Performance Specification 2 in Appendix B of 40 CFR 60 and shall follow the procedures and methods specified in paragraphs(i) and (ii).
    - (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 of Appendix B of 40 CFR 60, nitrogen oxides and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs(A) and (B).
      - (A) For nitrogen oxides, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used.
      - (B) For oxygen (or carbon dioxide), EPA Reference Method 3, 3A, or 3B, as applicable shall be used.
    - (ii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the municipal waste combustor unit.
  - (11) Quarterly accuracy determinations and daily calibration drift tests shall be performed in accordance with procedure 1 in Appendix F of 40 CFR 60.
  - (12) When nitrogen oxides continuous emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day for 90 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste.
- [40 CFR 60.38b and 40 CFR 60.58b(h); and, PA 78-11(B) & PA 83-18(B)]

Fugitive Ash

B.53. The procedures specified in paragraphs (1) through (4) shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. (See specific condition B.31.)

(1) The EPA Reference Method 22 shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b. The minimum observation time shall be a series of three 1-hour observations. The observation period shall include times when the facility is transferring ash from the municipal waste combustor unit to the area where ash is stored or loaded into containers or trucks.

(2) The average duration of visible emissions per hour shall be calculated from the three 1-hour observations. The average shall be used to determine compliance with 40 CFR 60.55b.

(3) The owner or operator of an affected facility shall conduct an initial performance test for fugitive ash emissions as required under 40 CFR 60.8.

(4) Following the date that the initial performance test for fugitive ash emissions is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for fugitive ash emissions on an annual basis (no more than 12 calendar months following the previous performance test).

[40 CFR 60.38b and 40 CFR 60.58b(k); and, PA 78-11(B) & PA 83-18(B)]

B.54. Compliance with the opacity standard in specific condition B.32. shall be determined by evaluating emissions from the refuse bunker and ash handling and loadout stations for Unit 3 in accordance with EPA Reference Method 9.

[PSD-FL-098]

Beryllium

*(reserved)*

~~B.55. The test method for beryllium emissions shall be EPA method 29 or 104, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run.~~

~~[Rule 62-213.440, F.A.C., and, PSD-FL-098]~~

Total Fluoride

*(reserved)*

~~B.56. The test method for total fluoride emissions shall be EPA method 13B, adopted and incorporated by reference in Rule 62-204.800, F.A.C. One sample shall constitute one test run.~~

~~[PSD-FL-098]~~

B.57. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**B.58. Operating Rate During Testing.** Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.  
[Rules 62-297.310(2) & (2)(b), F.A.C.]

**B.59. Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.  
[Rule 62-297.310(3), F.A.C.]

**B.60. Applicable Test Procedures.**

**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

- a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
- b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

**(b) Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

**(c) Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

**(d) Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached as part of this permit.

**(e) Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

**B.61. Required Stack Sampling Facilities.** When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

**B.62. Frequency of Compliance Tests.** The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

*1. (crossed)  
2. (crossed)* (a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

*6-8. (crossed)* 9. The owner or operator shall notify the DEP Southwest District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

*10. (crossed)* (b) Special Compliance Tests. When the DEP Southwest District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southwest District Office.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

### Compliance With Standards and Maintenance Requirements

**B.63.** Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined in accordance with performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

**B.64.** Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).

[40 CFR 60.11(b)]

**B.65.** The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.

[40 CFR 60.11(e)(5)]

### Monitoring Requirements

**B.66.** For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

**B.67.** If the owner or operator of an affected facility elects to submit continuous opacity monitoring system (COMS) data for compliance with the opacity standard as provided under 40 CFR 60.11(e)(5), he shall conduct a performance evaluation of the COMS as specified in Performance Specification 1, Appendix B, of 40 CFR 60 before the performance test required under 40 CFR 60.8 is conducted. Otherwise, the owner or operator of an affected facility shall conduct a performance evaluation of the COMS or continuous emission monitoring system (CEMS) during any performance test required under 40 CFR 60.8 or within 30 days thereafter in accordance with the applicable performance specification in



Appendix B of 40 CFR 60. The owner or operator of an affected facility shall conduct COMS or CEMS performance evaluations at such other times as may be required by the Administrator under section 114 of the Act.

(1) The owner or operator of an affected facility using a COMS to determine opacity compliance during any performance test required under 60.8 and as described in 40 CFR 60.11(e)(5) shall furnish the Administrator two or, upon request, more copies of a written report of the results of the COMS performance evaluation described in 40 CFR 60.13(c) at least 10 days before the performance test required under 60.8 is conducted.

[40 CFR 60.13(c)(1)]

B.68. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

(2) Unless otherwise approved by the Administrator, the following procedures shall be followed for continuous monitoring systems measuring opacity of emissions. Minimum procedures shall include a method for producing a simulated zero opacity-condition and an upscale (span) opacity condition using a certified neutral density filter or other related technique to produce a known obscuration of the light beam. Such procedures shall provide a system check of the analyzer internal optical surfaces and all electronic circuitry including the lamp and photo detector assembly.

[40 CFR 60.13(d)(1) and (2)]

B.69. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

(1) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring opacity of emissions shall complete a minimum of one cycle of sampling and analyzing for each successive 10-second period and one cycle of data recording for each successive 6-minute period.

(2) All continuous monitoring systems referenced by 40 CFR 60.13(c) for measuring emissions, except opacity, shall complete a minimum of one cycle of operation (sampling, analyzing, and data recording) for each successive 15-minute period.

[40 CFR 60.13(e)(1) and (2)]

B.70. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

B.71. When the effluents from a single affected facility or two or more affected facilities subject to the same emission standards are combined before being released to the atmosphere, the owner or operator may install applicable continuous monitoring systems (CMS) on each effluent or on the combined

effluent. When the affected facilities are not subject to the same emission standards, separate continuous monitoring systems shall be installed on each effluent. When the effluent from one affected facility is released to the atmosphere through more than one point, the owner or operator shall install an applicable continuous monitoring system on each separate effluent unless the installation of fewer systems is approved by the Administrator. When more than one continuous monitoring system is used to measure the emissions from one affected facility (e.g., multiple breechings, multiple outlets), the owner or operator shall report the results as required from each continuous monitoring system.

[40 CFR 60.13(g)]

**B.72.** Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or non reduced form (e.g., ppm pollutant and percent O<sub>2</sub> or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

**B.73. Determination of Process Variables.**

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

**CEM for Oxygen or Carbon Dioxide**

**B.74.** The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall comply with the test procedures and test methods specified in paragraphs (1) through (7).

(1) The span value of the oxygen (or carbon dioxide) monitor shall be 25 percent oxygen (or carbon dioxide).

(2) The monitor shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.

(3) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the affected facility, as specified under 40 CFR 60.8.

- (4) The monitor shall conform to Performance Specification 3 in Appendix B of 40 CFR 60 except for section 2.3 (relative accuracy requirement).
- (5) The quality assurance procedures of Appendix F of 40 CFR 60 except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.
- (6) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in paragraphs(i) through(iv). This relationship may be reestablished during performance compliance tests.
  - (i) The fuel factor equation in Method 3B shall be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3, 3A, or 3B, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.
  - (ii) Samples shall be taken for at least 30 minutes in each hour.
  - (iii) Each sample shall represent a 1-hour average.
  - (iv) A minimum of three runs shall be performed.
- (7) The relationship between carbon dioxide and oxygen concentrations that is established in accordance with paragraph (6) shall be submitted to the EPA Administrator as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.

[40 CFR 60.38b and 40 CFR 60.58b(b)]

(1) reserved  
(2) reserved  
(3) reserved

Recordkeeping and Reporting Requirements

B.75. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

- (4) A notification of any physical or operational change to an existing facility which may increase the emission rate of any air pollutant to which a standard applies, unless that change is specifically exempted under an applicable subpart or in 40 CFR 60.14(e). This notice shall be postmarked 60 days or as soon as practicable before the change is commenced and shall include information describing the precise nature of the change, present and proposed emission control systems, productive capacity of the facility before and after the change, and the expected completion date of the change. The Administrator may request additional relevant information subsequent to this notice.

[40 CFR 60.7(a)(4)]

B.76. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

B.77. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

- (1) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factor(s) used, and the date and time of commencement and completion of each time period of excess emissions. The process operating time during the reporting period.
  - (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the affected facility. The nature and cause of any malfunction (if known), the corrective action taken or preventative measures adopted.
  - (3) The date and time identifying each period during which the continuous monitoring system was inoperative except for zero and span checks and the nature of the system repairs or adjustments.
  - (4) When no excess emissions have occurred or the continuous monitoring system(s) have not been inoperative, repaired, or adjusted, such information shall be stated in the report.
- [40 CFR 60.7(c)(1), (2), (3), and (4)]

B.78. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

- (1) If the total duration of excess emissions for the reporting period is less than 1 percent of the total operating time for the reporting period and CMS downtime for the reporting period is less than 5 percent of the total operating time for the reporting period, only the summary report form shall be submitted and the excess emission report described in 40 CFR 60.7(c) need not be submitted unless requested by the Administrator.
- (2) If the total duration of excess emissions for the reporting period is 1 percent or greater of the total operating time for the reporting period or the total CMS downtime for the reporting period is 5 percent or greater of the total operating time for the reporting period, the summary report form and the excess emission report described in 40 CFR 60.7(c) shall both be submitted.

*{See attached Figure 1: Summary Report-Gaseous and Opacity Excess Emission and Monitoring System Performance}.*

[40 CFR 60.7(d)(1) and (2)]

B.79. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;
- (ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and
- (iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

(2) The frequency of reporting of excess emissions and monitoring systems performance (and summary) reports may be reduced only after the owner or operator notifies the Administrator in writing of his or her intention to make such a change and the Administrator does not object to the intended change. In deciding whether to approve a reduced frequency of reporting, the Administrator may review information concerning the source's entire previous performance history during the required recordkeeping period prior to the intended change, including performance test results, monitoring data, and evaluations of an owner or operator's conformance with operation and maintenance requirements. Such information may be used by the Administrator to make a judgment about the source's potential for noncompliance in the future. If the Administrator disapproves the owner or operator's request to reduce the frequency of reporting, the Administrator will notify the owner or operator in writing within 45 days after receiving

notice of the owner or operator's intention. The notification from the Administrator to the owner or operator will specify the grounds on which the disapproval is based. In the absence of a notice of disapproval within 45 days, approval is automatically granted.

(3) As soon as monitoring data indicate that the affected facility is not in compliance with any emission limitation or operating parameter specified in the applicable standard, the frequency of reporting shall revert to the frequency specified in the applicable standard, and the owner or operator shall submit an excess emissions and monitoring systems performance report (and summary report, if required) at the next appropriate reporting period following the noncomplying event. After demonstrating compliance with the applicable standard for another full year, the owner or operator may again request approval from the Administrator to reduce the frequency of reporting for that standard as provided for in 40 CFR 60.7(e)(1) and (e)(2).

[40 CFR 60.7(e)(1), (2), and (3)]

**B.80.** Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[40 CFR 60.7(f); and, Rule 62-213.440(1)(b)2.b., F.A.C.]

**B.81. Notification of Construction or Reconstruction.** The owner or operator of an affected facility with a capacity to combust greater than 250 tons per day shall submit a notification of construction, which includes the information specified in paragraphs (1) through (4).

(1) Intent to construct.

(2) Planned initial startup date.

(3) The types of fuels that the owner or operator plans to combust in the affected facility.

(4) The municipal waste combustor unit capacity and supporting capacity calculations prepared in accordance with 40 CFR 60.58b(j).

[40 CFR 60.39b and 40 CFR 60.59b(b)]

**B.82.** The owner or operator of an affected facility subject to the standards under 40 CFR. 60.53b, 60.54b, and 60.55b shall maintain records of the information specified in paragraphs (1) through (14), as applicable, for each affected facility for a period of at least 5 years.

(1) The calendar date of each record.

(2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii):

(i) The measurements specified in paragraphs (A) through (D) shall be recorded and be available for submittal to the Administrator or review onsite by an inspector.

(A) All 6-minute average opacity levels as specified under 40 CFR 60.58b(c).

(B) All 1-hour average sulfur dioxide emission concentrations as specified under 40 CFR 60.58b(e).

(C) All 1-hour average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).

(D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).

- (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (2)(ii)(A) through (2)(ii)(D) shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an inspector.
  - (A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as specified under 40 CFR 60.58b(e).
  - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
  - (C) All 4-hour block ~~or 24-hour daily~~ arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i).
  - (D) All 4-hour block arithmetic average municipal waste combustor unit load levels and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (2)(ii)(A) through (2)(ii)(D), or the opacity levels recorded under paragraph (2)(i)(A) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (i) through (v).
  - (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(i) during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations.
  - (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(ii) during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations.
  - (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations.
  - (iv) The total carbon usage for each calendar quarter estimated as specified by 40 CFR 60.58b(m)(3), with supporting calculations.
  - (v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).
- (5) [Reserved]
- (6) Identification of the calendar dates for which the minimum number of hours of any of the data specified in paragraphs (i) through (v) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
  - (i) Sulfur dioxide emissions data;
  - (ii) Nitrogen oxides emissions data;
  - (iii) Carbon monoxide emissions data;
  - (iv) Municipal waste combustor unit load data; and
  - (v) Particulate matter control device temperature data.
- (7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (8) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under Appendix F of this part, procedure 1.
- (9) The test reports documenting the results of the initial performance test and all annual performance tests listed in paragraphs (i) and (ii) shall be recorded along with supporting calculations.

- (i) The results of the initial performance test and all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
  - (ii) For the initial dioxin/furan performance test and all subsequent dioxin/furan performance tests recorded under paragraph (9)(i), the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
- (10) [Reserved]
- (11) The records specified in paragraphs (i) through (iii).
- (i) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required by 40 CFR 60.54b(a) including the dates of initial and renewal certifications and documentation of current certification.
  - (ii) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required by 40 CFR 60.54b(b) including the dates of initial and renewal certifications and documentation of current certification.
  - (iii) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course as required by 40 CFR 60.54b(d) including documentation of training completion.
- (12) Records showing the names of persons who have completed a review of the operating manual as required by 40 CFR 60.54b(f) including the date of the initial review and subsequent annual reviews.
- (13) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the average carbon mass feed rates recorded under (4)(iii) were less than either of the hourly carbon feed rates estimated during performance tests for mercury or dioxin/furan emissions and recorded under paragraphs (4)(i) and (4)(ii), respectively, with reasons for such feed rates and a description of corrective actions taken.
- (14) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (e.g., screw feeder speed) recorded under paragraph (4)(v) are below the level(s) estimated during the performance tests as specified in 40 CFR 60.58b(m)(1)(i) and 40 CFR 60.58b(m)(1)(ii), with reasons for such occurrences and a description of corrective actions taken.
- [40 CFR 60.39b and 40 CFR 60.59b(d)]

**B.83.** The owner or operator of an affected facility shall submit the information specified in paragraphs (1) through (6) in the initial performance test report.

- (1) The initial performance test data as recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) for the initial performance test for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature.
- (2) The test report documenting the initial performance test recorded under 40 CFR 60.59b(d)(9) for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emissions.
- (3) The performance evaluation of the continuous emission monitoring system using the applicable performance specifications in Appendix B of this part.

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(4) The maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device inlet temperature(s) established during the initial dioxin/furan performance test as recorded under 40 CFR 60.59b(d)(9).

(5) For affected facilities that apply activated carbon injection for mercury control, the owner or operator shall submit the average carbon mass feed rate recorded under 40 CFR 60.59b(d)(4)(i).

(6) For those affected facilities that apply activated carbon injection for dioxin/furan control, the owner or operator shall submit the average carbon mass feed rate recorded under 40 CFR 60.59b(d)(4)(ii).

[40 CFR 60.39b and 40 CFR 60.59b(f)]

**B.84.** Following the first year of municipal combustor operation, the owner or operator of an affected facility shall submit an annual report including the information specified in paragraphs (1) through (4), as applicable, no later than February 1 of each year following the calendar year in which the data were collected (once the unit is subject to permitting requirements under Title V of the Act, the owner or operator of an affected facility must submit these reports semiannually).

(1) A summary of data collected for all pollutants and parameters regulated under this subpart, which includes the information specified in paragraphs (i) through (v).

(i) A list of the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels achieved during the performance tests recorded under 40 CFR 60.59b (d)(9).

(ii) A list of the highest emission level recorded for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature based on the data recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D).

(iii) List the highest opacity level measured, based on the data recorded under 40 CFR 60.59b(d)(2)(i)(A).

(iv) The total number of days that the minimum number of hours of data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature data were not obtained based on the data recorded under 40 CFR 60.59b(d)(6).

(v) The total number of hours that data for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load, and particulate matter control device temperature were excluded from the calculation of average emission concentrations or parameters based on the data recorded under 40 CFR 60.59b(d)(7).

(2) The summary of data reported under paragraph (1) shall also provide the types of data specified in paragraphs (1)(i) through (1)(vi) for the calendar year preceding the year being reported, in order to provide the Administrator with a summary of the performance of the affected facility over a 2-year period.

(3) The summary of data including the information specified in paragraphs (1) and (2) shall highlight any emission or parameter levels that did not achieve the emission or parameter limits specified under this subpart.

(4) A notification of intent to begin the reduced dioxin/furan performance testing schedule specified in 40 CFR 60.58b(g)(5)(iii) during the following calendar year.

[40 CFR 60.39b and 40 CFR 60.59b(g)]

**B.85.** The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (1) through (5) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart, according to the schedule specified under paragraph (6).

(1) The semiannual report shall include information recorded under 40 CFR 60.59b(d)(3) for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, and opacity.



(2) For each date recorded as required by 40 CFR 60.59b(d)(3) and reported as required by paragraph (1), the semiannual report shall include the sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, particulate matter control device inlet temperature, or opacity data, as applicable, recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) and (d)(2)(i)(A), as applicable.

(3) If the test reports recorded under 40 CFR 56.59b(d)(9) document any particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission levels that were above the applicable pollutant limits, the semiannual report shall include a copy of the test report documenting the emission levels and the corrective actions taken.

(4) The semiannual report shall include the information recorded under 40 CFR 60.59b(d)(15) for the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate.

(5) For each operating date reported as required by paragraph (4), the semiannual report shall include the carbon feed rate data recorded under 40 CFR 60.59b(d)(4)(iii).

(6) Semiannual reports required by this condition shall be submitted according to the schedule specified in paragraphs (i) and (ii).

(i) If the data reported in accordance with paragraphs (1) through (5) were collected during the first calendar half, then the report shall be submitted by August 1 following the first calendar half.

(ii) If the data reported in accordance with paragraphs (1) through (5) were collected during the second calendar half, then the report shall be submitted by February 1 following the second calendar half.

[40 CFR 60.39b and 40 CFR 60.59b(h)]

**B.86.** All reports specified under 40 CFR 60.59b(a), (b), (c), (f), (g), (h), and (i) shall be submitted as a paper copy, postmarked on or before the submittal dates specified under these paragraphs, and maintained onsite as a paper copy for a period of 5 years.

[40 CFR 60.39b and 40 CFR 60.59b(j)]

**B.87.** All records specified under 40 CFR 60.59b(d) and (e) shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.

[40 CFR 60.39b and 40 CFR 60.59b(k)]

**B.88.** If the owner or operator of an affected facility would prefer a different annual or semiannual date for submitting the periodic reports required by 40 CFR 60.59b(g), (h) and (i), then the dates may be changed by mutual agreement between the owner or operator and the Administrator according to the procedures specified in 40 CFR 60.19(c) of Subpart A of this part.

[40 CFR 60.39b and 40 CFR 60.59b(l)]

**B.89.** In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southwest District Office 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 DEP Southwest District Office. Rule 62-210.700(6), F.A.C.]

**B.90.** Submit to the Department a written report of emissions in excess of emission limiting standard for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

[Rule 62-213.440, F.A.C.]

~~B.91. For Unit 3, CEM data recorded during periods of startup, shutdown, and malfunction shall be reported but excluded from compliance averaging periods for carbon monoxide and opacity.~~

~~[PSD-FL-098(A)]~~

(reserved)

A copy

B.92. Two copies of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.

~~[PA 78-11(B) & PA 83-18(B)]~~

Rule 62-4.070(3), F.A.C.; Power Plant Safety, Conditions of Certificate for Pinellas County Resource Recovery ]

B.93. Test Reports.

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southwest District Office on the results of each such test.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person

(b) [reserved]

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who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rule 62-297.310(8), F.A.C.]

B.94. Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners of each MSW unit and the equivalent heat input from natural gas (calculated using the heat value for natural gas provided by the natural gas supplier).

[Rule 62-213.440, F.A.C.]

B.95. Charging Rate Monitoring. The average daily solid waste charging rate shall be determined on a monthly basis and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the Facility; and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rule 62-213.440, F.A.C.; and, 40 CFR 60.53(a)]

*Not Federally Enforceable*

B.96.V Segregated Solid Waste Record Keeping. The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific condition B.11.:

(1) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition B.11., which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

(2) Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous ~~29 days~~. The resultant ~~30 day~~ total weight of tires shall be divided by the total weight of all waste materials received in the same ~~30 day~~ period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

(3) Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous ~~29 days~~. The resultant ~~30 day~~ total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same ~~30 day~~ period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[Rule 62-213.440, F.A.C.]

*calendar month*  
*days of one current calendar month.*  
*At the end of each calendar month,*  
*the resultant calendar month's*

Operator Training and Certification

B.97. Standards for municipal waste combustor operator training and certification.

(a) ~~No later than the date 6 months after the date of startup of an affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later,~~ Each chief facility operator and shift supervisor shall obtain and maintain a current provisional operator certification from either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference - see 40 CFR 60.17 of Subpart A)] or a State certification program.

~~(b) No later than the date 6 months after the date of startup of an affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later, Each chief facility operator and shift supervisor shall have completed full certification or shall have scheduled a full certification exam with either the American Society of Mechanical Engineers [QRO-1-1994 (incorporated by reference - see 40 CFR 60.17 of Subpart A)] or a State certification program.~~

(c) No owner or operator of an affected facility shall allow the facility to be operated at any time unless one of the following persons is on duty and at the affected facility: A fully certified chief facility operator, a provisionally certified chief facility operator who is scheduled to take the full certification exam ~~according to the schedule specified in paragraph (b)~~, a fully certified shift supervisor, a provisionally certified shift supervisor who is scheduled to take the full certification exam ~~according to the schedule specified in paragraph (b)~~.

~~(1) The requirement specified in paragraph (c) shall take effect 6 month after the date of startup of the affected facility or 12 months after State plan approval [40 CFR 60.39b(c)(4)(ii)], whichever is later.~~ (reserved)

(2) If one of the persons listed in paragraph (c) must leave the affected facility during their operating shift, a provisionally certified control room operator who is onsite at the affected facility may fulfill the requirement in paragraph (c).

(d) All chief facility operators, shift supervisors, and control room operators at affected facilities must complete the EPA or State municipal waste combustor operator training course ~~no later than the date 6 months after the date of startup of the affected facility, or by 12 months after State plan approval [40 CFR 60.39b(c)(4)(iii)], whichever is later.~~

(e) The owner or operator of an affected facility shall develop and update on a yearly basis a site-specific operating manual that shall, at a minimum, address the elements of municipal waste combustor unit operation specified in paragraph (e)(1) through (e)(11).

(1) A summary of the applicable standards;

(2) A description of basic combustion theory applicable to a municipal waste combustor unit;

(3) Procedures for receiving, handling, and feeding municipal solid waste;

(4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;

(5) Procedures for maintaining proper combustion air supply levels;

(6) Procedures for operating the municipal waste combustor unit within the standards established;

(7) Procedures for responding to periodic upset or off-specification conditions;

(8) Procedures for minimizing particulate matter carryover;

(9) Procedures for handling ash;

(10) Procedures for monitoring municipal waste combustor unit emissions; and

(11) Reporting and recordkeeping procedures.

(f) The owner or operator of an affected facility shall establish a training program to review the operating manual according to the schedule specified in paragraphs (f)(1) and (f)(2) with each person who has responsibilities affecting the operation of an affected facility including, but not limited to, chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers.

(1) Each person specified in paragraph (f) shall undergo initial training no later than the date ~~specified in paragraph (f)(1)(i), (f)(1)(ii), or (f)(1)(iii), whichever is later.~~

~~(i) The date 6 months after the date of startup of the affected facility;~~

~~(ii) The date prior to the day the person assumes responsibilities affecting municipal waste combustor unit operation; or~~

~~(iii) 12 months after State plan approval [40 CFR 60.39b(c)(4)(iii)].~~

(2) Annually, following the initial review required by paragraph (f)(1).

(g) The operating manual required by paragraph (e) shall be kept in a readily accessible location for all persons required to undergo training under paragraph (f). The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request.  
[40 CFR 60.35b, 40 CFR 60.39b(c)(4)(ii) & (iii), and 40 CFR 60.54b]

B.98. The requirement specified in 40 CFR 60.54b(d) does not apply to chief operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers ~~on or before the date of State plan approval.~~ (Specific Condition B.97(d))  
[40 CFR 60.39b(c)(4)(iii)(A)]

B.99. The owner or operator of a designated facility may request that the EPA Administrator waive the requirement specified in 40 CFR 60.54b(d) for chief operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers ~~on or before the date of State plan approval.~~  
[40 CFR 60.39b(c)(4)(iii)(B)]

B.100. The initial training requirements specified in 40 CFR 60.54b(f)(1) shall be completed no later than the date ~~specified in (1), (2), or (3), whichever is later.~~  
~~(1) The date six (6) months after the date of startup of the affected facility,~~  
~~(2) Twelve (12) months after State plan approval, or~~  
~~(3) The date prior to the day when the person assumes responsibilities affecting municipal waste combustor unit operation.~~  
[40 CFR 60.39b(c)(4)(iii)(C)]

#### Miscellaneous Requirements.

B.101. Activated Carbon Injection. The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit (see specific condition B.21.), or the dioxin/furan emission limits (see specific condition B.28.), or the dioxin/furan emission level specified in 40 CFR 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs (1) through (3).

(1) During the performance tests for dioxins/furans and mercury, as applicable, the owner or operator shall estimate an average carbon mass feed rate based on carbon injection system operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed, as specified in paragraphs (i) and (ii).

(i) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for mercury emissions and each subsequent performance test for mercury emissions.

(ii) An average carbon mass feed rate in kilograms per hour or pounds per hour shall be estimated during the initial performance test for dioxin/furan emissions and each subsequent performance test for dioxin/furan emissions.

(2) During operation of the affected facility, the carbon injection system operating parameter(s) that are the primary indicator(s) of the carbon mass feed rate (e.g., screw feeder setting) must equal or exceed the level(s) documented during the performance tests specified under paragraphs (1)(i) and (1)(ii).

(3) The owner or operator of an affected facility shall estimate the total carbon usage of the plant (kilograms or pounds) for each calendar quarter by two independent methods, according to the procedures in paragraphs (i) and (ii).

(i) The weight of carbon delivered to the plant.

(ii) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (1), and

sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

[40 CFR 60.38b and 40 CFR 60.58b(m)]

**B.102. Acid Rain Part Application.** For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C., the designated representative of the source containing the unit shall submit a complete Acid Rain Part application governing such unit to the Department before the later of January 1, 1998, or March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis.

[Rule 62-214.320(1)(h), F.A.C.]

**B.103. Operation and Maintenance Plans.** A separate Operation and Maintenance (O&M) plan shall be on file with DEP Southwest District Office for each MWC unit and associated air pollution control devices. These emissions units and associated control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent 5 years and be made available for inspection upon request.

[Rule 62-213.440(b), F.A.C.; and, Pinellas County Ordinance 97-05, Section 22, Sec. 58-128]

Subsection C. This section addresses the following emissions units.

| E.U. ID No. | Brief Description: Material Handling Systems and Treatment Operations |
|-------------|---|
| -004        | Hydrated Lime Storage Silo (reserved)                                 |
| -005        | Metal Recovery System (MRS)   |
| -006        | Activated Carbon Storage Silo (reserved)                              |
| -007        | Lime Storage Silo (reserved)  |
| -008        | Ash Conditioning Building (ACB)                                       |

~~Emissions unit -004 is a 2,667 cubic foot hydrated lime storage silo manufactured by Chemco. This emissions unit is located in the water softening area of the facility. It is part of a lime system designed to mix lime with water to produce lime slurry and store and transfer the lime slurry to the clarifier in the water treatment facility. A supply truck pneumatically transfers dry lime to the silo through a fill line. Particulate matter and visible emissions from the silo are controlled by a Siloair dust filter system (Model No. VS20KS3). The filter system parameters are as follows: stack height = 60 feet; exit diameter = 0.6 feet; exit temperature = 77°F, actual volumetric flowrate = 1,000 acfm; total cloth filtration area = 215.0 ft<sup>2</sup>. The initial startup date of the silo was February 15, 1995.~~

*ambient*

Emissions unit -005 is the Metal Recovery System (MRS). The MRS separates up to 112 tons per hour of MWC residue into ferrous and nonferrous metal streams and an aggregate stream. The aggregate is later deposited in a landfill. A cyclone/wet scrubber is used to capture the lighter, non-metallic ash fugitives that separate from the ash stream in the MRS and reduce fugitive ash emissions. The MRS is located inside the Ash Storage and Processing Building. This building has 4 roof ventilation fans and an attached conveyor enclosure with 2 roof ventilation fans. Since emissions from the MRS are controlled by the cyclone/wet scrubber and the ash is wetted before conveying and processed and stored in a wet state, no emissions controls are on the Ash Storage and Processing Building. Particulate matter and visible emissions are controlled by a Newell Industries, Inc. cyclone/wet scrubber (Model No. 80104). The scrubber parameters are as follows: stack height = 54 feet; exit diameter = 0.7 feet; exit temperature = 77°F, actual volumetric flowrate = 40,000 acfm. The initial startup date of the scrubber was November 1, 1989.

*ambient*

~~Emissions unit -006 is a 30 ton capacity silo for storage of activated carbon powder manufactured by Chemco. It is part of the activated carbon injection (ACI) system for control of mercury emissions from the municipal waste combustion units. A supply truck pneumatically transfers the activated carbon powder to the silo through a fill line. Particulate matter emissions are controlled by a Wheelabrator Canada, Inc. baghouse (Model No. 22WSC-BV). The baghouse parameters are as follows: stack height = 43 feet; exit diameter = 0.7 feet; exit temperature = 77°F, actual volumetric flowrate = 1,200 acfm. The initial startup date of the silo was September 24, 1998.~~

*ambient*

~~Emissions unit -007 is a 70 ton capacity silo for storage of pebble lime. It is part of the spray dry absorber (SDA) system used for control of acid gases and sulfur dioxide emissions from the municipal waste combustion units. A supply truck pneumatically transfers pebble lime to the silo through a fill line. Particulate matter emissions are controlled by a Wheelabrator Canada, Inc. baghouse (Model No. 22WSC-BV). The baghouse parameters are as follows: stack height = 58 feet; exit diameter = 0.7 feet; exit temperature = 77°F, actual volumetric flowrate = 1,200 acfm. The initial startup date of the silo was September 24, 1998.~~

*ambient*

Emissions unit -008 is the Ash Conditioning Building (ACB). It contains two 20 ton capacity fly ash surge bins. Stabilizers such as lime and phosphoric acid are added to condition the fly ash. Particulate matter emissions are controlled by a Tri-Mer Corporation wet venturi scrubber (Model No. 50-H). The scrubber parameters are as follows: stack height = 65 feet; exit diameter = 1.3 feet; exit temperature = ~~77~~ ambient °F, actual volumetric flowrate = approx. 5,000 acfm. The initial startup date of the scrubber was September 24, 1998.

{Permitting note(s): ~~Emissions unit 004 is a minor source regulated under AC52-259351 (January 24, 1995); Rule 62-210.300, F.A.C., Permits Required; and, PA 78-11(B, C) and PA 83-18 (B, C).~~ Emissions units -005 through -008 are minor sources regulated under Rule 62-210.300, F.A.C., Permits Required; and, PA 78-11(B, C) and PA 83-18 (B, C).}

The following <sup>and</sup> specific conditions apply to the emissions unit(s) listed above:

### Essential Potential to Emit (PTE) Parameters

#### C.1. Permitted Capacity.

- (1) ~~The normal filling rate for the hydrated lime storage silo shall be at least 25 tons/hour and occur in less than one hour.~~ (reserved)
  - (2) ~~The filling rate for the activated carbon and lime storage silos shall be at least 20,000 and 30,000 lbs/hr, respectively.~~ (reserved)
  - (3) The charging rate for the ACB shall not exceed 41.7 tons/hr fly ash.
  - (4) The charging rate for the MRS shall not exceed 112 tons/hr ash.
- ~~(1) AC52-259351; (X-3) Revised Initial Title V Application received 03/25/99; (4) Initial Title V Application received June 14, 1996]~~

{Permitting note: The charging rate/filling rate limitations have been placed in each permit to identify the capacity of each unit for the purposes of confirming that emissions testing is conducted within 90 to 100 percent of the unit's rated capacity (or to limit future operation to 110 percent of the test load), to establish appropriate emission limits and to aid in determining future rule applicability. The averaging time for this condition is based on the run time of the specified test method.}

C.2. Emissions Unit Operating Rate Limitation After Testing. See specific condition C.15.  
[Rule 62-297.310(2), F.A.C.]

C.3. Hours of Operation. Each unit may operate continuously, i.e., 8,760 hrs/yr.  
[Rules 62-213.440 and 62-210.200(PTE), F.A.C.]

### Emission Limitations and Standards

{Permitting Note: The attached Table 1-1, Summary of Air Pollutant Standards and Terms, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

#### C.4. Particulate Matter Emissions.

- (1) ~~Hydrated lime storage silo. Particulate matter emissions shall not exceed 0.005 gr/dscf from the baghouse outlet at the hydrated lime storage silo.~~ (reserved)
- (2) MRS. Particulate matter emissions shall not exceed 0.0102 gr/dscf from the cyclone/wet scrubber system outlet at the MRS.



(3) ~~Activated carbon and lime storage silos. Particulate matter emissions shall not exceed 0.005 gr/dscf from the baghouse outlet at each silo.~~ *(crossed)*

(4) ACB. Particulate matter emissions shall not exceed 0.03 gr/dscf from the wet scrubber system outlet at the ACB.

~~[(1) Rule 62-297.620(4), F.A.C.; and, Revised Title V application pages received September 15, 1999.~~

~~(2) Applicant request; and, PA 78-11(B,C) & PA 83-18(B,C).~~

~~(3) Rule 62-297.620(4), F.A.C.; applicant request; and, PA 78-11(B,C) & PA 83-18(B,C).~~

~~(4) PA 78-11(C) & PA 83-18(C).]~~

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

C.5. Visible Emissions. Visible emissions from each emissions unit shall not exceed 20% opacity.

[Rules 62-296.320(4)(b)1., F.A.C.]

{Permitting note: The averaging time for this condition is based on the run time of the specified test method.}

### Excess Emissions

C.6. Excess emissions resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and 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.]

C.7. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

[Rule 62-210.700(4), F.A.C.]

### Monitoring of Operations

C.8. Determination of Process Variables.

(a) Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.

(b) Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

[Rule 62-297.310(5), F.A.C.]

C.9. Operation and Maintenance Plans. A separate Operation and Maintenance (O&M) plan shall be on file with DEP Southwest District Office for the ~~hydrated lime storage silo and associated baghouse, lime storage silo and associated baghouse, activated carbon storage silo and associated baghouse, the MRS and associated scrubber,~~ and the ACB and associated scrubber. These emissions units and

associated control devices shall be operated and maintained in accordance with the submitted O&M plans. The O&M documentation logs shall be maintained for a minimum of the most recent 5 years and be made available for inspection upon request.

[~~AC52-268853~~; Rule 62-213.440(b), F.A.C.; and, Pinellas County Ordinance 97-05, Section 22, Sec. 58-128]

### Test Methods and Procedures

{Permitting note: Table 2-1, Summary of Compliance Requirements, summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.}

**C.10. Annual Tests Required.** Annual visible emissions compliance tests shall be performed for each emissions unit.

[Rule 62-297.310(7), F.A.C. ; and, ~~AC52-259351~~]

**C.11. Visible Emissions.** The test method for visible emissions for all emissions units shall be EPA Method 9, adopted and incorporated in Rule 62-204.800, F.A.C.

[~~AC52-259351 (E.U. ID No. 004)~~; and, PA 78-11(B,C) & PA 83-18(B,C) (all units)]

**C.12. Particulate Matter Emissions.** The test method for particulate matter emissions for all units shall be EPA Method 5, adopted and incorporated in Rule 62-204.800, F.A.C.

[PA 78-11(B,C) & PA 83-18(B,C)]

~~C.13. Particulate Matter Emissions – storage silos (E.U. ID Nos. 004, 006, and 007). In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Department waives any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specifies an alternative standard of 5% opacity.~~

~~If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit (see specific condition C.4.) is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule (see specific condition C.12.).~~

~~[Rule 62-297.620(4), F.A.C.; AC52-259351; and, PA 78-11(B,C) & PA 83-18(B,C)]~~ (reserved)

**C.14. Required Number of Test Runs.** For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.

[Rule 62-297.310(1), F.A.C.]

**C.15. Operating Rate During Testing.** Testing of emissions shall be conducted with each emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate

allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

[Rules 62-297.310(2) & (2)(b), F.A.C.]

**C.16. Calculation of Emission Rate.** The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the separate test runs unless otherwise specified in a particular test method or applicable rule.

[Rule 62-297.310(3), F.A.C.]

**C.17. Applicable Test Procedures.**

**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.

2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.

b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

**(b) Minimum Sample Volume.** Unless otherwise specified in the applicable rule, the minimum sample volume per run shall be 25 dry standard cubic feet.

**(c) Required Flow Rate Range.** For EPA Method 5 particulate sampling, acid mist/sulfur dioxide, and fluoride sampling which uses Greenburg Smith type impingers, the sampling nozzle and sampling time shall be selected such that the average sampling rate will be between 0.5 and 1.0 actual cubic feet per minute, and the required minimum sampling volume will be obtained.

**(d) Calibration of Sampling Equipment.** Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, attached to this permit.

**(e) Allowed Modification to EPA Method 5.** When EPA Method 5 is required, the following modification is allowed: the heated filter may be separated from the impingers by a flexible tube.

[Rule 62-297.310(4), F.A.C.]

C.18. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

[Rule 62-297.310(6), F.A.C.]

C.19. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units that are required to conduct an annual compliance test may submit the most recent annual compliance test to satisfy the requirements of this provision. In renewing an air operation permit pursuant to Rule 62-210.300(2)(a)3.b., c., or d., F.A.C., the Department shall not require submission of emission compliance test results for any emissions unit that, during the year prior to renewal:

- a. Did not operate; or
- b. In the case of a fuel burning emissions unit, burned liquid and/or solid fuel for a total of no more than 400 hours.

4. During each federal fiscal year (October 1 - September 30), unless otherwise specified by rule, order, or permit, the owner or operator of each emissions unit shall have a formal compliance test conducted for:

- a. Visible emissions, if there is an applicable standard;
- b. Each of the following pollutants, if there is an applicable standard, and if the emissions unit emits or has the potential to emit: 5 tons per year or more of lead or lead compounds measured as elemental lead; 30 tons per year or more of acrylonitrile; or 100 tons per year or more of any other regulated air pollutant; and
- c. Each NESHAP pollutant, if there is an applicable emission standard.

5. An annual compliance test for particulate matter emissions shall not be required for any fuel burning emissions unit that, in a federal fiscal year, does not burn liquid and/or solid fuel, other than during startup, for a total of more than 400 hours.

9. The owner or operator shall notify the DEP Southwest District Office, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

(b) Special Compliance Tests. When the DEP Southwest District Office, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the DEP Southwest District Office.

(c) Waiver of Compliance Test Requirements. If the owner or operator of an emissions unit that is subject to a compliance test requirement demonstrates to the Department, pursuant to the procedure established in Rule 62-297.620, F.A.C., that the compliance of the emissions unit with an applicable weight emission limiting standard can be adequately determined by means other than the designated test procedure, such as specifying a surrogate standard of no visible emissions for particulate matter sources equipped with a bag house or specifying a fuel analysis for sulfur dioxide emissions, the Department shall waive the compliance test requirements for such emissions units and order that the alternate means of determining compliance be used, provided, however, the provisions of Rule 62-297.310(7)(b), F.A.C., shall apply.

[Rule 62-297.310(7), F.A.C.; and, SIP approved]

1. [renewed]  
2. [renewed]

6.-8. [renewed]  
10. [renewed]

### Recordkeeping and Reporting

C.20. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the DEP Southwest District Office 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 DEP Southwest District Office. [Rule 62-210.700(6), F.A.C.]

#### C.21. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southwest District Office on the results of each such test.
- (b) The required test report shall be filed with the DEP Southwest District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
  1. The type, location, and designation of the emissions unit tested.
  2. The facility at which the emissions unit is located.
  3. The owner or operator of the emissions unit.
  4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
  5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
  6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
  7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
  8. The date, starting time and duration of each sampling run.
  9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
  10. The number of points sampled and configuration and location of the sampling plane.
  11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
  12. The type, manufacturer and configuration of the sampling equipment used.
  13. Data related to the required calibration of the test equipment.
  14. Data on the identification, processing and weights of all filters used.
  15. Data on the types and amounts of any chemical solutions used.
  16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
  17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
  18. All measured and calculated data required to be determined by each applicable test procedure for each run.
  19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
  20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**Subsection D. This section addresses the following emissions unit.**

| E.U. ID No. | Brief Description              |
|-------------|--------------------------------|
| -009        | Municipal Solid Waste Landfill |

Pinellas County Resource Recovery Facility contains a contiguous landfill, Bridgeway Acres. It has a maximum design capacity of 8.4 million Megagrams. This site began modification/reconstruction in 1985 and first accepted waste in 1976. The scheduled landfill closure date is 2036. The landfill currently accepts both municipal solid waste and ash from the resource recovery facility. In compliance with 40 CFR Subpart Cc regulations adopted and incorporated by Rule 62-204.800(8), F.A.C., NMOC emissions from Bridgeway acres were calculated. Tier I calculation yielded an NMOC value of 249 Megagrams per year (Mg/year), which is greater than the threshold NMOC value of 50 Mg/yr. Tier II testing was used to obtain a parameter for NMOC calculation specific to the Bridgeway Acres landfill. The Tier II calculated value was below the 50 Mg/yr threshold NMOC value and therefore a gas collection and control system was not installed at this landfill site.

{Permitting notes: This emissions unit is regulated under 40 CFR 60, Subpart Cc, Emissions Guidelines and Compliance Times for Municipal Solid Waste Landfills, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(c), F.A.C. Also, please note that conditions in 40 CFR 60, Subpart Cc, are contained in 40 CFR 60, Subpart WWW.} *same*

The following specific Conditions apply to the emissions units listed above:

General

D.1. Designated Facility:

- (a) The designated facility to which the guidelines apply is each existing MSW landfill
- (i) for which construction, reconstruction or modification was commenced before May 30, 1991; and
  - (ii) which has accepted waste at any time since November 8, 1987, or has additional design capacity available for future waste deposition.
- (b) Physical or operational changes made to an existing MSW landfill solely to comply with the provisions of Rule 62-204.800(8)(c), F.A.C. are not considered a modification or reconstruction and would not subject an existing MSW landfill to the requirements of 40 CFR 60, Subpart WWW [see 40 CFR 60.750].
- (c) reserved
- (d) When a MSW landfill subject to 40 CFR 60, Subpart Cc is closed, the owner or operator is no longer subject to the requirement to maintain an operating permit under 40 CFR 70 or 71 for the landfill if the landfill is not otherwise subject to the requirements of either 40 CFR 70 or 71 and if either of the following conditions are met.
- (1) The landfill was never subject to the requirement for a control system under Rule 62-204.800(8)(c)3.; or
  - (2) The owner or operator meets the conditions for control system removal specified in 40 CFR 60.752(b)(2)(v).

[Rules 62-204.800(8)(c)1. & 3., F.A.C.; 40 CFR 60.32c; and, 40 CFR 60.33c(a)(1)]

D.2. Definitions. For the purposes of Rule 62-204.800(8), F.A.C., the definitions contained in the various provisions of 40 CFR Part 60, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Part 60, shall mean the Secretary or the Secretary's designee.

[Rule 62-204.800(8)(a)2., F.A.C.; and, 40 CFR 60.2]

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**D.3. Definitions – Subpart Cc.** The terms used but not defined in 40 CFR 60, Subpart Cc have the meaning given to them in the Act and in Subparts A, B, and WWW of 40 CFR 60.  
[Rule 62-204.800(8)(c)2., F.A.C.; and, 40 CFR 60.31c]

**D.4. Standards for Air Emissions from MSW Landfills.** Any MSW landfill which has a design capacity greater than or equal to 2.5 million Megagrams and 2.5 million cubic meters but whose NMOC emission rate as of December 31, 1996, is less than 50 Megagrams per year shall comply with the provisions of 40 CFR 60.752(b)(2)(i) through (v) (see specific condition D.5.) commencing from December 31 of the first year after 1996 for which the nonmethane organic compound emission rate equals or exceeds 50 Megagrams per year.  
[Rule 62-204.800(8)(c)3.b., F.A.C.]

**D.5. Collection and Control System Requirements.**

If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, the owner or operator shall:

(i) Submit a collection and control system design plan prepared by a professional engineer to the Administrator within 1 year:

(A) The collection and control system as described in the plan shall meet the design requirements of paragraph (ii) below.

(B) The collection and control system design plan shall include any alternatives to the operational standards, test methods, procedures, compliance measures, monitoring, recordkeeping or reporting provisions of 40 CFR 60.753 through 60.758 proposed by the owner or operator.

(C) The collection and control system design plan shall either conform with specifications for active collection systems in 40 CFR 60.759 or include a demonstration to the Administrator's satisfaction of the sufficiency of the alternative provisions to 40 CFR 60.759.

(D) The Administrator shall review the information submitted under paragraphs (i) (A), (B) and (C) above and either approve it, disapprove it, or request that additional information be submitted. Because of the many site-specific factors involved with landfill gas system design, alternative systems may be necessary. A wide variety of system designs are possible, such as vertical wells, combination horizontal and vertical collection systems, or horizontal trenches only, leachate collection components, and passive systems.

(ii) Install a collection and control system that captures the gas generated within the landfill as required by paragraphs (ii)(A) or (B) and (iii) below within 30 months after the first annual report in which the emission rate equals or exceeds 50 megagrams per year, unless Tier 2 or Tier 3 sampling demonstrates that the emission rate is less than 50 megagrams per year, as specified in 40 CFR 60.757(c)(1) or (2).

(iii) Route all the collected gas to a control system that complies with the requirements in either paragraph (iii) (A), (B) or (C) below.

(A) An open flare designed and operated in accordance with 40 CFR 60.18;

(B) A control system designed and operated to reduce NMOC by 98 weight-percent, or, when an enclosed combustion device is used for control, to either reduce NMOC by 98 weight percent or reduce the outlet NMOC concentration to less than 20 parts per million by volume, dry basis as hexane at 3 percent oxygen. The reduction efficiency or parts per million by volume shall be established by an initial performance test to be completed no later than 180 days after the initial startup of the approved control system using the test methods specified in 40 CFR 60.754(d).

(C) Route the collected gas to a treatment system that processes the collected gas for subsequent sale or use. All emissions from any atmospheric vent from the gas treatment system shall be subject to the requirements of paragraph (iii) (A) or (B) above.



(iv) Operate the collection and control device installed to comply with 40 CFR 60, Subpart WWW in accordance with the provisions of 40 CFR 60.753, 60.755 and 60.756.

(v) The collection and control system may be capped or removed provided that all the conditions of paragraphs (v) (A), (B), and (C) below are met:

(A) The landfill shall be a closed landfill as defined in 40 CFR 60.751. A closure report shall be submitted to the Administrator as provided in 40 CFR 60.757(d);

(B) The collection and control system shall have been in operation a minimum of 15 years; and

(C) Following the procedures specified in 40 CFR 60.754(b), the calculated NMOC gas produced by the landfill shall be less than 50 megagrams per year on three successive test dates. The test dates shall be no less than 90 days apart, and no more than 180 days apart.

[40 CFR 60.752(b)(2)(i) through (v)]

**D.6. Hours of Operation.** The landfill may operate continuously, i.e., 8,760 hrs/yr.

[Rules 62-213.440 and 62-210.200(PTE), F.A.C.]

### Test Methods and Procedures

**D.7.** The provisions of 40 CFR 60.754, as applicable, shall be used to calculate the landfill NMOC emission rate for the purposes of the submittal of NMOC emission rate reports and determining whether the landfill has a nonmethane organic compound (NMOC) emission rate of 50 Megagrams per year or more.

[Rule 62-204.800(c)5., F.A.C.]

### D.8. Method of Calculating NMOC Emissions.

The landfill owner or operator shall calculate the NMOC emission rate using either the equation provided in paragraph (i) below or the equation provided in paragraph (ii) below. Both equations may be used if the actual year-to-year solid waste acceptance rate is known, as specified in paragraph (i), for part of the life of the landfill and the actual year-to-year solid waste acceptance rate is unknown, as specified in paragraph (ii), for part of the life of the landfill. The values to be used in both equations are 0.05 per year for  $k$ , 170 cubic meters per megagram for  $L_o$ , and 4,000 parts per million by volume as hexane for the  $C_{NMOC}$ . For landfills located in geographical areas with a thirty year annual average precipitation of less than 25 inches, as measured at the nearest representative official meteorologic site, the  $k$  value to be used is 0.02 per year.

(i) The following equation shall be used if the actual year-to-year solid waste acceptance rate is known.

$$M_{NMOC} = \sum_{i=1}^n 2kL_o M_i (e^{-kt_i}) (C_{NMOC}) (3.6 \times 10^{-9})$$

where,

$M_{NMOC}$  = Total NMOC emission rate from the landfill, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$L_o$  = methane generation potential, cubic meters per megagram solid waste

$M_i$  = mass of solid waste in the  $i^{th}$  section, megagrams

$t_i$  = age of the  $i^{th}$  section, years

$C_{NMOC}$  = concentration of NMOC, parts per million by volume as hexane

$3.6 \times 10^{-9}$  = conversion factor

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The mass of nondegradable solid waste may be subtracted from the total mass of solid waste in a particular section of the landfill when calculating the value for  $M_i$  if documentation of the nature and amount of such wastes is maintained.

(ii) The following equation shall be used if the actual year-to-year solid waste acceptance rate is unknown.

$$M_{\text{NMOC}} = 2L_c R (e^{-kc} - e^{-kt}) (C_{\text{NMOC}}) (3.6 \times 10^{-9})$$

where,

$M_{\text{NMOC}}$  = mass emission rate of NMOC, megagrams per year

$L_c$  = methane generation potential, cubic meters per megagram solid waste

$R$  = average annual acceptance rate, megagrams per year

$k$  = methane generation rate constant, year<sup>-1</sup>

$t$  = age of landfill, years

$C_{\text{NMOC}}$  = concentration of NMOC, parts per million by volume as hexane

$c$  = time since closure, years. For active landfill  $c = 0$  and  $e^{-kc} = 1$

$3.6 \times 10^{-9}$  = conversion factor

The mass of nondegradable solid waste may be subtracted from the average annual acceptance rate when calculating a value for  $R$ , if documentation of the nature and amount of such wastes is maintained.

[40 CFR 60.754(a)(1)]

**D.9. Requirements if Calculated NMOC Emissions are less than 50 megagrams per year.**

*Tier I.* The owner or operator shall compare the calculated NMOC mass emission rate to the standard of 50 megagrams per year.

(i) If the NMOC emission rate calculated in 40 CFR 60.754(a)(1) is less than 50 megagrams per year, then the landfill owner shall submit an emission rate report as provided in 40 CFR 60.757(b)(1), and shall recalculate the NMOC mass emission rate annually as required under 40 CFR 60.752(b)(1).

(ii) If the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, then the landfill owner shall either comply with 40 CFR 60.752(b)(2), or determine a site-specific NMOC concentration and recalculate the NMOC emission rate using the procedures provided in 40 CFR 60.754(a)(3).

[40 CFR 60.754(a)(2)]

**D.10. Method for Determining Site-Specific NMOC Emissions.**

*Tier II.* The landfill owner or operator shall determine the NMOC concentration using the following sampling procedure. The landfill owner or operator shall install at least two sample probes per hectare of landfill surface that has retained waste for at least 2 years. If the landfill is larger than 25 hectares in area, only 50 samples are required. The sample probes should be located to avoid known areas of nondegradable solid waste. The owner or operator shall collect and analyze one sample of landfill gas from each probe to determine the NMOC concentration using Method 25C or Method 18 of 40 CFR 60 Appendix A. If using Method 18 of 40 CFR 60 Appendix A, the minimum list of compounds to be tested shall be those published in the most recent Compilation of Air Pollutant Emission Factors (AP-42). If composite sampling is used, equal volumes shall be taken from each sample probe. If more than the required number of samples are taken, all samples shall be used in the analysis. The landfill owner or operator shall divide the NMOC concentration from Method 25C of 40 CFR 60 Appendix A by six to convert from  $C_{\text{NMOC}}$  as carbon to  $C_{\text{NMOC}}$  as hexane.

- (i) The landfill owner or operator shall recalculate the NMOC mass emission rate using the equations provided in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using the average NMOC concentration from the collected samples instead of the default value in the equation provided in 40 CFR 60.754(a)(1).
- (ii) If the resulting mass emission rate calculated using the site-specific NMOC concentration is equal to or greater than 50 megagrams per year, then the landfill owner or operator shall either comply with 40 CFR 60.752(b)(2), or determine the site-specific methane generation rate constant and recalculate the NMOC emission rate using the site-specific methane generation rate using the procedure specified in 40 CFR 60.754(a)(4).
- (iii) If the resulting NMOC mass emission rate is less than 50 megagrams per year, the owner or operator shall submit a periodic estimate of the emission rate report as provided in 40 CFR 60.757(b)(1) and retest the site-specific NMOC concentration every 5 years using the methods specified in 40 CFR 60.754(a)(3).  
[40 CFR 60.754(a)(3)]

**D.11. Method for Determining Site-Specific Methane Emissions.**

*Tier 3.* The site-specific methane generation rate constant shall be determined using the procedures provided in Method 2E of 40 CFR 60 Appendix A. The landfill owner or operator shall estimate the NMOC mass emission rate using equations in 40 CFR 60.754(a)(1)(i) or (a)(1)(ii) and using a site-specific methane generation rate constant  $k$ , and the site-specific NMOC concentration as determined in 40 CFR 60.754(a)(3) instead of the default values provided in 40 CFR 60.754(a)(1). The landfill owner or operator shall compare the resulting NMOC mass emission rate to the standard of 50 megagrams per year.

- (i) If the NMOC mass emission rate as calculated using the site-specific methane generation rate and concentration of NMOC is equal to or greater than 50 megagrams per year, the owner or operator shall comply with 40 CFR 60.752(b)(2).
- (ii) If the NMOC mass emission rate is less than 50 megagrams per year, then the owner or operator shall submit a periodic emission rate report as provided in 40 CFR 60.757(b)(1) and shall recalculate the NMOC mass emission rate annually, as provided in 40 CFR 60.757(b)(1) using the equations in 40 CFR 60.754(a)(1) and using the site-specific methane generation rate constant and NMOC concentration obtained in 40 CFR 60.754(a)(3). The calculation of the methane generation rate constant is performed only once, and the value obtained from this test shall be used in all subsequent annual NMOC emission rate calculations.  
[40 CFR 60.754(a)(4)]

**D.12. Alternative Methods.** The owner or operator may use other methods to determine the NMOC concentration or a site-specific  $k$  as an alternative to the methods required in 40 CFR 60.754(a)(3) and (a)(4) if the method has been approved by the Administrator.  
[40 CFR 60.754(a)(5)]

**D.13.** The NMOC emission rate shall be recalculated annually, except as provided in 40 CFR 60.757(b)(1)(ii).

- (1) If the calculated NMOC emission rate is less than 50 megagrams per year, the owner or operator shall:
  - (i) submit an annual emission report, except as provided for in 40 CFR 60.757(b)(1)(ii); and
  - (ii) recalculate the NMOC emission rate annually using the procedures specified in 40 CFR 60.754(a)(1) until such time as the calculated NMOC emission rate is equal to or greater than 50 megagrams per year, or the landfill is closed.
- (2) (i) If the NMOC emission rate, upon initial calculation or annual recalculation required in paragraph (1)(ii) above, is equal to or greater than 50 megagrams per year, the owner or operator shall install a collection and control system as provided in 40 CFR 60.752(b)(2).

- (ii) If the landfill is permanently closed, a closure notification shall be submitted to the Administrator as provided in 40 CFR 60.757(d).  
[40 CFR 60.33c(e)]

### Reporting Requirements

**D.14.** Each owner or operator of an MSW landfill to which Rule 62-204.800(8)(c), F.A.C., applies shall comply with the reporting and recordkeeping provisions of 40 CFR 60.757 and .758, as applicable.  
[Rule 62-204.800(c)5., F.A.C.]

**D.15.** Notification of any Increase in Design Capacity. An amended design capacity report shall be submitted to the Administrator providing notification of an increase in the design capacity of the landfill, within 90 days of an increase in the maximum design capacity of the landfill to or above 2.5 million megagrams and 2.5 million cubic meters. This increase in design capacity may result from an increase in the permitted volume of the landfill or an increase in the density as documented in the annual recalculation required in 40 CFR 60.758(f).  
[40 CFR 60.757(a)(3)]

**D.16.** Annual NMOC Emission Rate. Each owner or operator subject to the requirements of Rule 62-204.800(8)(c), F.A.C., shall submit an NMOC emission rate report to the Administrator annually, except as provided for in paragraphs (1)(ii) or (3) below. The Administrator may request such additional information as may be necessary to verify the reported NMOC emission rate.

(1) The NMOC emission rate report shall contain an annual or 5-year estimate of the NMOC emission rate calculated using the formula and procedures provided in 40 CFR 60.754(a) or (b), as applicable.

(i) NMOC emission rate reports shall be submitted annually, except as provided for in paragraphs (1)(ii) and (3) below.

(ii) If the estimated NMOC emission rate as reported in the annual report to the Administrator is less than 50 megagrams per year in each of the next 5 consecutive years, the owner or operator may elect to submit an estimate of the NMOC emission rate for the next 5-year period in lieu of the annual report. This estimate shall include the current amount of solid waste-in-place and the estimated waste acceptance rate for each year of the 5 years for which an NMOC emission rate is estimated. All data and calculations upon which this estimate is based shall be provided to the Administrator. This estimate shall be revised at least once every 5 years. If the actual waste acceptance rate exceeds the estimated waste acceptance rate in any year reported in the 5-year estimate, a revised 5-year estimate shall be submitted to the Administrator. The revised estimate shall cover the 5-year period beginning with the year in which the actual waste acceptance rate exceeded the estimated waste acceptance rate.

(2) The NMOC emission rate report shall include all the data, calculations, sample reports and measurements used to estimate the annual or 5-year emissions.

(3) Each owner or operator subject to the requirements of 40 CFR 60, Subpart WWW is exempted from the requirements of paragraphs (1) and (2) above, after the installation of a collection and control system in compliance with 40 CFR 60.752(b)(2), during such time as the collection and control system is in operation and in compliance with 40 CFR 60.753 and 60.755.

[Rule 62-204.800(8)(c)5., F.A.C.; and, 40 CFR 60.757(b)]

**D.17.** Collection and Control System Design Plan. Each owner or operator subject to the provisions of 40 CFR 60.752(b)(2)(i) shall submit a collection and control system design plan to the Administrator within 1 year of the first report, required under 40 CFR 60.757(b), in which the emission rate exceeds 50 megagrams per year, except as follows:

(1) If the owner or operator elects to recalculate the NMOC emission rate after Tier 2 NMOC sampling and analysis as provided in 40 CFR 60.754(a)(3) and the resulting rate is less than 50 megagrams per year, annual periodic reporting shall be resumed, using the Tier 2 determined site-specific NMOC concentration, until the calculated emission rate is equal to or greater than 50 megagrams per year or the landfill is closed. The revised NMOC emission rate report, with the recalculated emission rate based on NMOC sampling and analysis, shall be submitted within 180 days of the first calculated exceedance of 50 megagrams per year.

(2) If the owner or operator elects to recalculate the NMOC emission rate after determining a site-specific methane generation rate constant (k), as provided in Tier 3 in 40 CFR 60.754(a)(4), and the resulting NMOC emission rate is less than 50 Mg/yr, annual periodic reporting shall be resumed. The resulting site-specific methane generation rate constant (k) shall be used in the emission rate calculation until such time as the emissions rate calculation results in an exceedance. The revised NMOC emission rate report based on the provisions of 40 CFR 60.754(a)(4) and the resulting site-specific methane generation rate constant (k) shall be submitted to the Administrator within 1 year of the first calculated emission rate exceeding 50 megagrams per year.

[40 CFR 60.757(c)]

**D.18. Controlled Landfill Closure Report.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of a controlled landfill shall submit a closure report to the Administrator within 30 days of waste acceptance cessation. The Administrator may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Administrator, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[40 CFR 60.757(d)]

**D.19. Uncontrolled Landfill Closure Report.** Each owner or operator of an uncontrolled landfill shall submit a closure report to the DEP Southwest District Office within 30 days of waste acceptance cessation. The Department may request additional information as may be necessary to verify that permanent closure has taken place in accordance with the requirements of 40 CFR 258.60. If a closure report has been submitted to the Department, no additional wastes may be placed into the landfill without filing a notification of modification as described under 40 CFR 60.7(a)(4).

[Rule 62-213.440, F.A.C.]

### **Recordkeeping Requirements**

#### **D.20. Test Reports.**

(a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the DEP Southwest District Office on the results of each such test.

(b) The required test report shall be filed with the DEP Southwest District Office as soon as practical but no later than 45 days after the last sampling run of each test is completed.

(c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the DEP Southwest District Office to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
8. The date, starting time and duration of each sampling run.

9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

[Rules 62-213.440 and 62-297.310(8), F.A.C.]

**D.21. Capacity and Acceptance Reports.** Except as provided in 40 CFR 60.752(b)(2)(i)(B), each owner or operator of an MSW landfill subject to the provisions of 40 CFR 60.752(b) shall keep for at least 5 years up-to-date, readily accessible, on-site records of the design capacity report which triggered 40 CFR 60.752(b), the current amount of solid waste in-place, and the year-by-year waste acceptance rate. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60.758(a)]

**D.22. Design Capacity Calculations.** Landfill owners or operators who convert design capacity from volume to mass or mass to volume to demonstrate that landfill design capacity is less than 2.5 million megagrams or 2.5 million cubic meters, as provided in the definition of "design capacity", shall keep readily accessible, on-site records of the annual recalculation of site-specific density, design capacity, and the supporting documentation. Off-site records may be maintained if they are retrievable within 4 hours. Either paper copy or electronic formats are acceptable.

[40 CFR 60.758(f)]

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**Appendix I-1, List of Insignificant Emissions Units and/or Activities.**

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emission from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities:

~~RESOURCE RECOVERY FACILITY AREA~~

1. ~~500 & 250 Gallon Diesel Oil Storage Tanks.~~
2. ~~250 Gallon Unloaded Gasoline Storage Tank~~ (S)
3. ~~250 Gallon Hydraulic Oil Storage Tank~~ (S)
4. ~~(2) 2000 Gallon Turbine Oil Storage Tanks~~
5. ~~2000 Gallon Turbine Oil Collection Tank~~ (S)
6. ~~Welding Station Vent in Maintenance Building~~ operations
7. ~~20,000 & 7800 Gallon Phosphoric Acid Storage Tanks.~~
8. ~~5200 Gallon Caustic Storage Tank~~ (S)
9. ~~5200 & 5000 Gallon Sulfuric Acid Storage Tanks.~~
10. ~~8000 Gallon Sodium Carbonate Storage Tank~~ (S)
11. ~~25,000 Gallon Urea Storage Tank~~ (S)
12. ~~(5) 1 ton Chlorine Cylinders.~~

~~LANDFILL, MULCHING, AND OTHER AREAS AT THE PINELLAS COUNTY COMPLEX~~

1. ~~500 Gallon Diesel Oil Storage Tank at Chlorine Treatment Area~~
2. ~~500 Gallon Inground Diesel Oil Storage Tank at Scale Station~~
3. ~~12,000 Gallon Inground Gasoline Storage Tank at Mosquito Control Area.~~
4. ~~12,000 Gallon Inground Diesel Storage Tank at Mosquito Control Area.~~
13. 5. ~~(2) 1000 Gallon Pesticide Storage Tanks.~~
6. ~~(2) 1000 Gallon Aboveground Diesel Storage Tanks at Landfill Contractor.~~
14. 7. ~~1000 Gallon Waste Oil Storage Tank at Landfill Contractor~~ (S)
8. ~~275 Gallon Gasoline Storage Tank at Landfill Contractor.~~
9. ~~275 Gallon Oil Storage Tank at Landfill Contractor.~~
10. ~~275 Gallon Hydraulic Oil Storage Tank at Landfill Contractor.~~
11. ~~(7) 1 ton Chlorine Cylinders.~~
12. ~~100 Gallon Above Ground Diesel Storage Tank At Mulch Area~~
15. 13. ~~250 Gallon Mixed Waste Gasoline Tank At Landfill Contractor Area~~ (S)

↳ Storage

see attached list

Additional Items for Appendix I-1, List of Insignificant Emission Units and/or Activities

Follows Appendix I-1 in Appendix A

16. Fire and Safety Equipment.
17. Paint Usage Less than 6.0 Gallons per Day.
18. Vehicular Traffic and Mobile Equipment Onsite.
19. Storage Drums and Use of Cooling Tower and Boiler Chemicals.
20. Laboratory Vents/Hoods.
21. Refuse Pit.
22. Flanges and Valves.
23. Makeup Water Treatment Plant.
24. Solvent Degreasers.
25. Plant Road Fugitive Emissions.
26. Emergency Generators and Fire Pumps Provided None of the Sources is Subject to the Federal Acid Rain Program and Total Prorated Fuel Consumption is Limited to 32,000 Gallons per Year of Diesel Fuel or 4000 Gallons per Year of Gasoline.
27. Yard Waste Trommel and Other General Purpose Internal Combustion Engines, Heating Units, and Other Combustion Devices Not Listed Elsewhere Provided None of the Sources is a Pollution Control Device Nor Subject to the Federal Acid Rain Program and Total Prorated Fuel Consumption is Limited to 32,000 Gallons per Year of Diesel Fuel or 4000 Gallons per Year of Gasoline.
28. Hydrated Lime Storage Silo (for water treatment).
29. Pebble Lime Storage Silo (for spray dry absorbers).
30. Activated Carbon Storage Silo (for carbon injection systems).



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**Appendix U-1, List of Unregulated Emissions Units and/or Activities.**

Unregulated Emissions Units and/or Activities. An emissions unit which emits no "emissions-limited pollutant" and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither 'regulated emissions units' nor 'insignificant emissions units'.

| E.U. ID No.     | Brief Description of Emissions Units and/or Activity   |
|-----------------|--|
| -010            | <del>3 Diesel Fuel Fired Internal Combustion Engines drive Yard Waste Trommel Mulching Machine, Resource Recovery Facility Emergency Diesel Fire Pump, and Lift Station Emergency Diesel Fire Pump.</del> <i>Cooling Tower</i> |
| <del>-011</del> | <del>3 Diesel Fuel Fired Generators at Chlorine Treatment Area, Scale Station, and Maintenance Service Building</del>  |
| <del>-012</del> | <del>2 Gasoline Fired Generators at Mosquito Control Area and Maintenance Service Building.</del>  |

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**Table 1-1, Summary of Air Pollutant Standards and Terms**

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

FINAL Permit No.: 1030117-002-  
Facility ID No.: 10301

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

| E. U. ID No.                   | Brief Description  | Pollutant Name                  | Fuel(s)      | Hours/Year | Allowable Emissions                     |           |       | Equivalent Emissions* |          | Regulatory Citation(s)          | See Per Condition |
|--------------------------------|--|---------------------------------|--------------|------------|---|-----------|-------|-----------------------|----------|---------------------------------|-------------------|
|                                |  |                                 |              |            | Standard(s)                             | lbs./hour | TPY   | lbs./hour             | TPY      |                                 |                   |
| -001                           | UNIT 1 - Municipal Solid Waste (MSW) Combustor<br>(275,000 lbs/hr - steam)<br>(1100 TPD - MSW)<br>(458 MMBtu/hour-MSW) | VE                              | MSW          | 8760       | 10%                                     |           |       | N/A                   | N/A      | 40 CFR 60.33b(a)(1)(iii)        | B.19              |
|                                |  | VE - Fugitive Ash               |              | 8760       | 5%                                      |           |       | N/A                   | N/A      | 40 CFR 60.36b                   | B.31              |
|                                |  | PM <sup>1</sup>                 | MSW          | 8760       | 27 mg/dscm                              |           |       | 14.4                  | 63.1     | 40 CFR 60.33b(a)(1)(i)          | B.18              |
|                                |  | PM <sub>10</sub> <sup>1</sup>   | MSW          | 8760       | 27 mg/dscm                              |           |       | 14.4                  | 63.1     | 40 CFR 60.33b(a)(1)(i)          | B.18              |
|                                |  | CO <sup>1</sup>                 | MSW          | 8760       | 100 ppm <sub>dv</sub>                   |           |       | 61.0                  | 267      | 40 CFR 60.34b(a)                | B.30              |
|                                |  | NO <sub>x</sub> <sup>1</sup>    | MSW          | 8760       | 205 ppm <sub>dv</sub>                   |           |       | 205                   | 899      | 40 CFR 60.33b(d)                | B.29              |
|                                |  | SO <sub>2</sub> <sup>1, 2</sup> | MSW          | 8760       | 29 ppm <sub>dv</sub> or                 |           |       | 26.8                  | 117      | 40 CFR 60.33b(b)(3)(i)          | B.26              |
|                                |  |                                 |              |            | 75% reduction nte 122 ppm <sub>dv</sub> |           |       | 170                   | 745      | 40 CFR 60.33b(b)(3)(i)          | B.26              |
|                                |  | HCl <sup>1, 2</sup>             | MSW          | 8760       | 29 ppm <sub>dv</sub> or                 |           |       | 23.0                  | 101      | 40 CFR 60.33b(b)(3)(ii)         | B.27              |
|                                |  |                                 |              |            | 95% reduction nte 100 ppm <sub>dv</sub> |           |       | 79.8                  | 350      | 40 CFR 60.33b(b)(3)(ii)         | B.27              |
|                                |  | dioxin/furan <sup>1</sup>       | MSW          | 8760       | 30 ng/dscm (total mass)                 |           |       | 1.60E-05              | 6.90E-05 | 40 CFR 60.33b(c)(1)(ii)         | B.28              |
|                                |  | Cd <sup>1</sup>                 | MSW          | 8760       | 0.040 mg/dscm                           |           |       | 0.0210                | 0.0920   | 40 CFR 60.33b(a)(2)(i)          | B.20              |
|                                |  | Hg <sup>1, 2</sup>              | MSW          | 8760       | 0.070 mg/dscm or                        |           |       | 0.0367                | 0.161    | Rule 62-296.416(3)(a)1., F.A.C. | B.21              |
| 85% reduction nte 0.10 mg/dscm |  |                                 |              |            |   | 0.0524    | 0.230 | 40 CFR 60.33b(a)(3)   | B.21     |                                 |                   |
| Pb <sup>1</sup>                | MSW  | 8760                            | 0.44 mg/dscm |            |   | 0.230     | 1.01  | 40 CFR 60.33b(a)(4)   | B.25     |                                 |                   |
| -002                           | UNIT 2 - Municipal Solid Waste (MSW) Combustor<br>(275,000 lbs/hr - steam)<br>(1100 TPD - MSW)<br>(458 MMBtu/hour-MSW) | VE                              | MSW          | 8760       | 10%                                     |           |       | N/A                   | N/A      | 40 CFR 60.33b(a)(1)(iii)        | B.19              |
|                                |  | VE - Fugitive Ash               |              | 8760       | 5%                                      |           |       | N/A                   | N/A      | 40 CFR 60.36b                   | B.31              |
|                                |  | PM <sup>1</sup>                 | MSW          | 8760       | 27 mg/dscm                              |           |       | 14.4                  | 63.1     | 40 CFR 60.33b(a)(1)(i)          | B.18              |
|                                |  | PM <sub>10</sub> <sup>1</sup>   | MSW          | 8760       | 27 mg/dscm                              |           |       | 14.4                  | 63.1     | 40 CFR 60.33b(a)(1)(i)          | B.18              |
|                                |  | CO <sup>1</sup>                 | MSW          | 8760       | 100 ppm <sub>dv</sub>                   |           |       | 61.0                  | 267      | 40 CFR 60.34b(a)                | B.30              |
|                                |  | NO <sub>x</sub> <sup>1</sup>    | MSW          | 8760       | 205 ppm <sub>dv</sub>                   |           |       | 205                   | 899      | 40 CFR 60.33b(d)                | B.29              |
|                                |  | SO <sub>2</sub> <sup>1, 2</sup> | MSW          | 8760       | 29 ppm <sub>dv</sub> or                 |           |       | 40.4                  | 177      | 40 CFR 60.33b(b)(3)(i)          | B.26              |
|                                |  |                                 |              |            | 75% reduction nte 122 ppm <sub>dv</sub> |           |       | 170                   | 745      | 40 CFR 60.33b(b)(3)(i)          | B.26              |
|                                |  | HCl <sup>1, 2</sup>             | MSW          | 8760       | 29 ppm <sub>dv</sub> or                 |           |       | 23.0                  | 101      | 40 CFR 60.33b(b)(3)(ii)         | B.27              |
|                                |  |                                 |              |            | 95% reduction nte 100 ppm <sub>dv</sub> |           |       | 79.8                  | 350      | 40 CFR 60.33b(b)(3)(ii)         | B.27              |
|                                |  | dioxin/furan <sup>1</sup>       | MSW          | 8760       | 30 ng/dscm (total mass)                 |           |       | 1.60E-05              | 6.90E-05 | 40 CFR 60.33b(c)(1)(ii)         | B.28              |
|                                |  | Cd <sup>1</sup>                 | MSW          | 8760       | 0.040 mg/dscm                           |           |       | 0.0210                | 0.0920   | 40 CFR 60.33b(a)(2)(i)          | B.20              |
|                                |  | Hg <sup>1, 2</sup>              | MSW          | 8760       | 0.070 mg/dscm or                        |           |       | 0.0367                | 0.161    | Rule 62-296.416(3)(a)1., F.A.C. | B.21              |
| 85% reduction nte 0.10 mg/dscm |  |                                 |              |            |   | 0.0524    | 0.230 | 40 CFR 60.33b(a)(3)   | B.21     |                                 |                   |
| Pb <sup>1</sup>                | MSW  | 8760                            | 0.44 mg/dscm |            |   | 0.230     | 1.01  | 40 CFR 60.33b(a)(4)   | B.25     |                                 |                   |

Table 1-1, Summary of Air Pollutant Standards and Terms

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

FINAL Permit No.: 1030117-002-A  
Facility ID No.: 1030117

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of the permit.

| E. U. ID No.                   | Brief Description   | Pollutant Name                  | Fuel(s)      | Hours/Year | Allowable Emissions                     |           |          | Equivalent Emissions*             |                                     | Regulatory Citation(s)   | See Perm Condition |
|--------------------------------|---|---------------------------------|--------------|------------|---|-----------|----------|-----------------------------------|-------------------------------------|--|--------------------|
|                                |   |                                 |              |            | Standard(s)                             | lbs./hour | TPY      | lbs./hour                         | TPY                                 |  |                    |
| -003                           | UNIT 3 - Municipal Solid Waste (MSW) Combustor (275,000 lbs/hr - steam) (1100 TPD - MSW) (458 MMBtu/hour-MSW) | VE                              | MSW          | 8760       | 10%                                     |           |          | N/A                               | N/A                                 | 40 CFR 60.33b(a)(1)(iii)   | B.19.              |
|                                |   | VE - Fugitive Ash               |              | 8760       | 5%                                      |           |          | N/A                               | N/A                                 | 40 CFR 60.36b  | B.31.              |
|                                |   | PM <sup>1</sup>                 | MSW          | 8760       | 27 mg/dscm                              |           |          | 14.4                              | 63.1                                | 40 CFR 60.33b(a)(1)(i)   | B.18.              |
|                                |   | PM <sub>10</sub> <sup>1</sup>   | MSW          | 8760       | 27 mg/dscm                              |           |          | 14.4                              | 63.1                                | 40 CFR 60.33b(a)(1)(i)   | B.18.              |
|                                |   | CO <sup>1</sup>                 | MSW          | 8760       | 100 ppm <sub>vd</sub>                   |           |          | 61.0                              | 267                                 | 40 CFR 60.34b(a)   | B.30.              |
|                                |   | NO <sub>x</sub> <sup>1</sup>    | MSW          | 8760       | 205 ppm <sub>vd</sub>                   |           |          | 205                               | 899                                 | 40 CFR 60.33b(d)   | B.29.              |
|                                |   | SO <sub>2</sub> <sup>1, 2</sup> | MSW          | 8760       | 29 ppm <sub>vd</sub> or                 |           |          | 40.4                              | 177                                 | 40 CFR 60.33b(b)(3)(i)   | B.26.              |
|                                |   |                                 |              |            | 75% reduction nte 122 ppm <sub>vd</sub> |           |          | 170                               | 745                                 | 40 CFR 60.33b(b)(3)(i)   | B.26.              |
|                                |   | HCl <sup>1, 2</sup>             | MSW          | 8760       | 29 ppm <sub>vd</sub> or                 |           |          | 23.0                              | 101                                 | 40 CFR 60.33b(b)(3)(ii)  | B.27.              |
|                                |   |                                 |              |            | 95% reduction nte 100 ppm <sub>vd</sub> |           |          | 79.8                              | 350                                 | 40 CFR 60.33b(b)(3)(ii)  | B.27.              |
|                                |   | dioxin/furan <sup>1</sup>       | MSW          | 8760       | 30 ng/dscm (total mass)                 |           |          | 1.60E-05                          | 6.90E-05                            | 40 CFR 60.33b(c)(1)(iii)   | B.28.              |
|                                |   | Cd <sup>1</sup>                 | MSW          | 8760       | 0.040 mg/dscm                           |           |          | 0.0210                            | 0.0920                              | 40 CFR 60.33b(a)(2)(i)   | B.20.              |
|                                |   | Hg <sup>1, 2</sup>              | MSW          | 8760       | 0.070 mg/dscm or                        |           |          | 0.0367                            | 0.161                               | Rule 62-296.416(3)(a)1., F.A.C.  | B.21.              |
| 85% reduction nte 0.10 mg/dscm |   |                                 |              |            |   | 0.0524    | 0.230    | 40 CFR 60.33b(a)(3)               | B.21.                               |  |                    |
| Pb <sup>1</sup>                | MSW   | 8760                            | 0.44 mg/dscm |            |   | 0.230     | 1.01     | 40 CFR 60.33b(a)(4)               | B.25.                               |  |                    |
| Be                             | MSW   | 8760                            |              |            |   | 5.0E-05   | 5.34E-04 | 40 CFR 61.32(a) and PSD-FL-098(A) | B.33.                               |  |                    |
| Fl                             | MSW   | 8760                            |              |            |   | 0.31      | 36.4     | PSD-FL-098(A)                     | B.34.                               |  |                    |
| -004                           | Hydrated Lime Storage Silo<br><i>(revised)</i>  | VE                              |              | 8760       | shall not exceed 20%                    |           |          | N/A                               | N/A                                 | Rule 62-296.320(4)(b)1., F.A.C.  | C.5.               |
|                                |   | PM                              |              | 8760       | 0.005 gr/dscf                           |           |          | 0.043                             | 0.19                                | Rule 62-297.620(4), F.A.C., and Revised Title V application pages received September 16, 1999. | C.4.               |
| -005                           | Metal Recovery System (MRS)   | VE                              |              | 8760       | shall not exceed 20%                    |           |          | N/A                               | N/A                                 | Rule 62-296.320(4)(b)1., F.A.C.  | C.5.               |
|                                |   | PM                              |              | 8760       | 0.0102 gr/dscf                          |           |          | 3.50                              | 15.3                                | Applicant request; and, PA 78-11(B,C) & PA 83-18(B,C)  | C.4.               |
| -006                           | Activated Carbon Storage Silo<br><i>(revised)</i>   | VE                              |              | 8760       | shall not exceed 20%                    |           |          | N/A                               | N/A                                 | Rule 62-296.320(4)(b)1., F.A.C.  | C.5.               |
|                                |   | PM                              |              | 8760       | 0.005 gr/dscf                           |           |          | 0.0514                            | 0.225                               | Rule 62-297.620(4), F.A.C., and applicant request  | C.4.               |
| -007                           | Lime Storage Silo<br><i>(revised)</i>   | VE                              |              | 8760       | shall not exceed 20%                    |           |          | N/A                               | N/A                                 | Rule 62-296.320(4)(b)1., F.A.C.  | C.5.               |
|                                |   | PM                              |              | 8760       | 0.005 gr/dscf                           |           |          | 0.0514                            | 0.225                               | Rule 62-297.620(4), F.A.C., and applicant request  | C.4.               |
| -008                           | Ash Conditioning Building (ACB)   | VE                              |              | 8760       | shall not exceed 20%                    |           |          | N/A                               | N/A                                 | Rule 62-296.320(4)(b)1., F.A.C.  | C.5.               |
|                                |   | PM                              |              | 8760       | 0.03 gr/dscf                            |           |          | 1.29                              | 5.63                                | PA 78-11(C) & PA 83-18(C)  | C.4.               |
| -009                           | MSW Landfill  | NMOC                            |              | 8760       | 36 mg/y                                 |           |          | 55                                | Rule 62-291.800(8)(b)(2)(i), F.A.C. | D.6.   |                    |

Notes:

- \* The "Equivalent Emissions" listed are for informational purposes.
- 1. Corrected to 7% O<sub>2</sub>
- 2. Whichever is least stringent.

**Table 2-1, Summary of Compliance Requirements**

Pinellas County Utilities Administration  
Pinellas County Resource Recovery Facility

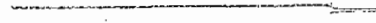
FINAL Permit No.: 1030117-002-AV  
Facility ID No.: 1030117

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

| E. U. ID No. | Brief Description   | Pollutant Name or Parameter | Fuel(s)                   | Compliance Method               | Testing Time Frequency             | Frequency Base Date | Min. Compliance Test Duration | CMS <sup>1</sup> | See Permit Condition(s) |
|--------------|---|-----------------------------|---------------------------|---------------------------------|------------------------------------|---------------------|-------------------------------|------------------|-------------------------|
| -001         | Municipal Solid Waste (MSW) Combustors<br>(275,000 lbs/hr - steam)<br>(1100 TPD - MSW).<br>(458 MMBtu/hour - MSW) | VE                          | MSW                       | EPA Method 9                    | Annually                           |                     | 30 minutes                    | Yes              | B.46.                   |
| -002         |   | VE- Fugitive Ash            |                           | EPA Method 22                   | Annually                           |                     | 1 hour                        | No               | B.53.                   |
| -003         |   | PM                          |                           |                                 |                                    |                     |                               |                  |                         |
|              |   | PM <sub>10</sub>            | MSW                       | EPA Method 5                    | Annually                           |                     | 1 hour                        | No               | B.46.                   |
|              |   | CO                          | MSW                       | EPA Method 10, 10A, 10B         | Daily                              |                     | 1 hour                        | Yes              | B.17.                   |
|              |   | NO <sub>x</sub>             | MSW                       | EPA Method 19                   | Daily                              |                     | 1 hour                        | Yes              | B.52.                   |
|              |   | SO <sub>2</sub>             | MSW                       | EPA Method 19                   | Daily                              |                     | 1 hour                        | Yes              | B.49.                   |
|              |   | HCl                         | MSW                       | EPA Method 26, 26A              | Annually                           |                     | 1 hour                        | No               | B.50.                   |
|              |   | dioxin/furan                | MSW                       | EPA Method 23                   | Annually <sup>3</sup>              |                     | N/A                           | No               | B.51.                   |
|              |   | Cd                          | MSW                       | EPA Method 29                   | Annually                           |                     | 1 hour                        | No               | B.47.                   |
|              |   | Hg                          | MSW                       | EPA Method 29                   | Annually                           |                     | 1 hour                        | No               | B.47., B.48.            |
|              |   | Pb                          | MSW                       | EPA Method 29                   | Annually                           |                     | 1 hour                        | No               | B.47.                   |
|              |   | <del>Be<sup>3</sup></del>   | <del>MSW</del>            | <del>EPA Method 29 or 104</del> | <del>Annually</del>                |                     | <del>N/A</del>                | <del>No</del>    | <del>B.52.</del>        |
|              | <del>P</del>  | <del>MSW</del>              | <del>EPA Method 136</del> | <del>Every 5 years</del>        |                                    | <del>1 hour</del>   | <del>No</del>                 | <del>B.54.</del> |                         |
| -004         | <del>Hydrated Lime Storage Site</del>   | <del>VE</del>               | <del></del>               | <del>EPA Method 9</del>         | <del>Annually<sup>5</sup></del>    | <del>15 Feb</del>   | <del>30 minutes</del>         | <del>No</del>    | <del>C.11.</del>        |
|              |   | <del>PM</del>               | <del></del>               | <del>EPA Method 5</del>         | <del>As required<sup>4</sup></del> |                     | <del>1 hour</del>             | <del>No</del>    | <del>C.12.</del>        |
| -005         | Metal Recovery System (MRS)   | VE                          |                           | EPA Method 9                    | Annually                           |                     | 30 minutes                    | No               | C.11.                   |
|              |   | PM                          |                           | EPA Method 5                    | Every 5 years                      |                     | 1 hour                        | No               | C.12.                   |
| -006         | Activated Carbon Storage Site   | VE                          |                           | EPA Method 9                    | Annually                           |                     | 30 minutes                    | No               | C.11.                   |
|              |   | PM                          |                           | EPA Method 5                    | As required <sup>4</sup>           |                     | 1 hour                        | No               | C.12.                   |
| -007         | Lime Storage Site   | VE                          |                           | EPA Method 9                    | Annually                           |                     | 30 minutes                    | No               | C.11.                   |
|              |   | PM                          |                           | EPA Method 5                    | As required <sup>4</sup>           |                     | 1 hour                        | No               | C.12.                   |
| -008         | Ash Conditioning Building (ACB)   | VE                          |                           | EPA Method 9                    | Annually                           |                     | 30 minutes                    | No               | C.11.                   |
|              |   | PM                          |                           | EPA Method 5                    | Every 5 years                      |                     | 1 hour                        | No               | C.12.                   |
| -009         | MSW Landfill  | NMOC                        |                           | EPA Method 18 or 25C            | Every 5 years <sup>6</sup>         |                     |                               | No               | D.10.                   |

**Notes:**

- CMS [=] continuous monitoring system used for monitoring requirement in lieu of fuel sampling and analysis if marked 'yes'.  
(Acceptable as long as CMS is maintained and calibrated as required.)
- Applies only to Unit 3. *(revised)*
- Test at least one unit annually, subject to 40 CFR 60.58b(g) requirements.
- ~~Particulate matter tests are not required unless visible emissions tests indicate standards may have been violated.~~
- ~~Within 60 days prior to or on February 15 or within 12 months of previous test.~~
- If Tier II testing is used to determine site-specific NMOC emission rate.



**APPENDIX B**

**ISSUED PERMIT REVISIONS/MODIFICATIONS**



# Department of Environmental Protection

NOV - 7 2001

UTILITIES ADMIN

SEP 18 2001

RECEIVED

Jeb Bush  
Governor

Southwest District  
3804 Coconut Palm Drive  
Tampa, Florida 33619

David B. Struhs  
Secretary

## NOTICE OF ADMINISTRATIVELY CORRECTED TITLE V OPERATION PERMIT

In the Matter of a Request for Administrative Correction:

Mr. Pick Talley  
Director of Utilities  
Pinellas County Utilities Administration  
14 South Fort Harrison Avenue, 5<sup>th</sup> Floor  
Clearwater, FL 33756

FINAL Permit No.: 1030117-002-AV  
Pinellas County Resource Recovery Facility  
(Admin. Correction DEP Project No. 004)

Enclosed is an ADMINISTRATIVELY CORRECTED (Admin. Correction DEP Project No. 004) page to the initial Title V operation permit, 1030117-002-AV, for the operation the Pinellas County Resource Recovery Facility located at 3001 110th Avenue North, St. Petersburg, Pinellas County. This correction is issued pursuant to Rule 62-210.360, Florida Administrative Code and Chapter 403, Florida Statutes (F.S.). This administrative correction is a Department initiated change per Rule 62-210.360(3), F.A.C. regarding the number of copies of the stack test reports to be submitted to the Department. This corrective action does not alter the effective dates of the existing permit.

Any party to this order (permit) has the right to seek judicial review of it under Section 120.68 of the Florida Statutes, by the filing of a Notice of Appeal under Rule 9.110 of the Florida Rules of Appellate Procedure, with the clerk of the Department of Environmental Protection in the Office of General Counsel, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida, 32399-3000; and by filing a copy of the Notice of Appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The Notice of Appeal must be filed within thirty days from the date this notice is filed with the clerk of the permitting authority.

Executed in Tampa, Florida.

FOR   
W.C. Thomas, P.E.  
District Air Program Administrator  
Southwest District

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF ADMINISTRATIVELY CORRECTED PERMIT (including the corrected page(s)) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on SEP 17 2001 to the person(s) listed or as otherwise noted:

- Mr. Pick Talley, Pinellas County Utilities Administration \*
- Mr. Gary Robbins, Pinellas County, Department of Environmental Management
- Mr. Gregg Worley, USEPA, Region 4 (INTERNET E-mail Memorandum)
- Ms. Gracy R. Danois, U.S. EPA, Region 4 (INTERNET E-mail Memorandum)
- Ms. Barbara Friday, Bureau of Air Regulation (e-mailed by permit engineer)
- Mr. Scott Sheplak, Bureau of Air Regulation (e-mailed by permit engineer)
- Mr. Hamilton Oven, Siting Coordination Office (e-mailed by permit engineer)

cc: M. SANTELLA - WPI  
P. HESSLING - PDEM  
D. EVAS - RTP  
D. DEE - LANDERS & PARSONS  
R. LARSON - HDR

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

RECEIVED

SEP 19 2001

SOURWASTEOP

(Clerk)

SEP 17 2001  
(Date)

ADMINISTRATIVE PERMIT CORRECTION

FINAL Title V Permit No.: 1030117-002-AV

Admin. Correction DEP Project No. 004

Pinellas County Resource Recovery Facility

Page 2 of 2

*Condition B.92 is hereby changed:*

**From:**

B.92. Two copies of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.

[PA 78-11(B) & PA 83-18(B)]

**To:**

B.92. A copy of the results of the stack tests shall be submitted within 60 days of testing to the DEP Southwest District Office.

[Rule 62-4.070(3), F.A.C.; Power Plant Siting, Conditions of Certification for Pinellas County Resource Recovery]

STATE OF FLORIDA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
NOTICE OF FINAL PERMIT

DEC 26 2000

In the Matter of an  
Application for Permit by:

Mr. Pick Talley, Director of Utilities  
Pinellas County Utilities  
PO Box 1780  
Clearwater, Florida 33757

DEP File No. 1030117-003-AC  
PSD-FL-011B and PSD-FL-098B  
Pinellas County Resource Recovery Facility  
Pinellas County

Enclosed is Final Permit Number 1030117-003-AC (PSD-FL-011B and PSD-FL-098B). This permit, which is a modification to PSD permit numbers PSD-FL-011A and PSD-FL-098A, authorizes the applicant, Pinellas County Utilities to construct its Capital Replacement Project for its Pinellas County Resource Recovery Facility located at 3001 110<sup>th</sup> Avenue North, St. Petersburg, Pinellas County. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order has the right to seek judicial review of it under section 120.68 of the Florida Statutes, by filing a notice of appeal under rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



C. H. Fancy, P.E., Chief  
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Notice of Final Permit (including the Final permit) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 12/21/00 to the person(s) listed:

Pick Talley \*  
Don Elias, RTP ✓  
Bill Thomas, P.E., DEP SW District  
Peter Hessling, Pinellas County DEM  
Gregg Worley, EPA  
John Bunyak, NPS

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlotta D. Hayes 12/21/00  
(Clerk) (Date)





# Department of Environmental Protection

Jeb Bush  
Governor

Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400

David B. Scrubs  
Secretary

December 14, 2000

## CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Pick Talley  
Director of Utilities  
Pinellas County Utilities  
14 S. Fort Harrison Avenue, 5th Floor  
Clearwater, Florida 33756

Re: DEP File No. 1030117-003-AC, PSD-FL-011B and PSD-FL-098B  
Modification of PSD Permits PSD-FL-011A and PSD-FL-098A  
Pinellas County Resource Recovery Facility

The applicant, Pinellas County Utilities, applied on August 30, 2000, to the Department for a modification to PSD permit numbers PSD-FL-011A and PSD-FL-098A for its Pinellas County Resource Recovery Facility located at 3001 110<sup>th</sup> Avenue North, St. Petersburg, Pinellas County. The modification is to authorize construction of its Capital Replacement Project. The Department has reviewed the modification request. The referenced permits are hereby modified as follows. This modification shall supplement conditions imposed by previous permitting actions.

### New Specific Condition:

The owner or operator is authorized to construct its Capital Replacement Project as described in the letter application from Pinellas County Utilities dated August 30, 2000, and subsequent related information. The owner or operator is authorized to perform the construction activities generally described as: boiler refurbishment consisting primarily of replacement of the components from the furnace gas exit to the economizer gas exit for boiler unit trains 1, 2 and 3; rebuilding the refuse cranes; refurbishment of the cooling tower; upgrading the instrumentation control systems; refurbishment or replacement of feedwater pumps; tipping floor improvements; and upgrading the existing water regeneration equipment through the replacement of two nominal 100 gallon per minute demineralizer trains.

The owner or operator shall submit to the Department on an annual basis, for a period of five years representative of normal post-change operations of MWC units 1, 2 and 3 ("the units"), within the period not longer than 10 years following the completion of construction of the last unit, information demonstrating that the Capital Replacement Project did not result in a PSD-significant emissions increase. A PSD-significant increase shall be defined as noted in Table 212.400-2 of Chapter 62-212, F.A.C. The information required above shall be based on a comparison of "baseline" past actual annual emissions with actual annual emissions for the given year after completion of the Capital Replacement Project, shall be reported on a calendar year basis, and shall start the first full calendar year following the completion of the Capital Replacement Project's boiler refurbishment of the last unit. The owner or operator shall utilize the "representative actual annual emissions" methodology, defined at Rule 62-210.200(12)(d), F.A.C., and the provisions of 40 CFR 52.21(b)(33), adopted by state rule, in its demonstration. If the Capital Replacement Project results in a PSD-significant emissions increase, or if the owner or operator fails to submit the required information, the units shall be subject to the requirements of PSD at that future time, which shall include a BACT determination for each PSD-significant pollutant.

The owner or operator shall estimate actual annual emissions using the general methodology shown in its letter application and subsequent related information, as discussed generally as follows. The owner or operator shall use the continuous emission monitoring system (CEMS) data to estimate actual annual emissions of the

"More Protection, Less Process"

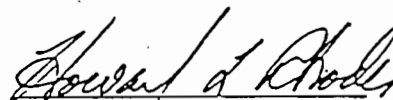
pollutants monitored by the CEMS: NO<sub>x</sub>, SO<sub>2</sub>, and CO. The owner or operator shall use data from all post-retrofit compliance test(s) to estimate past actual annual emissions of other pollutants not monitored by the CEMS: PM/PM<sub>10</sub>, lead, mercury, dioxins, hydrogen chloride. The owner or operator shall use the CEMS data to determine unit availability, which shall be used in determining actual annual emissions. The owner or operator shall use the CEMS data starting from June 1, 2000 until the start of construction of the Capital Replacement Project's boiler refurbishment for its determination of baseline past actual annual emissions. No more than two years of data shall be used to determine the baseline past actual annual emissions. As an alternative to the above, the owner or operator may use other methods approved by the Department.

[Rule 62-4.070(3) and 62-212.300(1)(d), F.A.C.]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit modification) has the right to seek judicial review of it under Section 120.68, F.S., by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel, Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000, and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within thirty days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director  
Division of Air Resources  
Management

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on 12/21/00 to the person(s) listed:

Pick Talley \*  
Don Elias, RTP  
Bill Thomas, P.E., DEP SW District  
Peter Hessling, Pinellas County DEM  
Gregg Worley, EPA  
John Bunyak, NPS

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to §120.52, Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.

Charlotte J. Hayes 12/21/00  
(Clerk) (Date)

**1 APPLICANT NAME AND ADDRESS**

Pinellas County Utilities  
 14 S. Fort Harrison Avenue, 5th Floor  
 Clearwater, Florida 33756

Authorized Representative: Mr. Pick Talley, Director of Utilities

**2 REVIEWING AND PROCESS SCHEDULE**

|                    |   |
|--------------------|---|
| September 1, 2000  | Received letter application for permit modification                   |
| September 20, 2000 | Received permit application fee                                       |
| September 25, 2000 | Received additional information                                       |
| October 6, 2000    | Received additional information by fax (original received October 11) |
| October 12, 2000   | Received additional information                                       |
| October 17, 2000   | Received revised information  |
| October 20, 2000   | Received additional information by fax (original received October 23) |
| October 20, 2000   | Application complete (for purposes of review time clock)              |
| November 2, 2000   | Distributed Notice of Intent to Issue and supporting documents        |
| November 10, 2000  | Notice of Intent published in the St. Petersburg Times                |

**3 FACILITY DESCRIPTION, PROJECT DETAILS AND RULE APPLICABILITY**

This existing Pinellas County Resource Recovery Facility has three municipal waste combustor units ("units") that burn municipal solid waste (MSW) and certain other solid wastes to produce steam used to make electricity via steam turbine generators. All three municipal waste combustor units are mass burn water wall boilers with auxiliary natural gas fired burners, and each has a nominal design rate capacity of 1000 tons of MSW per day, 417 mmBtu per hour, and 250,000 pounds steam per hour (assuming MSW with a heating value of 5000 Btu per pound). Units 1 and 2 began commercial operation in May 1983 and unit 3 began commercial operation in August 1986. The total nominal electric generating capacity of the facility is 75 MW from two steam turbine/generator sets, and the power is supplied to Florida Power Corporation pursuant to contract. The facility includes other emissions units related to operation of the facility, and a contiguous municipal solid waste landfill. The facility is located at 3001 110<sup>th</sup> Avenue North, St. Petersburg, Pinellas County. The facility's units were originally permitted under the federal PSD program (PSD-FL-011 permitted units 1 and 2 and PSD-FL-098 permitted unit 3). The facility was also certified under Florida's Power Plant Siting Act, under orders PA78-11 and PA83-18, and their respective modified orders.

The units are subject to the requirements of Rule 62-204.800(8)(b), F.A.C., and 40 CFR 60 Subpart Cb, the emission guidelines for "existing" large municipal waste combustors. The units were recently retrofitted with new combustion controls and advanced pollution control equipment to meet the emission requirements of this subpart. These requirements were more stringent than the requirements imposed on these units by previous PSD permits. Retrofit construction and initial compliance testing were completed in late 1998 for unit 3, summer 1999 for unit 2 and early 2000 for unit 1. Retrofit construction activities were authorized by an amendment to the PSD permits for the facility, denoted as PSD-FL-011A and PSD-FL-098A.

The applicant applied for a modification of its PSD permits to allow construction of its Capital Replacement Project. The applicant proposed in this project to construct facility improvements that are intended to allow the facility to operate at capacity throughout the useful life of the upgraded emission controls installed during the Subpart Cb retrofit noted above. In essence, this is a life extension project. [Information provided by applicant at a pre-application meeting with the Department July 7, 2000.] The present project will be processed as a PSD permit modification denoted as PSD-FL-011B and PSD-FL-098B.

## TECHNICAL EVALUATION AND DETERMINATION

The Capital Replacement Project includes improvements throughout the facility: refurbishment of the boilers, cranes, cooling towers and feedwater pumps, upgrades of the instrumentation and controls, replacement of the water treatment system and tipping floor improvements. Of particular importance to this permitting action are the Capital Replacement Project's changes related to boiler refurbishment. All three municipal waste combustor unit boilers are proposed for refurbishment, so the emissions units addressed by this permitting action are:

| EMISSIONS UNIT NO. | EMISSIONS UNIT DESCRIPTION       |
|--------------------|----------------------------------|
| 001                | Municipal waste combustor unit 1 |
| 002                | Municipal waste combustor unit 2 |
| 003                | Municipal waste combustor unit 3 |

The applicant stated that the units are "electric utility steam generating units" as defined at 40 CFR 52.21(b)(31) and Rule 62-210.200(109), F.A.C., and so the applicant proposed that the facility may use the "representative actual annual emissions" methodology specified at 40 CFR 52.21(b)(33) and Rule 62-210.200(12)(d), F.A.C., to confirm that the project is not subject to the PSD requirements of 40 CFR Part 52 and Rule 62-212.400, F.A.C. Because Florida has a delegated PSD program for sources subject to the Power Plant Siting Act, the analysis of PSD applicability is to be done in accordance with federal rules, particularly 40 CFR 52.21, and the Department may rely explicitly on EPA's interpretation of its rules. The Department can also rely on its rules provided it does so in a manner that is consistent with EPA's program. In reviewing this proposed project, the Department needed to determine whether the applicant's units are electric utility steam generating units, and, if so, if the applicant has met the requirements for the representative actual annual emissions methodology.

The first issue is whether the units are electric utility steam generating units. It should be noted that the Department's present review of whether the units are electric utility steam generating units is for purposes of determining PSD applicability, not the applicability of any NSPS requirement for such units. A plain reading of the definitions noted above appears to confirm the applicant's assertion that the units meet the definition. The units are steam electric generating units which are intended to supply more than one third of the potential electrical output and more than 25 MW electrical output to a utility power distribution system for sale. However, the definitions state that the units must have been constructed for the purpose of supplying that electricity. A municipal waste combustion facility that produces steam to drive an steam turbine electrical generator, such as the applicant's facility, is arguably constructed with more than one purpose, to supply electricity and to combust solid waste (reduce its volume prior to ultimate disposal). It may not be possible to distinguish which purpose is more important as it is conceivable that the facility may not have been constructed unless revenue would be received both from the receipt of solid waste and the sale of electricity. The definitions do not exclude additional "purposes" for the units, and so do not limit consideration to only units that serve the sole purpose of supplying electricity.

EPA has not explicitly written regarding whether MWC units that use steam to generate electricity are electric utility steam generating units. EPA's interpretive rule for case-by-case MACT applicability published May 25, 2000, briefly discusses electric utility steam generating units, for a different purpose than PSD applicability. EPA actually considered this issue within the broader context of determining that combustion turbines are not electric utility steam generating units, even if they are part of a combined cycle system. EPA stated that waste heat recovery units, including duct burners, which are part of a combined cycle system are considered to be steam generating units. In making this assessment EPA relied upon the distinction that steam generating units use steam derived from the combustion of fuel to drive a "steam turbine, which in turn provides shaft power to spin an electric generator and generate electricity." [65 FR 34011.] EPA distinguished this type of electric generator from that of a turbine generator, which uses fuel to directly drive a mechanically coupled electric generator. Clearly, then, EPA

considers a steam generating unit to be an electrical generator that is driven by extracting energy from steam.

EPA limits the definition of electric utility steam generating units to those units with a minimum generating capacity, which can only be accomplished with a steam generator of a given size and inlet energy requirements, but the definition does not limit the type of boiler or fuels used to create the steam. The term "electric utility" implies that not all types of industrial or commercial facilities are included in the definitions, but the applicant's MWC units, which use steam to generate electricity for sale, appear to meet the definition. Considering the applicant's MWC units to be electric utility steam generating units seems consistent with EPA's published intent regarding the 1992 changes to the PSD program (the so called "WEPCO rule"). In the preamble to these changes, and in its discussion of Alternatives for New Source Review Applicability (part of the so called "new source review reform" proposal), EPA identified the broad criteria used to support the "representative actual annual emissions" methodology for electric utilities. (The methodology is discussed further below.) Generally, in 1992 EPA stated that it was comfortable with the 1992 changes applying to electric utilities because the source population was relatively small, the technology in use relatively uniform, public information would be available to NSR permitting authorities to help confirm future operating conditions, and federal acid rain rules required continuous monitoring or other highly accurate methods for reporting actual emissions. [57 FR 32333.] Clearly, large MWC facilities such as the applicant's, conform with this intent. Although not subject to the acid rain rules, the requirements of 40 CFR 60 Subparts Cb and Eb compel the sources to install continuous monitoring systems and perform accurate emission tests to determine actual emissions. The source population is small, with relatively uniform combustion and control technologies, especially after the implementation of Subparts Cb and Eb. EPA has recently revisited its prior analysis, in light of its belief that changes to utilities are not being reported to permitting authorities. [63 FR 39861.] In its discussion, EPA has additionally noted that electric utilities generally serve a clearly defined local market area. [63 FR 39860.] Although EPA probably intended this to refer to electric service, the applicant's facility also serves a clearly defined local area for receipt and disposal of solid waste. This analogy is important because it is a measure of the applicant's ability to forecast demand growth and future utilization of its units, and is a consideration of the permitting agency when relying on the applicant's projections. (This consideration should not be construed to broaden the scope of the applicability of the WEPCO rule beyond electric utility steam generating units to any commercial or industrial source. EPA has explicit concerns with considering forecasted demand growth in a competitive market economy. [See, for example 63 FR 39861.] The applicant's facility is municipally owned, and its projection of demand is strongly tied to its need to service the limited area of Pinellas County.) The applicant's electrical service is even more limited because it is contracted to sell its net power to one customer, Florida Power Corporation. The facility has been operated to maximize its unit availability, as evidenced by the facility's annual operation reports. As with investor owned electric utilities, public information is available to help confirm the applicant's projection of future demand and utilization, particularly with regard to demand for solid waste disposal. Solid waste reporting is required for each county by the Department's solid waste rules. Population growth data, which will have the major influence on the future demand for solid waste disposal capacity at municipally owned facilities such as the applicant's, is available from sources such as the University of Florida's Bureau of Economic and Business Research. Considering the applicant's units to be electric utility steam generating units appears to be consistent with EPA's intent regarding the WEPCO rule, and the Department considers these units to electric utility steam generating units for purposes of PSD applicability.

Because the units are electric utility steam generating units, the applicant is allowed to use the "representative actual annual emissions" methodology specified at Rule 62-210.200(12)(d), F.A.C., to confirm that the project is not subject to the PSD requirements of Rule 62-212.400, F.A.C. The second issue is whether the applicant has met the requirements for this methodology. This methodology requires

the applicant to compare actual annual emissions prior to the modification with the annual emissions projected for the two year period following the modification. EPA has written about the representative actual annual emissions methodology in both the preamble to the 1992 changes to the PSD program at 57 FR 32323-6, and in EPA Region 5's May 23, 2000 determination of PSD applicability for Detroit Edison's Dense Pack project.

As noted in the Dense Pack determination, the determination of PSD applicability is a two step process. First, the project must be a physical or operational change that is not excluded from PSD review as routine maintenance, repair or replacement of component parts. This provision is included in Florida's rules under the definition of "modification" at Rule 62-210.200(188), F.A.C., although that definition is not limited to PSD projects. The applicant has not suggested that this project in any way meets that exclusion. The project is a modification as defined by Department rule. Second, the project must result in a PSD-significant increase in emissions. The Department's rules refer to an increase in "actual emissions", which are defined at Rule 62-210.200(12)(d), F.A.C., which, as noted above, provides for the representative actual annual emissions methodology for electric utility steam generating units. Detroit Edison's Dense Pack project is similar to the applicant's project in that both projects are non-routine physical changes that are projected by the source owner to not result in post-change PSD significant emissions increases. In its review of the Dense Pack project, EPA Region 5 concluded that Detroit Edison may "lawfully avoid the major source permitting process by using the unit's representative actual annual emissions to calculate emissions following the change if the source submits information for 5 years following the change to confirm its pre-change projection." [Letter from EPA Region 5 Administrator to Detroit Edison, May 23, 2000.] This is very similar to what EPA wrote in the Federal Register that "any utility which utilizes the 'representative actual annual emissions' methodology to determine that it is not subject to NSR must submit for 5 years after the change sufficient records to determine if the change results in an increase in representative actual annual emissions." [57 FR 32325.] Although the applicant is only required to compare past actual emissions to projected actual emissions for a two year post-change period, the applicant must report post-change emissions for a five year period to confirm its projection. EPA wrote that the additional reporting is a safeguard that future significant actual emissions increases that result from the project will not go unnoticed and unreviewed. [57 FR 32325.] The applicant has proposed that actual emissions will not increase in a PSD significant manner as a result of this project, based on a comparison of past actual to representative future actual annual emissions, and has agreed to the required reporting.

At issue next is the form of any required permit conditions to ensure that the project is not subject to PSD requirements. For sources that are not eligible to use the representative actual annual emissions methodology, the Department would typically provide limits on future potential emissions in any construction permit issued for a modification of an emissions unit. Such limits would be emission limits, which are firm, federally-enforceable limits on future potential emissions. For sources using the representative actual annual emissions methodology, EPA has written that such emission limits are not required. In fact, EPA stated that the only requirement is for "tracking and monitoring post-change utilization and/or emissions levels at the unit to confirm that baseline emission levels are not exceeded as a result of the change." [57 FR 32325.] Although not clear in the cited text, EPA intended that the test be that emissions increases not equal or exceed the PSD significance criteria. EPA wrote that "the intent is to confirm the utility's initial projections rather than annually revisiting the issue of NSR applicability. If however, the reviewing authority determines that the source's emissions have in fact increased significantly over baseline levels as a result of the change, the source would become subject to NSR requirements at that time." [57 FR 32325.] EPA further clarified in the Dense Pack determination that the trigger for PSD review would also include failure to report the required information: "If Detroit Edison fails to comply with the reporting requirements ... it will be required to obtain a PSD permit for the Dense Pack project." [Detroit Edison Applicability Determination Detailed Analysis, undated

(presumably May 23, 2000).] Thus, the requirement to track and report actual emissions is an "applicability requirement" rather than an emission limit.

Another issue to be considered is that certain emission increases, those not caused by the change, are not included in the future actual emissions. EPA referred to this as the "causation provision" in the 1992 preamble, where EPA wrote, "where projected increased operations are in response to an independent factor, such as demand growth, which would have occurred ... even in the absence of the physical or operational change, the increased operations ... may be excluded from the projection of the unit's future actual emissions." [57 FR 32327.] As noted in the Dense Pack determination, "[i]n projecting post-change emissions, Detroit Edison does not have to include that portion of the unit's emissions which could have been accommodated before the change and is unrelated to the change, such as demand growth." [Letter from EPA Region 5 Administrator to Detroit Edison, May 23, 2000.] EPA did clarify that increased emissions resulting from efficiency improvements that occur directly because of the project that cause the unit(s) to be utilized more, are not to be excluded from actual emissions: "If efficiency improvements are the predominant cause of the change in emissions and demand growth is not, the exclusion does not apply." [57 FR 32327.] The applicant in this project did not include a projection for demand growth or other independent factors that may increase operations and future emissions. The applicant noted that little demand growth for solid waste disposal is expected beyond the nominal one percent population growth rate that Pinellas County is experiencing. [Discussion with R. Peter Stasis, P.E., of Pinellas County Utilities, pre-application meeting, July 7, 2000.] Independent confirmation of the potential demand growth can be found from the University of Florida's Bureau of Economic and Business Research, which has noted that Pinellas has the fifth largest population in Florida, and its potential for growth is leveling out. [UF Bureau of Economic and Business Research, [www.napa.ufl.edu/99news/pop99.htm](http://www.napa.ufl.edu/99news/pop99.htm)] The university's 1997 forecasted population for Pinellas County is 905,933 in 2000 and 1,018,919 in 2020, an annual growth rate of less than 1%. [[www.napa.ufl.edu/98news/populati.htm#table](http://www.napa.ufl.edu/98news/populati.htm#table)] The region served by Florida Power Corporation, which receives the electric power from the applicant, is growing at a faster average rate, so demand growth for electric power may be a factor. [ibid.] The applicant is entitled to exclude any actual emissions increase attributable to factors independent of the project, but the applicant must support such exclusion in its future reports. The applicant has not represented that the current project will increase utilization of the units, in and of itself.

The recently completed Subpart Cb retrofit changes are expected to reduce actual emissions from the units (substantially for many pollutants such as dioxin and acid gases) as compared to emissions prior to the retrofit. Because of this, the Department required that the applicant use actual emissions after completion of the retrofit changes for the purposes of determining PSD applicability to this project. The applicant proposed to use the continuous emission monitoring system (CEMS) data to estimate actual annual emissions of the pollutants monitored by the CEMS: NO<sub>x</sub>, SO<sub>2</sub>, and CO. The applicant proposed to use data from all post-retrofit compliance test(s) to estimate actual annual emissions of other pollutants not monitored by the CEMS: PM/PM<sub>10</sub>, lead, mercury, dioxins, hydrogen chloride. The CEMS data will also be used to determine unit availability, which is a factor the applicant will use in making its actual annual emissions estimates. The applicant proposed to use the CEMS data starting from June 1, 2000 until the start of construction of the Capital Replacement Project's boiler refurbishment. The starting date of June 1 was selected by the applicant to provide for sufficient time from completion of the retrofit project for the units to have begun normal operation. The applicant intends to begin construction of the Capital Replacement Project's boiler refurbishment in the fall of 2001. This will provide for twelve or more months of CEMS data, and one or two series of compliance tests, for estimating actual annual emissions. Normally, two years of actual emissions data are required for PSD purposes, but Rule 62-210.200(12)(a), F.A.C., provides for the Department to allow the use of a different time period upon a determination that it is more representative of normal operation of the emissions unit. In this case, where the Department is requiring post Subpart Cb retrofit emissions data, the Department is authorizing the use

**TECHNICAL EVALUATION AND DETERMINATION**

of less than two years of data to determine past actual emissions. The applicant has proposed to use the same methodology to determine future actual emissions following the Capital Replacement Project.

As mentioned above, the CEMS will also be used to document availability of the units. Unit availability is a factor in determining actual emissions. EPA stated that actual emissions should be calculated as the product of hourly emissions and capacity utilization (unit availability). [See, for example, EPA's preamble to the 1992 PSD program changes, 57 FR 32323.] Average availability of the units, determined from the operating hours reported annually by the applicant for 1990 through 1999, was about 81.7%, with a standard deviation of about 4%. The applicant reported that for the period of June 1-July 31, 2000, availability of the units was about 89.8%. It is not surprising that unit availability would increase as a result of the Subpart Cb retrofit project. The units date from the early- to mid-1980s. The units were equipped with combustion controls and electrostatic precipitators that were placed in service when the units were first constructed. The applicant reported that operational problems with the ESPs, such as transient field failures, increased as the units aged. [Telephone call with Don Elias, October 19, 2000.] The retrofit project included a new distributive control system that allowed for quicker response to changes in operating parameters, as well as new advanced emission control equipment, including baghouses which replaced the ESPs. These modernized facilities will allow the units to operate in a more stable manner, with less transient failures, with longer periods of time between planned outages. The averaging period proposed by the applicant will be long enough to include planned outage periods. The applicant expects that with the longer averaging time, unit availability will fall somewhat from 89.8% to about 86%, and the Department does not find fault with this assessment. [Memo from Don Elias, October 19, 2000.]

The applicant did provide a "baseline" estimate of actual emissions and a projection of future actual emissions based on the CEMS data available from June 1 through July 31, 2000. As discussed above, the applicant will revise this estimate based on the complete data available from June 1 until the start of construction of the Capital Replacement Project's boiler refurbishment, to provide for the longest possible period for gathering representative data. At that time, the applicant will also revise its estimate of representative future actual annual emissions. The applicant estimated that any emissions increases associated with this project will not exceed the PSD significance criteria. Based on the limited data to date, emissions are estimated by the applicant as follows in tons per year (TPY):

| Pollutant                               | Current Actual Emissions <sup>1</sup> (TPY) | Rep. Future Actual Emissions (TPY) | Net Increase (TPY)     | PSD Significance (TPY) | Subject to PSD? |
|---|---|------------------------------------|------------------------|------------------------|-----------------|
| PM/PM <sub>10</sub>                     | 47  | 71/61                              | 24/14                  | 25/15                  | No              |
| SO <sub>2</sub>                         | 85  | 124                                | 39                     | 40                     | No              |
| NO <sub>x</sub>                         | 1691  | 1730                               | 39                     | 40                     | No              |
| CO                                      | 118   | 217                                | 99                     | 100                    | No              |
| Pb                                      | 0.25  | 0.84                               | 0.59                   | 0.6                    | No              |
| Hg                                      | 0.23  | 0.32                               | 0.09                   | 0.1                    | No              |
| MWC Organics<br>Total PCDD/F            | 9.8 x 10 <sup>-3</sup>                      | 10.1 x 10 <sup>-3</sup>            | 3.0 x 10 <sup>-4</sup> | 3.5 x 10 <sup>-3</sup> | No              |
| MWC Acid Gases<br>HCl & SO <sub>2</sub> | 239   | 278                                | 39                     | 40                     | No              |

<sup>1</sup> Current actual emissions are after completion of the Subpart Cb retrofit construction. Representative future actual emissions are estimated for the two years following completion of the Capital Replacement Project's boiler refurbishment construction.



In summary, the applicant's proposed Capital Replacement Project is a non-routine physical change that is a modification as defined by Department rule. Because the affected emissions units are electric utility steam generating units, the applicant may lawfully avoid PSD preconstruction review by using the unit's representative actual annual emissions to calculate emissions following the modification. The Department has determined that past actual emissions in this case will be the post-Subpart Cb retrofit emissions. The applicant contends that representative actual annual emissions following the Capital Replacement Project will not be significantly greater than its past actual emissions. Therefore, the applicant may avoid major PSD permitting to the extent it documents its actual emissions and submits information following the modification to confirm its projection.

The proposed project is subject to preconstruction review requirements under the provisions of Chapter 403, F.S., and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. The existing facility is located in an area designated, in accordance with Rule 62-204.340, F.A.C., as attainment or unclassifiable for the criteria pollutants ozone, PM<sub>10</sub>, carbon monoxide, SO<sub>2</sub>, nitrogen dioxide and lead. This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant exceeds 100 tons per year (TPY). At this facility potential emissions of PM/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO and VOC exceed 100 TPY.

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1 of Chapter 62-212, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also an existing Major Facility with respect to Rule 62-212.400, Prevention of Significant Deterioration (PSD). As noted above, the applicant has proposed that the net increase in emissions of PM/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC, MWC metals, MWC organics and MWC acid gases will not exceed the PSD significance levels of Table 212.400-2, F.A.C. Therefore this project is not subject to PSD requirements of Rule 62-212.400, F.A.C., for these pollutants.

40 CFR 60.14 defines a modification for purposes of federal New Source Performance Standards to include a change to an existing facility that increases the emission rate of any pollutant, where such rate is defined by that section to be in units of kg/hour. The Capital Replacement Project is not intended to increase the physical capacity of the emissions units, and so will not result in an increase in the short-term emission rates of any pollutant from the emissions units. Therefore, the project is not a modification as defined by the federal rules. The Capital Replacement Project does not constitute a reconstruction project as defined at 40 CFR 60.15 because the capital cost for the regulated portions of the MWC units of \$35 million does not exceed 50% of the fixed capital cost of a new facility, which are estimated to be \$290 million for the portions of the MWC units regulated by the NSPS Subpart Eb. The applicant also estimated total maintenance costs, excluding costs associated with the Subpart Cb retrofit, for the regulated portions of the MWC units over the life of the facility at \$31.5 million. When these costs are added to the costs of this project, the total costs are 23% of the comparable new construction costs, still less than half of the value that is considered reconstruction per federal rule. (All figures are in year 2000 dollars.) Thus, this project is not subject to any federal New Source Performance Standard.

This project is not subject to any unit specific requirements under state rule. The applicant is required to obtain this permit modification for this project because it is a modification as defined by Rule 62-210.200(188), F.A.C., and construction permits are required for modifications pursuant to Rules 62-4.030, 62-210.300(1)(a) and 62-212.300(1)(a), F.A.C.

#### 4 SOURCE IMPACT ANALYSIS

An impact analysis was not required for this project because it is not subject to the requirements of PSD for PM/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC, MWC metals, MWC organics and MWC acid gases.

## TECHNICAL EVALUATION AND DETERMINATION

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### 5 BACT ANALYSIS AND DEPARTMENT'S DETERMINATION

A BACT determination was not required because this project is not subject to the requirements of PSD for PM/PM<sub>10</sub>, NO<sub>x</sub>, SO<sub>2</sub>, CO, VOC, MWC metals, MWC organics and MWC acid gases. If the Department determines during the reporting period that the project is subject to PSD, BACT will be required at that time. As is required for any BACT determination, at that time the BACT determination shall not result in allowable emissions that are less stringent than those of the applicable NSPS requirements of 40 CFR 60, Subpart Eb, the NSPS for "new" large municipal waste combustors.

### 6 EXCESS EMISSIONS

The PSD permit modification for this project will not revise any existing requirements or provisions regarding excess emissions at these units. The Department expects the applicant to include excess emissions, to the extent quantifiable, in its calculation of actual emissions.

### 7 PRELIMINARY DETERMINATION

Based on the foregoing technical evaluation of the application and additional information submitted by the applicant and other available information, the Department has made a preliminary determination that the proposed project will comply with all applicable state and federal air pollution regulations. The Department's preliminary determination is to issue the draft permit modification to allow construction of the Capital Replacement Project, subject to the terms and conditions of the draft permit modification.

The permit modification for this project authorizes construction of the Capital Replacement Project, but imposes the record keeping and reporting requirements noted above. As discussed above, these requirements establish an applicability limit, so that if representative future actual emissions increase, or if the applicant fails to comply with the reporting requirements, the applicant will be required to undergo PSD review for the Capital Replacement Project.

### 8 FINAL DETERMINATION

The Department distributed a public notice package on November 2, 2000. The Public Notice of Intent to Issue was published in the St. Petersburg Times on November 10, 2000. Comments were received from the applicant's consultant in a memorandum dated November 8, 2000. These comments primarily noted minor typographical errors and suggested minor changes to clarify this determination. The Department corrected the typographical errors in this determination and the permit modification identified by the applicant, and made the changes the applicant requested for clarification. These changes are not significant and do not alter any applicable requirement of the permit modification. No comments were received from the public, EPA or federal land manager.

The final action of the Department is to issue the permit with the changes noted above.

#### DETAILS OF THIS ANALYSIS MAY BE OBTAINED BY CONTACTING:

Joseph Kahn, P.E.  
Department of Environmental Protection  
Bureau of Air Regulation  
Mail Station #5505  
2600 Blair Stone Road  
Tallahassee, Florida 32399-2400  
Telephone: 850/488-0114



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August 22, 2001

C. H. Fancy, P.E., Chief, Bureau of Air Regulation  
Florida Department of Environmental Protection  
Twin Towers Office Building  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Pinellas County Resource Recovery Facility Capital Replacement Project  
PSD Permit PSD-FL-011B and PSD-FL-098B/DEP File No. 1030117-003-AC

Dear Mr. Fancy:

On December 21, 2000, the Department issued a PSD Permit Modification that authorized the construction of the Capital Replacement Project (CRP) at the Pinellas County Resource Recovery Facility (Facility). The CRP was described in detail in the Technical Evaluation and Determination attached to the Department's permit.

With this letter, Pinellas County is formally notifying the Department that CRP construction activities have commenced as of June 1, 2001. The CRP activities require occasional short-term shutdowns of the municipal waste combustor (MWC) units, which would affect facility availability. In the Technical Evaluation and Determination (page 6, second full paragraph), the Department instructed the County to revise the County's estimate of current actual facility emissions upon commencement of CRP construction activities. The estimate was to be performed in a manner consistent with the emissions estimates originally provided to the Department for the two month period of June-July, 2000 (see October 16, 2000 letter from Donald F. Elias to the Department).

Attached please find the revised calculations for the one-year (twelve-month) period from June 2000 through May 2001. The calculations include the most recent stack test data during May 2001. The CEM pollutant emission rates were revised to consider the average flowrate or dioxin stack tests for immediately before (May 2000) and at the end of (May 2001) the one-year period. This is consistent with the Department's requirement to use multiple years of stack test flowrates when available for determining actual annual emission rates for fee purposes for CEM pollutants at Rule 62-213.205(1)(e), Florida Administrative Code (FAC).

Overall MWC availability for the year, which includes periods of downtime for scheduled maintenance as well as the normal outages for malfunctions and repairs, was 86.6% (down from the two-month average of 89.8%). Overall CEM emission averages (in ppm<sub>dv</sub> corrected to 7% O<sub>2</sub>) were similar to the previous two-month estimates, but the average flowrate decreased when the additional year of dioxin stack test data was included. With the

C. H. Fancy, P.E., Chief  
 August 22, 2001  
 Page 2

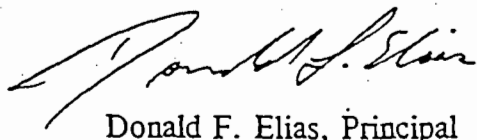
decrease in overall unit availability and flowrates, there was a slight decrease in the estimated actual emissions as compared to the original two-month period.

The revised estimates of current actual emissions and the revised estimates of future actual emissions are shown in the following table, which replaces the table set forth on page 6 of the Department's Technical Evaluation and Determination.

| Pollutant                               | Current Actual Emissions (TPY) | Rep. Future Actual Emissions (TPY) | Net Increase (TPY)     | PSD Significance (TPY) | Subject to PSD? |
|---|--------------------------------|------------------------------------|------------------------|------------------------|-----------------|
| PM/PM <sub>10</sub>                     | 45                             | 69/59                              | 24/14                  | 25/15                  | No              |
| SO <sub>2</sub>                         | 84                             | 123                                | 39                     | 40                     | No              |
| NO <sub>x</sub>                         | 1569                           | 1608                               | 39                     | 40                     | No              |
| CO                                      | 93                             | 192                                | 99                     | 100                    | No              |
| Pb                                      | 0.24                           | 0.83                               | 0.59                   | 0.6                    | No              |
| Hg                                      | 0.22                           | 0.31                               | 0.09                   | 0.1                    | No              |
| MWC Organics<br>Total PCDD/F            | 9.5 x 10 <sup>-5</sup>         | 9.8 x 10 <sup>-5</sup>             | 3.0 x 10 <sup>-6</sup> | 3.5 x 10 <sup>-6</sup> | No              |
| MWC Acid Gases<br>HCl & SO <sub>2</sub> | 232                            | 271                                | 39                     | 40                     | No              |

Also attached are certification pages from the County's Responsible Official and registered Professional Engineer. If you have any questions, please feel free to contact me at 732-968-9600 or Ronald D. Larson of HDR Engineering at 813/282-2398.

Sincerely,  
 RTP ENVIRONMENTAL ASSOCIATES, INC.®



Donald F. Elias, Principal

cc: A.Linero/J.Kahn, Florida DEP;  
 P.Talley/R.P.Stasis/W.Smith, Pinellas Co.;  
 R.Larson, HDR Engineering; D.Deer, Esq., Landers & Parsons;  
 R.Henson/S.Reinhart/J.McIntyre/M.Killeen/T.Porter, Wheelabrator;  
 W.Corbin/PCRRF4 Proj.File, RTP

**CALCULATIONS of  
CURRENT ACTUAL EMISSIONS  
for PINELLAS COUNTY RRF**

June 2000 - May 2001 Data

**Information from CEM Systems (Wheelabrator Pinellas Inc.'s June 5, 2001 letter):**Average Stack Concentrations (ppmdv at 7% O<sub>2</sub>) for June 2000 - May 2001 from CEM data:

|                   |                                |                                   |
|-------------------|--------------------------------|-----------------------------------|
| NO <sub>x</sub> : | (189.65 + 193.02 + 191.38)/3 = | 191.35 ppmdv at 7% O <sub>2</sub> |
| SO <sub>2</sub> : | ( 12.0 + 7.03 + 3.03)/3 =      | 7.35 ppmdv at 7% O <sub>2</sub>   |
| CO:               | ( 23.4 + 18.1 + 14.2)/3 =      | 18.6 ppmdv at 7% O <sub>2</sub>   |

June 2000 - May 2001 Operating Rates (percent of available hours):

|         |                                      |        |
|---------|--------------------------------------|--------|
| Unit 1: | 453,808 min/(60 min/hr)/(8760 hrs) = | 86.34% |
| Unit 2: | 448,836 min/(60 min/hr)/(8760 hrs) = | 85.39% |
| Unit 3: | 462,241 min/(60 min/hr)/(8760 hrs) = | 87.95% |
|         | Average:                             | 86.56% |

**Information from Stack Tests:**Flowrates (dscfm at 7% O<sub>2</sub>) during May 2000 PCDD/F Stack Tests:

|         |   |                                    |
|---------|---|------------------------------------|
| Unit 1: | (142,100 dscfm)(20.9%-10.2%)/(20.9%-7%) = | 109,386 dscfm at 7% O <sub>2</sub> |
| Unit 2: | (134,400 dscfm)(20.9%- 9.8%)/(20.9%-7%) = | 107,327 dscfm at 7% O <sub>2</sub> |
| Unit 3: | (118,800 dscfm)(20.9%- 9.6%)/(20.9%-7%) = | 96,578 dscfm at 7% O <sub>2</sub>  |

Flowrates (dscfm at 7% O<sub>2</sub>) during May 2001 PCDD/F Stack Tests:

|         |   |                                    |
|---------|---|------------------------------------|
| Unit 1: | (122,500 dscfm)(20.9%- 9.3%)/(20.9%-7%) = | 102,230 dscfm at 7% O <sub>2</sub> |
| Unit 2: | (127,600 dscfm)(20.9%-10.2%)/(20.9%-7%) = | 98,224 dscfm at 7% O <sub>2</sub>  |
| Unit 3: | (99,250 dscfm)(20.9%- 8.3%)/(20.9%-7%) =  | 89,968 dscfm at 7% O <sub>2</sub>  |
|         | Average:                                  | 100,619 dscfm at 7% O <sub>2</sub> |

**Emission Calculations:**Actual Emission Rates (tons/year) for CEM Pollutants:

|                   |   |                |
|-------------------|---|----------------|
| NO <sub>x</sub> : | (191.35 ppmdv)(100619 dscfm)(46 lb/mole)(0.0025956 moles/dscf)(60 min/hr)<br>(8760 hrs/yr)(86.56%)(3 units)/(10 <sup>6</sup> ppm)/(2000 lb/ton) = | 1569 tons/year |
| SO <sub>2</sub> : | ( 7.35 ppmdv)(100619 dscfm)(64 lb/mole)(0.0025956 moles/dscf)(60 min/hr)<br>(8760 hrs/yr)(86.56%)(3 units)/(10 <sup>6</sup> ppm)/(2000 lb/ton) =  | 84 tons/year   |
| CO:               | ( 18.6 ppmdv)(100619 dscfm)(28 lb/mole)(0.0025956 moles/dscf)(60 min/hr)<br>(8760 hrs/yr)(86.56%)(3 units)/(10 <sup>6</sup> ppm)/(2000 lb/ton) =  | 93 tons/year   |

Actual Emission Rates (tons/year) for non-CEM Pollutants (see attached table):

|         |   |                   |
|---------|---|-------------------|
| PM:     | (3.94 lb/hr) (8760 hrs/yr)(86.56%)(3 units)/(2000 lb/ton) =   | 45 tons/year      |
| Pb:     | (0.0207 lb/hr) (8760 hrs/yr)(86.56%)(3 units)/(2000 lb/ton) = | 0.24 tons/year    |
| Hg:     | (0.0197 lb/hr) (8760 hrs/yr)(86.56%)(3 units)/(2000 lb/ton) = | 0.22 tons/year    |
| PCDD/F: | (8.33E-6 lb/hr)(8760 hrs/yr)(86.56%)(3 units)/(2000 lb/ton) = | 9.47E-5 tons/year |
| HCl:    | (13.0 lb/hr) (8760 hrs/yr)(86.56%)(3 units)/(2000 lb/ton) =   | 148 tons/year     |

Actual Emission Rates (tons/year) for MWC-Specific Pollutants:

|                 |   |               |
|-----------------|---|---------------|
| MWC Acid Gases: | (84 tons <sub>SO<sub>2</sub></sub> /year)+(148 tons <sub>HCl</sub> /year) = | 232 tons/year |
| MWC Metals:     | -----see PM emission rates above-----                                       |               |
| MWC Organics:   | ---see PCDD/F emission rate above---  |               |

CALCULATIONS of  
CURRENT ACTUAL EMISSIONS  
for PINELLAS COUNTY RRF

June 2000 - May 2001 Data

| 1998-2001 Stack Test Measurements (lbs/hr) |          |          |           |          |          |          |           |          |          |
|--|----------|----------|-----------|----------|----------|----------|-----------|----------|----------|
| Pollutant                                  | Unit 1   |          | Unit 2    |          |          | Unit 3   |           |          |          |
|  | May 2000 | May 2001 | Sept 1999 | May 2000 | May 2001 | Dec 1998 | Sept 1999 | May 2000 | May 2001 |
| PM   | 0.52     | 0.24     | 3.94      | 0.46     | 0.30     | 0.46     | 1.13      | 2.47     | 0.20     |
| Lead                                       | 0.00108  | 0.00722  | 0.0207    | 0.000684 | 0.000596 | 0.00135  | 0.00262   | 0.00994  | 0.000372 |
| Mercury                                    | 0.00588  | 0.0122   | 0.00915   | 0.00293  | 0.00760  | 0.0197   | 0.00374   | 0.00376  | 0.00492  |
| PCDD/F                                     | 2.12e-07 | 3.70e-07 | 3.19e-06  | 1.18e-06 | 2.16e-06 | 8.33e-06 | 4.18e-06  | 1.58e-06 | 1.22e-06 |
| HCl  | 10.2     | 5.67     | 12.5*     | 7.09     | 11.0     | 13.0*    | 10.2*     | 5.82     | 10.9     |

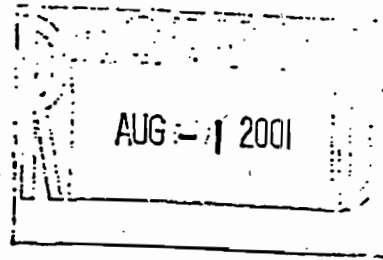
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\*Based on the average HCl concentration (ppmdv at 7% O<sub>2</sub>) and the average flowrate and oxygen content during the PCDD/F stack test (dscfm at 7% O<sub>2</sub>) for the same unit and year.

# Wheelabrator Pinellas Inc.

A Waste Management Company

3001 110th Avenue North  
St. Petersburg, FL 33716-2002  
(727) 572-9163  
(727) 572-4370 Fax



June 5, 2001

Donald Elias  
RTP Environmental  
239 US Highway 22 East  
Green Brook, New Jersey 08812

Dear Don:

The following tables summarize the average steam flow, NOx, CO, and SO<sub>2</sub> at the Pinellas County Resource Recovery Facility (PCRRF) for all three boilers (Unit 1, 2, and 3):

| Boiler | Steam Flow<br>(klbs/hour) | Unit On Line<br>(minutes) | NOx<br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) | SO <sub>2</sub><br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) | CO<br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) |
|--------|---------------------------|---------------------------|--|--|---|
| Unit 1 | 208.6                     | 453,808                   | 189.65   | 12.0   | 23.4  |
| Unit 2 | 205.2                     | 448,836                   | 193.02   | 7.03   | 18.1  |
| Unit 3 | 209.1                     | 462,241                   | 191.38   | 3.03   | 14.2  |

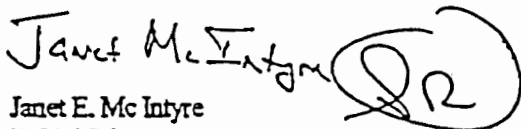
Please note these averages are from 00:00 on 6/1/00 to 23:59 on 05/31/01 CEMS time at the PCRRF (CEMS time remains at Eastern Standard Time). This information is from the ESC computer system.

| Boiler | Steam Flow<br>(klbs/hour) | Unit On Line<br>(minutes) | NOx<br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) | SO <sub>2</sub><br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) | CO<br>(ppm <sub>d</sub> @ 7% O <sub>2</sub> ) |
|--------|---------------------------|---------------------------|--|--|---|
| Unit 1 | 215.1                     | 40,869                    | 190.03   | 8.9  | 12.2  |
| Unit 2 | 213.9                     | 40,184                    | 197.74   | 7.80   | 9.2   |
| Unit 3 | 217.7                     | 42,547                    | 195.95   | 4.62   | 7.4   |

Please note these averages are from 00:00 on 05/01/01 to 23:59 on 05/31/01. CEMS time at the PCRRF (CEMS time remains at Eastern Standard Time). This information is from the ESC computer system.

If you require any further information or have any questions, please feel free to give me a call at (727) 572-9163 x16.

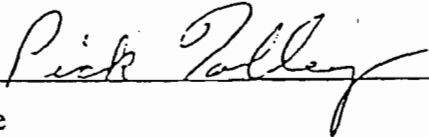
Sincerely,



Janet E. McIntyre  
EH&S Director

Cc: Ron Larson, HDR

**Owner/Authorized Representative or Responsible Official**

|   |
|---|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official:<br><b>Mr. Pick Talley, Director of Utilities, Pinellas County</b>   |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address:<br><br>Organization/Firm: <b>Pinellas County Utilities Administration</b><br>Street Address: <b>14 South Fort Harrison Avenue, 5<sup>th</sup> Floor</b><br>City: <b>Clearwater</b> State: <b>Florida</b> Zip Code: <b>33756</b>   |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers:<br>Telephone: <b>(727) 464-3438</b> Fax: <b>(727) 464-3944</b>  |
| 4. Owner/Authorized Representative or Responsible Official Statement:<br><br><i>I, the undersigned, am the owner or authorized representative*(check here [ ], if so) or the responsible official (check here [ X ], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i><br><br><p style="text-align: center;"><br/>Signature</p> <p style="text-align: center;"><u>August 10, 2001</u><br/>Date</p> |

\* Attach letter of authorization if not currently on file.

**Professional Engineer Certification**

|   |
|---|
| 1. Professional Engineer Name: <b>R. Peter Stasis</b><br>Registration Number: <b>0046220</b>  |
| 2. Professional Engineer Mailing Address:<br>Organization/Firm: <b>Pinellas County Utilities Administration</b><br>Street Address: <b>14 South Fort Harrison Avenue, 5<sup>th</sup> Floor</b><br>City: <b>Clearwater</b> State: <b>Florida</b> Zip Code: <b>33756</b> |
| 3. Professional Engineer Telephone Numbers:<br>Telephone: <b>(727) 464-3519</b> Fax: <b>(727) 464-3595</b>  |



4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*


*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

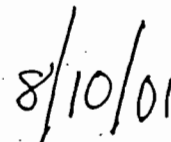
*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [  ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [  ], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [  ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

  
\_\_\_\_\_  
Signature

  
\_\_\_\_\_  
Date

(seal)

\* Attach any exception to certification statement.

**APPENDIX C**  
**RESPONSIBLE OFFICIAL AND P.E. CERTIFICATIONS**

# APPLICATION FOR AIR PERMIT - TITLE V SOURCE

See Instructions for Form No. 62-210.900(1)

## I. APPLICATION INFORMATION

### Identification of Facility

|   |  |
|---|--|
| 1. Facility Owner/Company Name:<br><b>Pinellas County Board of County Commissioners</b>   |  |
| 2. Site Name:<br><b>Pinellas County Resource Recovery Facility</b>  |  |
| 3. Facility Identification Number: <b>1030117</b> <input type="checkbox"/> Unknown  |  |
| 4. Facility Location:<br>Street Address or Other Locator: <b>3001 110<sup>th</sup> Avenue North</b><br>City: <b>St. Petersburg</b> County: <b>Pinellas</b> Zip Code: <b>33716</b> |  |
| 5. Relocatable Facility?<br><input type="checkbox"/> Yes <input checked="" type="checkbox"/> No   | 6. Existing Permitted Facility?<br><input checked="" type="checkbox"/> Yes <input type="checkbox"/> No |

### Application Contact

|  |  |
|--|--|
| 1. Name and Title of Application Contact: <b>Donald F. Elias, Principal</b>  |  |
| 2. Application Contact Mailing Address:<br>Organization/Firm: <b>RTP Environmental Associates, Inc.</b><br>Street Address: <b>239 U.S. Highway 22 East</b><br>City: <b>Green Brook</b> State: <b>NJ</b> Zip Code: <b>08812</b> |  |
| 3. Application Contact Telephone Numbers:<br>Telephone: <b>(732) 968 - 9600</b> Fax: <b>(732) 968 - 9603</b>   |  |

### Application Processing Information (DEP Use)

|                                    |  |
|------------------------------------|--|
| 1. Date of Receipt of Application: |  |
| 2. Permit Number:                  |  |
| 3. PSD Number (if applicable):     |  |
| 4. Siting Number (if applicable):  |  |

**Purpose of Application**

**Air Operation Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

- Initial Title V air operation permit for an existing facility which is classified as a Title V source.
- Initial Title V air operation permit for a facility which, upon start up of one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.

Current construction permit number: \_\_\_\_\_

- Title V air operation permit revision to address one or more newly constructed or modified emissions units addressed in this application.

Current construction permit number: \_\_\_\_\_

Operation permit number to be revised: \_\_\_\_\_

- Title V air operation permit revision or administrative correction to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application. (Also check Air Construction Permit Application below.)

Operation permit number to be revised/corrected: \_\_\_\_\_

- Title V air operation permit revision for reasons other than construction or modification of an emissions unit. Give reason for the revision; e.g., to comply with a new applicable requirement or to request approval of an "Early Reductions" proposal.

Operation permit number to be revised: 1030117-002-AV

Reason for revision: Update/correct permit conditions to simplify recordkeeping, add recent regulations, and make other changes for consistency with other Florida MWCs

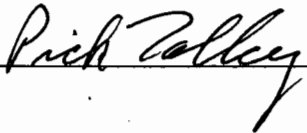
**Air Construction Permit Application**

This Application for Air Permit is submitted to obtain: (Check one)

- Air construction permit to construct or modify one or more emissions units.
- Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.
- Air construction permit for one or more existing, but unpermitted, emissions units.

**(a) Also a concurrent construction permit application if deemed necessary by the Department**

**Owner/Authorized Representative or Responsible Official**

|  |
|--|
| 1. Name and Title of Owner/Authorized Representative or Responsible Official:<br><b>Pick Talley, Director of Utilities</b>   |
| 2. Owner/Authorized Representative or Responsible Official Mailing Address:<br>Organization/Firm: <b>Pinellas County Utilities Administration</b><br>Street Address: <b>14 South Fort Harrison Avenue, 5<sup>th</sup> Floor</b><br>City: <b>Clearwater</b> State: <b>Florida</b> Zip Code: <b>33756</b>  |
| 3. Owner/Authorized Representative or Responsible Official Telephone Numbers:<br>Telephone: <b>(727) 464 - 3438</b> Fax: <b>(727) 464 - 3944</b>   |
| 4. Owner/Authorized Representative or Responsible Official Statement:<br><i>I, the undersigned, am the owner or authorized representative*(check here [ ], if so) or the responsible official (check here [ X ], if so) of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions unit.</i><br><br><br>Signature _____ Date <u>8/11/07</u> |

\* Attach letter of authorization if not currently on file.

**Professional Engineer Certification**

|  |
|--|
| 1. Professional Engineer Name: <b>Ronald D. Larson, P.E.</b><br>Registration Number:   |
| 2. Professional Engineer Mailing Address:<br>Organization/Firm: <b>HDR Engineering, Inc.</b><br>Street Address: <b>2202 N. Westshore Blvd., Suite 250</b><br>City: <b>Tampa</b> State: <b>Florida</b> Zip Code: <b>33607</b> |
| 3. Professional Engineer Telephone Numbers:<br>Telephone: <b>(813) 282 - 2398</b> Fax: <b>(813) 282 - 2440</b>   |

4. Professional Engineer Statement:

*I, the undersigned, hereby certify, except as particularly noted herein\*, that:*

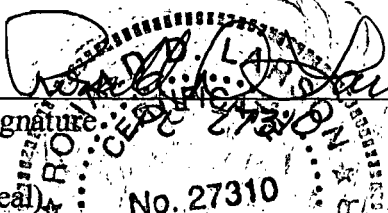
*(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and*

*(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.*

*If the purpose of this application is to obtain a Title V source air operation permit (check here [ X ], if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.*

*If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [(a)], if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.*

*If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ], if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.*

  
Signature: L.A. Johnson

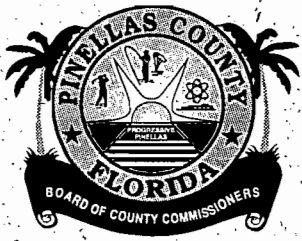
Date: 8/15/03

\* Attach any exceptions to certification statement.

(a) Also a concurrent construction permit application if deemed necessary by the Department

# Pineellas

| <u>Name</u>     | <u>Organization</u> | <u>Phone</u>   |
|-----------------|---------------------|----------------|
| Donald F. Elias | RTP Environmental   | (732) 968-9600 |
| M. Kirk Dunbar  | HDR Engineering     | (763) 591-5476 |
| PAT COMERI      | DEP OGC             | 850 245-2288   |
| Scott Sheplik   | DEP                 | 850/921-9532   |
| Edward J. Svec  | FDEP Title V        | 850/921-8985   |
| David S. Dee    | Landers + Parsons   | 850-681-0311   |
| Jeff Frensdorf  | WPI                 | 727-572-9163   |



"Serving You Every Day"

BOARD OF COUNTY COMMISSIONERS  
PINELLAS COUNTY, FLORIDA

PINELLAS COUNTY UTILITIES  
SOLID WASTE OPERATIONS

3095 - 114<sup>TH</sup> AVENUE NORTH  
ST. PETERSBURG, FLORIDA 33716

PHONE: (727) 464-7500

FAX: (727) 464-7713

COMMISSIONERS:

KAREN WILLIAMS SEEL - CHAIRMAN  
SUSAN LATVALA - VICE CHAIRMAN  
CALVIN D. HARRIS  
JOHN MORRONI  
ROBERT B. STEWART  
BARBARA SHEEN TODD  
KENNETH T. WELCH

August 15, 2003

Mr. Scott M. Sheplak, P.E.  
Florida Department of Environmental Protection  
Division of Air Resources Management  
2600 Blair Stone Road  
Tallahassee, FL 32399-2400

Re: Pinellas County Resource Recovery Facility  
Revisions to Initial Title V Permit No. 1030117-002-AV

Dear Mr. Sheplak:

The Department's June 10, 2003 letter noted that four items were needed to continue processing Pinellas County's Application to revise the Title V Permit for the Pinellas County Resource Recovery Facility. These items were discussed in a June 19<sup>th</sup> telephone conversation between Donald F. Elias of RTP Environmental Associates, Inc. (RTP) and Scott Sheplak and Ed Svec of the Department's Title V Section. The County's responses to the Department's four items are given below:

1. Four copies of Sections I and II of the Department's Title V permit application forms (DEP Form No. 62-210.900(1)) are attached hereto.
2. Four copies of the cover letter, report, and hand-annotated revisions to the Title V permit originally submitted on April 15, 2003 are attached hereto.

RECEIVED

AUG 20 2003

BUREAU OF AIR REGULATION





3. No additional information is needed from us at this time. As we understand it, the Department may include a conditional statement for some of the requested revisions to certain regulated/unregulated sources. Specifically the Yard Waste Trommel diesel engine would be an insignificant source as long as fuel usage stays below the level equivalent to the five ton per year-NO<sub>x</sub> emissions threshold (16,500 gallons of diesel per year based on AP-42 Table 3.3-1 factors of 4.41 lb/MMBtu and 0.137 MMBtu/gallon). Since the engine has an hour meter, the County requests that annual usage be limited to number of hours per year, rather than fuel usage, conservatively assuming full load (100%). For the 0.875 MMBtu/hour (maximum gross heat input) engine operated at 100% load, 5 tons per year would be equivalent to 2500 hours/year.
4. No additional information is needed from us at this time. As we understand it, the Department may not be able to include some of the requested changes since the Department is required to include all applicable requirements. The specific example discussed in the June 19<sup>th</sup> telephone conversation is the conflicting state and federal requirements for Startup/Shutdown/Malfunction (S/S/M) periods where the Large MWC NSPS allows three hours per occurrence while the State Rule allows only 2 hours in any 24-hour period unless specifically authorized by the Department for longer duration (Rule 62-210.700(1), F.A.C.). For clarity's sake, we request the Department to cross-reference the Large MWC NSPS when citing the DEP State Rule, e.g., Specific Condition III.B.7(a) in the most recent version of the Re-issued Final Draft PSD Permit for Lee County RRF Unit 3.

Finally, the County would like to request one additional revision to the Title V permit relating to the wet scrubbers. The Ash Conditioning Building (ACB) wet scrubber (Emission Unit ID No. 008) controls no specific sources inside the ACB. Two pickup points are located in the ACB to control dust levels inside the ACB, primarily for worker comfort. The Material Recovery System (MRS) wet scrubber (Emission Unit ID No. 005) has a pickup point at the shredder/crusher to control dust inside the MRS enclosure whenever the shredder/crusher is operating and when deemed necessary by the operator. When operated, the wet scrubbers would emit particulate matter (PM). When dust levels inside the ACB or MRS enclosure do not warrant operation of the wet scrubbers, any minor amounts of dust would mostly remain inside the associated structures. Any emissions that might occur from ventilation fans, doors, or other openings would be regulated by the MWC fugitive ash EG limits in 40 CFR 60.36b and 40 CFR 60.55b as specified by Title V Permit Specific Conditions III.B.31 and III.B.53. As a practical matter, the ash is moist when it is delivered to the ACB, thus minimizing the potential for dust.

The current language in the Title V permit at Specific Condition III.C.3 could be construed to require continuous operation of these devices as air pollution control devices whenever ash processing or material recovery operations were occurring. However, continuous operation of these devices is unnecessary. It would be more appropriate to consider the wet scrubbers as air pollution sources rather than air pollution control equipment. Therefore, the County requests that Title V Permit Specific Condition III.C.3 be changed from:

C.3 Hours of Operation. Each unit may operate continuously, i.e., 8,760 hrs/yr.

Revisions to Initial Title V Permit No. 1030117-002-AV

August 15, 2003

Page 3 of 3

To:

C.3 Hours of Operation. Each unit may operate continuously, i.e., 8,760 hrs/yr. Operation of the two wet scrubbers (Emission Unit ID Nos. -003 and -005) is at the discretion of the operator as necessary to control dust levels inside the associated enclosures and maintain compliance with the limits in 40 CFR 60.36b and 40 CFR 60.55b for MWC fugitive ash.

If you have any questions, please feel free to contact Donald F. Elias of RTP Environmental Associates, Inc. at 732-968-9600.

Sincerely,

PINELLAS COUNTY UTILITIES



Warren N. Smith  
Director, Solid Waste Operations

Enclosures

cc: P.Talley – Utilities  
R.Hauser – DSWO  
K.Oswald – DWSO  
P.Hessling – DEM  
R.Larson – HDR  
M.Santella – WPI  
D.Deer – Landers & Parsons  
D.Elias – RTP  
File