



LEE COUNTY
SOUTHWEST FLORIDA

BOARD OF COUNTY COMMISSIONERS

July 21, 2011

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BUREAU OF
AIR REGULATION

John E. Manning
District One

Mr. Scott Sheplak, PE
DEP - Division of Air Resource Management
Mail Station #5505
2600 Blair Stone Road
Tallahassee, FL 32399

Brian Bigelow
District Two

Ray Judah
District Three

Tammy Hall
District Four

**SUBJECT: Lee County Resource Recovery Facility (Waste to Energy)
Request for Modification of Permits PSD FL-151-B&D**

Frank Mann
District Five

Karen B. Hawes
County Manager

Dear Mr. Sheplak:

Project No: 0710119 -008 -AC/PSD-FL-151 E

Diana M. Parker
County Hearing
Examiner

Lee County hereby submits this request for certain modifications to its PSD permits that were issued by the Department and previously modified pursuant to the County's applications to construct and (later) expand its waste to energy (or resource recovery) facility (WTE). The PSD permit (PSD-FL-151) was issued in 1992 for the original facility and was subsequently modified in 1994, 1995, and 2000 resulting in what is referred to as PSD-FL-151B. In 2005, PSD-FL-151C was issued pursuant to the County's application to expand the WTE facility by adding a third municipal waste combustion (MWC) unit. PSD-FL-151C became PSD-FL-151D solely for the purpose of extending the expiration date.

During the Department's review of the County's Title V permit renewal application, it became apparent that several requirements of the facility's operating permit were outdated, but such requirements originated from the facility's underlying PSD permits. Therefore, it was suggested that the PSD permit(s) be modified in order to simplify the Title V renewal process. The requested permit changes are summarized in the following sections.

Units 1 and 2, Arsenic and Beryllium Emission Limits

Section 112(b)(6) of the Clean Air Act states the following:

"The provisions of part C of this subchapter (prevention of significant deterioration) shall not apply to pollutants listed under this section."

PSD-FL-151B for Units 1 and 2 contains emission limit for beryllium and arsenic, which were subject to PSD permitting at the time of permit issuance. However, these two pollutants are regulated under Section 112 of the Clean Air Act and, as such, are prohibited from being regulated under PSD. All beryllium and arsenic emission limits, and related testing requirements, should be deleted because the underlying regulatory basis for them is prohibited by the Clean Air Act.

Units 1 and 2, Fluoride, Sulfuric Acid Mist, and VOC

P.O. Box 398, Fort Myers, Florida 33902-0398 (239) 533-2111

Internet address <http://www.lee-county.com>

AN EQUAL OPPORTUNITY AFFIRMATIVE ACTION EMPLOYER

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Review of historic stack test data indicates that each of these pollutants is emitted at a rate that is less than the applicable PSD significant emissions increase threshold. This testing verifies that these pollutants are not subject to PSD review and the permit limits for them, and related testing requirements, should be deleted. Permits recently issued by the Department for new MWC units do not contain emissions limitations for fluoride sulfuric acid mist, or VOC in recognition of the fact that these pollutants are not emitted in appreciable quantities from municipal waste combustors.

Unit 3, Hydrogen Fluoride

Review of historic stack test data indicates that hydrogen fluoride is emitted at rate that is less than the applicable PSD significant emissions increase threshold. Further, hydrogen fluoride is a HAP regulated under Section 112 as a hazardous pollutant. As such, the pollutant is not subject to PSD review and the permit limits for HF, and related testing requirements, should be deleted.

Units 1, 2, and 3, Annual Emission Limits

Both permits contain annual mass emission limits for each pollutant. The County is permitted to operate each emission unit 8760 hours per year. EPA policy is that annual emission rates do not constitute BACT limits. These annual requirements are redundant to the short term permit limits and serve no purpose to further protect the environment. As such, the annual emission limits should be deleted.

Lime Silo Baghouse

Tests have consistently shown that VEs are not present at the lime baghouse. The County plans the relocation of the vent for this baghouse such that it vents internal to the building in which it is located. Consistent with other internally venting emission units at the facility, venting the lime silo baghouse internally means that the lime silo is no longer considered a regulated emission unit. Therefore, we are also requesting that this emission unit be deleted from all facility permits.

Ash Building Baghouse

Tests have consistently shown that VEs are not present at the ash building baghouse. The County plans the relocation of the vent for this baghouse such that it vents internal to the ash building. However, because the ash system is subject to requirement under 40 CFR Part 60, Subparts Cb and Eb, the ash building will continue to be considered a regulated emission unit. Therefore, the County would maintain the VE test requirement for the ash building (utilizing USEPA Reference Method 22), but the observations will be made on the ash building rather than the ash building baghouse vent.

Biosolids

In previous correspondence with the Department, the County requested that biosolids be

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treated as an industrial waste byproduct, and thus be considered as an allowable fuel. The Department was understanding of the County's request but would not allow the consideration due to the previous (Department initiated) prohibition considering 'sewage sludge' as a fuel. It is apparent now, particularly in light of the Department's recent rewrite of 62-640, F.A.C, that the disposal options for biosolids is significantly more limited. Waste to energy facilities in other sections of the country and in Europe routinely combust biosolids without adverse impacts to compliance with their air emissions standards. The County, therefore, requests that biosolids be recognized as a suitable fuel material under its PSD permit, albeit with a 5% limitation relative to throughput.

Units 1 and 2, Combustion Efficiency

A combustion efficiency requirement, based on the CO/CO2 ratio was established by the Department for MWC units 1 and 2 but there is no requirement for unit 3. This requirement provides no environmental protection so the County is requesting that this condition be deleted from PSD-151B.

All of the requested modifications shown above have been expressed as specific 'add, replace, delete' language and included in "Attachment 1" to this letter. The items shown in the attachment provide direct reference to the appropriate sections of PSD FL 151B and PSD FL 151D. The County also requests that these changes are included as changes to the Facility's Draft Title V permit accordingly. Finally, we have also included "DEP Form No. 62-210.900(1)" as "Attachment 2" and copies of PSD FL 151, modifications to PSD 151 dated 5/2/94, 11/11/94, 4/20/95, 3/15/2000, and PSD 151D as Attachment 3.

Please call me at 239-533-8000 if you have any immediate questions.

Sincerely,



Lindsey J. Sampson, Director
Solid Waste Division

cc: Mike Duff, Covanta
Jason Gorrie, Covanta
Kirk Dunbar, HDR
Don Castro, HDR
Syed Arif, DEP

w/ Attachments 1, 2, and 3

ATTACHMENT 1 - MODIFICATIONS RELATED TO PSD-FI-151-B (MWC Units 1 &2)

Specific Conditions: Section 2. Emission Standards

Replace Section 2 in its entirety by the following:

Based on the permitted capacities mentioned in the project description the stack emissions from each unit (MWC units #1 and #2) shall not exceed any of the following limitations:

Pollutant Name	Standards	Lbs/hr
Particulate Matter (PM ₁₀)	22.9 mg/dscm	5.34
MWC Metals (PM)	22.9 mg/dscm	5.34
Sulfur Dioxide (SO ₂)	29 ppm or 80% reduction, at 7% O ₂ ⁽¹⁾ – 24 hour geometric average	41
Nitrogen Oxides (NO _x)	180 ppm at 7% O ₂ - 24 hour average	80
Carbon Monoxide (CO)	100 ppm at 7% O ₂ - 4 hour average	27.2
Mercury	0.050 mg/dscm at 7% O ₂ or 85% reduction ⁽¹⁾	0.0271
Visible Emissions (Opacity)	10%, 6 minute average	
Lead (Pb)	0.400 mg/dscm	0.165
MWC Acid Gas (HCl)	25 ppm at 7% O ₂ or 95% reduction ⁽¹⁾	17.7
Dioxin/Furan (PCDD/F)	30 ng/dscm at 7% O ₂	7.0 x 10 ⁻⁶
Ammonia	50 ppm at 7% O ₂	

Abbreviations

ug/dscm: Micrograms per dry standard cubic meter

mg/dscm: Milligrams per dry standard cubic meter

ng/dscm: Nanograms per dry standard cubic meter

ppm: Part per million dry volume

Dioxins/furans: Total tetra through octa-chlorinate

Note (1) Whichever standard is less stringent

[Rules 62-210-200, 62-212-400 (BACT), and 62-4.070(3), F.A.C., and request of applicant]

Specific Conditions: 3.a. Test Methods

Replace the table entry for “Visible emissions determination of opacity” in its entirety by the following. (Note, this table entry was previously modified by the March 15, 2000 modification.)

9. Visible emission determination of opacity.

- At least one one-hour run to be conducted simultaneously with particulate testing for the emissions from the dry scrubber/baghouse.
- At least one 30-minute run to be conducted for the ash handling building.

Specific Condition 3.c (from March 15, 2000 modification)

1. Delete the words “arsenic, beryllium, fluoride, sulfuric acid mist, and VOC” from the first sentence.
2. Delete the current sixth sentence that states, “If the Department has reason to believe that the particulate weight emission standard is not being met it shall require that compliance be demonstrated using EPA Method 5.”
3. Delete the words “baghouse and the lime silo baghouse” in the seventh sentence. (Note, the seventh sentence states, “Compliance testing for visible emissions from the ash handling building baghouse and the lime silo baghouse shall be conducted annually.”)

Specific Conditions, Condition 4.f, Restrictions for Type of Wastes Combusted (from March 15, 2000 modification)

1. Condition 4.f: Delete item “(g) sewage sludge”. Re-letter item “(h) explosives” to letter “(g)”.
2. Condition 4.f: Add the following new paragraph immediately following the eleventh paragraph of this subsection. (The eleventh paragraph begins with the sentence “Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility.”) New paragraph: “Subject to the conditions and limitations contained in this permit, biosolid waste or “biosolids” may be used as fuel at the facility. The total quantity of biosolids received and burned at the facility shall not exceed 5%, by weight of the facility’s total fuel, based on the average dry solids content of the biosolids received during any month, the weight of the biosolids received as recorded by the facility’s truck scales, and the total quantity of other waste received during the same month.”
3. Condition 4.f: Replace the fifteenth paragraph of this subsection with the following paragraph. (The fifteenth paragraph begins with the sentence “Each day the total weight of segregated tires, etc.”) Replacement paragraph: “Each day the total weight of segregated tires and biosolids shall be computed, and the daily total of each shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires and total weight of biosolids (after correcting the biosolids weight using the average dry solids content) shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant numbers shall be multiplied by 100 to express the ration in percentage terms. The percentage computed shall be compared to the 5% limitations.”

Specific Conditions, Condition 4.k, Miscellaneous Requirements (PSD 151)

1. Delete Condition 4.k, related to combustion efficiency, in its entirety.

MODIFICATIONS RELATED TO PSD-151-D (MWC Unit 3)

Section III Emission Units Specific Conditions

1. Condition B.6.1: Delete item “(g) sewage sludge”. Re-letter items “(h) explosives” and “(i) beryllium containing waste, as defined in 40 CFR 61, Subpart C” to “(g)” and “(h)”, respectively.
2. Condition B.6.6: Add the following paragraph: “Subject to the conditions and limitations contained in this permit, biosolid waste (or biosolids) may be used as fuel at the facility. The total quantity of biosolids received as segregated loads and burned at the facility shall not exceed 5% by weight of the facility’s total fuel, based on the average dry solids content of the biosolids received during any month, the weight of the biosolids received, as recorded by the facility’s truck scales and the total quantity of other waste received during the same month. Compliance with this limitation shall be determined by using a calendar monthly average in accordance with specific condition B.24 below.
3. Condition B.8.: Replace Condition B.8 in its entirety with the following:

B.8 Emissions from the MWC unit #3 shall not exceed the limits in the following tables [BACT]

Pollutant Name	Standards	Lbs/Hr
Particulate Matter (PM ₁₀)	20.6 mg/dscm, corrected to 7 O ₂	5.12
MWC Metals (PM)	20.6 mg/dscm, corrected to 7 O ₂	5.12
Sulfur Dioxide (SO ₂)	26 ppm or 80% reduction, at 7% O ₂ ⁽¹⁾	56.9
Nitrogen Oxides (NO _x)	110 ppm at 7% O ₂ - 12 month rolling average 150 ppm at 7% O ₂ 24 hour average	70.8
Carbon Monoxide (CO)	80 ppm at 7% O ₂ – 12 month rolling avg. 100 ppm at 7% O ₂ - 4 hour average	23 28.73
Mercury	0.028 mg/dscm at 7% O ₂ or 85% reduction ⁽¹⁾	0.0168
Visible Emissions (Opacity)	10%, 6 minute average	
Lead (Pb)	0.2 mg/dscm, corrected to 7 % O ₂	0.05
MWC Acid Gas (HCl)	25 ppm or 95% reduction at 7 % O ₂ ⁽¹⁾	46.76
Cadmium (Cd)	0.02 mg/dscm at 7 % O ₂	.005
Dioxin/Furan (PCDD/F)	13 ng/dscm, corrected to 7% O ₂	3.2 x 10 ⁻⁶
Ammonia	15/30 ppmvd at 7% O ₂ ⁽²⁾	

Notes to table:

Abbreviations

ug/dscm: Micrograms per dry standard cubic meter

mg/dscm: Milligrams per dry standard cubic meter

ng/dscm: Nanograms per dry standard cubic meter

ppm: Part per million dry volume

Dioxins/furans: Total tetra through octa-chlorinate

Note (1) Whichever standard is less stringent

Note (2) Limit is 15 ppmvd average per quarter with no stack test required or 30 ppmvd quarterly avg. with stack test required.

[Rules 62-210-200, 62-212-400 (BACT), and 62-4.070(3), F.A.C., and request of applicant]

4. Condition B.24: Replace the third paragraph of this subsection with the following paragraph. "Each day the total weight of segregated tires and biosolids shall be computed, and the daily total of each shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires and total weight of biosolids (after correcting the biosolids weight using the average dry solids content) shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant numbers shall be multiplied by 100 to express the ration in percentage terms. The percentage computed shall be compared to the 5% limitations.

Section III, Subsection C. Specific Conditions:

1. Delete all references to the Lime and Carbon Silos, Conditions C.1(a) and C.1(b), and Condition C.3.



Department of Environmental Protection

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

I. APPLICATION INFORMATION

"ATTACHMENT 2"

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

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

Air Operation Permit – Use this form to apply for:

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

To ensure accuracy, please see form instructions.

Identification of Facility

1. Facility Owner/Company Name: Lee County Dept. of Solid Waste Mgt.	
2. Site Name: Lee Co. Solid Waste Resource Rec. Fac.	
3. Facility Identification Number: 070119	
4. Facility Location... Street Address or Other Locator: 10500 Buckingham Rd City: Fort Meyers County: Lee Zip Code: 33905	
5. Relocatable Facility? <input type="checkbox"/> Yes <input checked="" type="checkbox"/> No	6. Existing Title V Permitted Facility? <input checked="" type="checkbox"/> Yes <input type="checkbox"/> No

Application Contact

1. Application Contact Name: M. Kirk Dunbar – Air Quality Engineer	
2. Application Contact Mailing Address... Organization/Firm: HDR Engineering, Inc. Street Address: 701 Xenia Avenue South, Suite 600 City: Minneapolis State: MN Zip Code: 55416	
3. Application Contact Telephone Numbers... Telephone: (763) 591- 5476 ext. Fax: (763) 591- 5413	
4. Application Contact E-mail Address: kirk.dunbar@hdrinc.com	

Application Processing Information (DEP Use)

1. Date of Receipt of Application: 7-22-11	3. PSD Number (if applicable):
2. Project Number(s): 0710119-008-AC	4. Siting Number (if applicable):

PSD-FL-151 E

APPLICATION INFORMATION

Purpose of Application

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

Air Construction Permit

- Air construction permit.
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
- Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.

Air Operation Permit

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

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

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

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

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

Application Comment

This permit application is a minor revision to administratively amend previously issued PSD Permit Conditions to delete or modify obsolete permit terms. In addition, the draft Title V renewal permit prepared by FDEP will be revised to reflect the requested changes.

APPLICATION INFORMATION

Application Responsible Official Certification

Complete if applying for an initial, revised, or renewal Title V air operation permit or concurrent processing of an air construction permit and revised or renewal Title V air operation permit. If there are multiple responsible officials, the “application responsible official” need not be the “primary responsible official.”

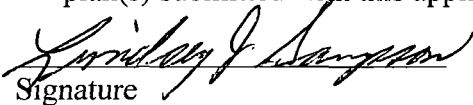
1. Application Responsible Official Name: Lindsey J. Sampson
2. Application Responsible Official Qualification (Check one or more of the following options, as applicable): <input type="checkbox"/> For a corporation, the president, secretary, treasurer, or vice-president of the corporation in charge of a principal business function, or any other person who performs similar policy or decision-making functions for the corporation, or a duly authorized representative of such person if the representative is responsible for the overall operation of one or more manufacturing, production, or operating facilities applying for or subject to a permit under Chapter 62-213, F.A.C. <input type="checkbox"/> For a partnership or sole proprietorship, a general partner or the proprietor, respectively. <input checked="" type="checkbox"/> For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. <input type="checkbox"/> The designated representative at an Acid Rain source or CAIR source.
3. Application Responsible Official Mailing Address... Organization/Firm: Lee County Solid Waste Division Street Address: 10500 Buckingham Rd, Suite 200 City: Ft. Myers State: FL Zip Code: 33905
4. Application Responsible Official Telephone Numbers... Telephone: (239)533-8000 ext. Fax: (239)461-5871
5. Application Responsible Official E-mail Address: sampsolj@leegov.com

APPLICATION INFORMATION

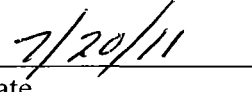
6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature

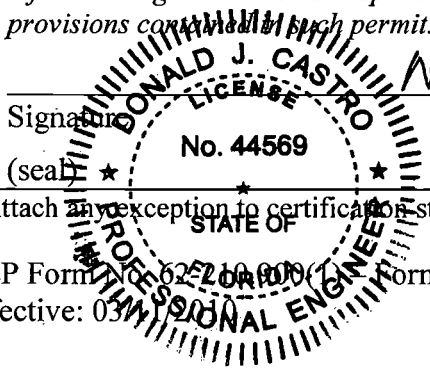


Date



APPLICATION INFORMATION

Professional Engineer Certification

1. Professional Engineer Name: Donald Castro Registration Number: 44569
2. Professional Engineer Mailing Address... Organization/Firm: HDR Engineering, Inc. Street Address: 5426 Bay Center Drive, Suite 400 City: Tampa State: FL Zip Code: 33609
3. Professional Engineer Telephone Numbers... Telephone: (813)282-2404 ext. Fax: () -
4. Professional Engineer E-mail Address: don.castro@hdrinc.com
5. Professional Engineer Statement: <i>I, the undersigned, hereby certify, except as particularly noted herein*, that:</i> <i>(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and</i> <i>(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.</i> <i>(3) If the purpose of this application is to obtain a Title V air operation permit (check here <input checked="" type="checkbox"/>, if so), I further certify that each emissions unit described in this application for air permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance plan and schedule is submitted with this application.</i> <i>(4) If the purpose of this application is to obtain an air construction permit (check here <input type="checkbox"/>, if so) or concurrently process and obtain an air construction permit and a Title V air operation permit revision or renewal for one or more proposed new or modified emissions units (check here <input checked="" type="checkbox"/>, if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.</i> <i>(5) If the purpose of this application is to obtain an initial air operation permit or operation permit revision or renewal for one or more newly constructed or modified emissions units (check here <input type="checkbox"/>, if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.</i> Signature: <u>Donald J. Castro</u> Date: <u>7/19/2011</u> (seal) 

* Attach an exception to certification statement.

APPLICATION INFORMATION

6. Application Responsible Official Certification:

I, the undersigned, am a responsible official of the Title V source addressed in this air permit application. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof and all other applicable requirements identified in this application to which the Title V source is subject. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department, and I will promptly notify the department upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I certify that the facility and each emissions unit are in compliance with all applicable requirements to which they are subject, except as identified in compliance plan(s) submitted with this application.

Signature

Date

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1. Facility UTM Coordinates... Zone 17 East (km) 424.21 North (km) 2945.7		2. Facility Latitude/Longitude... Latitude (DD/MM/SS) 26° 37' 54"N Longitude (DD/MM/SS) 81° 45' 41" W	
3. Governmental Facility Code: (3) – Source owned or operated by the County	4. Facility Status Code: Active	5. Facility Major Group SIC Code: (49) – Electric, Gas and Sanitary Services	6. Facility SIC(s): Primary: 4953
7. Facility Comment : The facility, consisting of three municipal waste combustor units and associated processes, is owned by Lee County and was designed, built, and is currently operated by Covanta Lee, Inc.			

Facility Contact

1. Facility Contact Name: Lindsey Sampson - Director
2. Facility Contact Mailing Address... Organization/Firm: Lee County Solid Waste Division Street Address: 10500 Buckingham Rd City: Fort Myers State: FL Zip Code: 33905
3. Facility Contact Telephone Numbers: Telephone: (239)533-8000 ext. Fax: (239)461-5871
4. Facility Contact E-mail Address: sampsolj@leegov.com

Facility Primary Responsible Official

Complete if an "application responsible official" is identified in Section I that is not the facility "primary responsible official."

1. Facility Primary Responsible Official Name:
2. Facility Primary Responsible Official Mailing Address... Organization/Firm: Street Address: City: State: Zip Code:
3. Facility Primary Responsible Official Telephone Numbers... Telephone: () - ext. Fax: () -
4. Facility Primary Responsible Official E-mail Address:

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. Facility Regulatory Classifications Comment:	

List of Pollutants Emitted by Facility

1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
HAPS	A	
NOX	A	
SO2	A	
CO	A	
H106 (Hydrogen Chloride)	A	
PM	B	
PB	B	
H027 (Cadmium)	B	
PM10	B	
H114 (Mercury Compounds)	B	
D/F	B	
NH3	ND	

C. FACILITY ADDITIONAL INFORMATION

Additional Requirements for All Applications, Except as Otherwise Stated

1.	Facility Plot Plan: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Previously Submitted, Date: <u>23-Aug-10</u>
2.	Process Flow Diagram(s): (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Previously Submitted, Date: <u>23-Aug-10</u>
3.	Precautions to Prevent Emissions of Unconfined Particulate Matter: (Required for all permit applications, except Title V air operation permit revision applications if this information was submitted to the department within the previous five years and would not be altered as a result of the revision being sought)		
<input type="checkbox"/>	Attached, Document ID: _____	<input checked="" type="checkbox"/>	Previously Submitted, Date: <u>23-Aug-10</u>

Additional Requirements for Air Construction Permit Applications

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

9. Additional Impact Analyses (Rules 62-212.400(8) and 62-212.500(4)(e), F.A.C.):

Attached, Document ID: _____ Not Applicable

10. Alternative Analysis Requirement (Rule 62-212.500(4)(g), F.A.C.):

Attached, Document ID: _____ Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

Additional Requirements for FESOP Applications

1. List of Exempt Emissions Units:
 Attached, Document ID: _____ Not Applicable (no exempt units at facility)

Additional Requirements for Title V Air Operation Permit Applications

1. List of Insignificant Activities: (Required for initial/renewal applications only)
 Attached, Document ID: _____ Not Applicable (revision application)

2. Identification of Applicable Requirements: (Required for initial/renewal applications, and for revision applications if this information would be changed as a result of the revision being sought)
 Attached, Document ID: _____
 Not Applicable (revision application with no change in applicable requirements)

3. Compliance Report and Plan: (Required for all initial/revision/renewal applications)
 Attached, Document ID: Not applicable – No noncompliance issues
Note: A compliance plan must be submitted for each emissions unit that is not in compliance with all applicable requirements at the time of application and/or at any time during application processing. The department must be notified of any changes in compliance status during application processing.

4. List of Equipment/Activities Regulated under Title VI: (If applicable, required for initial/renewal applications only)
 Attached, Document ID: _____
 Equipment/Activities Onsite but Not Required to be Individually Listed
 Not Applicable

5. Verification of Risk Management Plan Submission to EPA: (If applicable, required for initial/renewal applications only)
 Attached, Document ID: _____ Not Applicable

6. Requested Changes to Current Title V Air Operation Permit:
 Attached, Document ID: Cover Letter and Attached Not Applicable

C. FACILITY ADDITIONAL INFORMATION (CONTINUED)

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

1. Acid Rain Program Forms:

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

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable (not an Acid Rain source)

Phase II NO_x Averaging Plan (DEP Form No. 62-210.900(1)(a)1.):

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

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

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable

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

Attached, Document ID: _____ Previously Submitted, Date: _____

Not Applicable (not a CAIR source)

Additional Requirements Comment

With the exception of the items discussed in the cover letter and attachment, all above applicable requirements were previously submitted with the Title V renewal application dated August 23, 2010. No additional forms are required in connection with the current permit application.



State of Florida
DEPARTMENT OF ENVIRONMENTAL REGULATION

For Routing To Other Than The Addressee	
To: _____	Location: _____
To: _____	Location: _____
To: _____	Location: _____
From: _____	Date: _____

Interoffice Memorandum

TO: Carol Browner
FROM: Howard L. Rhodes *[Signature]*
DATE: July 14, 1992
SUBJECT: Approval of Construction Permit PSD-FL-151
Lee County Waste to Energy Recovery Facility

Attached for your approval and signature is the construction permit for the above mentioned company to construct a waste to energy recovery facility comprised of Units No. 1 and 2. The facility will be located at Buckingham Road and State Road 82 in Fort Myers, Florida.

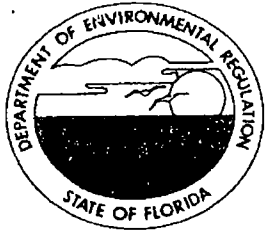
I recommend your approval and signature.

CF/MB/pa

Attachments

FINAL DETERMINATION

The power plant site certification of Lee County Solid Waste resource recovery facility was approved by the Governor and the Cabinet sitting as the Siting Board on June 16, 1992. The Department is issuing a PSD air permit for this facility which is substantially identical to the terms of the Conditions of Certification contained in the power plant site certification. There are no changes in the process input or steam production rates. Revised mercury emission standards are contained in the PSD permit as were prescribed in the final power plant site certification approved by the Siting Board.



Florida Department of Environmental Regulation

Twin Towers Office Bldg. • 2600 Blair Stone Road • Tallahassee, Florida 32399-2400

Lawton Chiles, Governor

Carol M. Browner, Secretary

PERMITTEE:
Lee County Utilities
2178 McGregor Blvd.
Ft. Myers, FL 33902

Permit Number: PSD-FL-151

County: Lee
Latitude/Longitude: 26°37'54"N
81°45'41"W

Project: Lee County Waste to Energy
Recovery Facility Units
1 and 2

This permit is issued under the provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 17-2 and 17-4. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawings, plans, and other documents attached hereto or on file with the Department and made a part hereof and specifically described as follows:

For the construction of the Lee County Solid Waste Energy Recovery Facility located at Buckingham Road and State Road 82, in Fort Myers, Florida consisting of two mass-burn Municipal Waste Combustors (MWC) with two units to be constructed initially and the third unit to be installed in the future. These mass-burn units shall have a maximum permitted capacity of 660 tons/day, each unit, for a total capacity for both units not to exceed 1320 tons/day; and a maximum heat input of 275 MMBtu/hr, per unit, for a total heat input for both units not to exceed 550 MMBtu/hr, based on a municipal solid waste average heating value of 5000 Btu/lb.

Each combustor unit shall be of Stoker Waterwall design (or equivalent) capable of generating 20 MW for a total of 40 MW from both units. Each unit shall be allowed to produce a maximum of 186,200 lbs of steam per hour at 865 psig and 830°F. Each combustor unit shall be equipped with auxiliary burners to be fired by only propane gas. Emissions from each combustor shall be controlled by a slaked lime scrubber followed by a baghouse. NO_x emissions shall be controlled by a SNCR System. Mercury emissions shall be controlled by injecting activated carbon.

The permittee must submit four copies of complete information prior to purchase and installation of any combustor and related equipment. Such information shall include the following: make and model numbers of each MWC and all pollution control and continuous emissions monitoring devices and related equipment.

PERMITTEE: Lee County

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The power plant site certification number for this facility is PA90-30.

This source shall be constructed in accordance with the permit application; plans, documents, amendments and drawings, except as otherwise noted in the General and Specific Conditions:

Attachments are as follows:

Power Plant Site Certification package filed on June 29, 1990 and related correspondence.

GENERAL CONDITIONS:

1. The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
2. This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings, exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
3. As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey any vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver of or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
4. This permit conveys no title to land or water, does not constitute State recognition or acknowledgement of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
5. This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow

PERMITTEE: Lee County

Permit Number: PSD-FL-151

GENERAL CONDITIONS:

the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.

6. The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.

7. The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:

- a. Have access to and copy any records that must be kept under the conditions of the permit;
- b. Inspect the facility, equipment, practices, or operations regulated or required under this permit; and
- c. Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.

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

8. If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:

- a. a description of and cause of non-compliance; and
- b. the period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

PERMITTEE: Lee County

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GENERAL CONDITIONS:

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.

10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.

11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 17-4.120 and 17-30.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.

12. This permit or a copy thereof shall be kept at the work site of the permitted activity.

13. This permit also constitutes:

- (x) Determination of Best Available Control Technology (BACT)
- (x) Determination of Prevention of Significant Deterioration (PSD)
- (x) Compliance with New Source Performance Standards (NSPS)

14. The permittee shall comply with the following:

- a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.

PERMITTEE: Lee County

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GENERAL CONDITIONS:

b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application for this permit. These materials shall be retained at least three years from the date of the sample, measurement, report or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- the date, exact place, and time of sampling or measurements;
- the person responsible for performing the sampling or measurements;
- the dates analyses were performed;
- the person responsible for performing the analyses;
- the analytical techniques or methods used; and
- the results of such analyses.

15. When requested by the Department, the permittee shall within a reasonable time furnish any information required by law which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

SPECIFIC CONDITIONS:

1. This facility shall be allowed to operate continuously (i.e. 8760 hours/year).

2. Emission Standards

Based on the permitted capacities mentioned in the project description the stack emissions from each unit shall not exceed any of the following limitations:

- a. Particulate matter: Particulate emissions from the baghouse shall not exceed 0.010 grains/dry standard cubic

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SPECIFIC CONDITIONS:

- foot, corrected to 7% O₂; 5.34 lbs/hr per unit; and 21.3 tons/year per unit.
- b. PM₁₀: In no case shall PM₁₀ emissions exceed 0.010 gr/dry cubic standard foot, corrected to 7% O₂ for the fraction of particles less than 10 microns in diameter; 5.34 lbs/hr per unit; and 21.3 tons/year per unit.
 - c. *Opacity: In no case shall visible emissions from each baghouse exhaust exceed 10% opacity (six minute average).
 - d. *SO₂: 30 ppmdv corrected to 7% O₂, 24 hour daily geometric average or at least 80% removal efficiency, whichever is least restrictive. In no case shall SO₂ emissions exceed 0.150 lbs/MMBtu per unit, 41 lbs/hr/unit, and 163.3 tons/year, per unit.
 - e. *NO_x: 180 ppmdv corrected to 7% O₂, 24 hour daily block average (midnight to midnight). In no case shall NO_x emissions exceed 0.290 lb/MMBtu, 80 lbs/hr per unit, and 320 tons/year, per unit.
 - f. *Carbon Monoxide: 100 ppmdv at 7% O₂, 4-hour block average beginning at midnight. In no case shall CO emissions exceed .10 lb/MMBtu, 27.2 lbs/hr/unit, and 108 tons/year, per unit.
 - g. *VOC (Hydrocarbons): 37 ppmdv at 7% O₂. In no case shall VOC emissions exceed 0.021 lb/MMBtu, 5.80 lbs/hr/unit and 23 tons/year, per unit.
 - h. HCl: 25 ppmdv at 7% O₂, or at least 95% removal efficiency, which ever is least restrictive. In no case shall HCl emissions exceed 0.064 lb/MMBtu, 17.70 lbs/hr/unit, and 70.70 tons/year, per unit.
 - i. H₂SO₄ (sulfuric acid mist): In no case shall H₂SO₄ emissions exceed 0.036 lb/MMBtu, 9.85 lbs/hr/unit and 39.3 tons/year per unit.
 - j. *F (fluoride): 5.0 ppmdv at 7% O₂. In no case shall F emissions exceed 0.0035 lb/MMBtu, 0.96 lbs/hr/unit, and 3.8 tons/year, per unit.

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- k. *Pb (lead): In no case shall lead emissions exceed 0.00060 lbs/MBtu, 0.165 lbs/hr/unit and 0.66 tons/yr., per unit.
- l. *Be (Beryllium): In no case shall Be emissions exceed 1.35×10^{-7} lbs/MMBtu, 3.70×10^{-5} lbs/hr/unit, and 1.47×10^{-4} tons/year, per unit.
- m. *Hg (Mercury): In no case shall mercury emissions exceed 0.000138 lbs/MMBtu, 0.0379 lbs/hr/unit, and 0.166 tons/yr per unit at 140 ug/dscm at 7% O₂ or at least 70 percent removal efficiency by weight.
- n. As (Arsenic): In no case shall arsenic emissions exceed 9.10×10^{-6} lbs/MMBtu, 2.50×10^{-3} lbs/hr/unit, and 0.01 tons/year, per unit.
- o. *Dioxins/Furans: In no case shall emissions of total (tetra thru octa-chlorinated dibenzo-p dioxins and dibenzofurans) exceed 30 ng/dscm @ 7% O₂, 2.54×10^{-8} lbs/MMBtu, 7.0×10^{-6} lbs/hr/unit, and 2.80×10^{-5} tons/year, per unit.
- p. *NH₃: In no case shall ammonia slip from exhaust gases exceed 50 ppmv.
- q. There shall be no visible emissions (less than 5% opacity) during the operations of the lime silo.
- r. In no case shall emissions from the ash handling building baghouse exceed a particulate limit of 0.010 grains/dscf and visible emissions of 5% opacity.
- * Pursuant to Rule 17-4.080 F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions for the pollutants CO, VOC, F, NH₃, SO₂, NO_x, Pb, Be, Hg, dioxins and furans, and visible emissions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

SPECIFIC CONDITIONS:

- 3. Test Methods/Continuous Emissions Monitoring System (CEMS)/Testing Frequency/Sampling Ports/Record Keeping/Reporting of Excess Emissions and Malfunctions.

- a. Test Methods

Compliance with emission limiting standards mentioned in Specific Condition No. 2 shall be demonstrated using EPA Methods, as contained in 40 CFR Part 60 (Standards of Performance for New Stationary Sources), or 40 CFR Part 61 (National Emission Standards for Hazardous Air Pollutants), or any other method as approved by the Department, in accordance with F.A.C. Rule 17-2.700(3). A test protocol shall be submitted for approval to the South Florida District and to the Bureau of Air Regulation at least 90 days prior to testing. This protocol shall include details on how the weight percentage of used tires in the MSW stream will be accounted for during the compliance testing.

EPA Method

For Determination of

- | | |
|--------------|--|
| 1 | Selection of sample site and velocity traverses. |
| 2 | Stack gas flow rate when converting concentrations to or from mass emission limits. |
| 3 or 3A | Gas analysis when needed for calculation of molecular weight or percent O ₂ . |
| 4 | Moisture content when converting stack velocity to dry volumetric flow rate for use in converting concentrations in dry gases to or from mass emission limits. |
| 5 | Particulate matter concentration and mass emissions. |
| 201 or 201A | PM ₁₀ emissions. |
| 6, 6C, or 19 | Sulfur dioxide emissions from stationary sources. |
| 7, 7C, or 19 | Nitrogen oxide emissions from stationary sources. |

PERMITTEE: Lee County

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SPECIFIC CONDITIONS:

- 9 Visible emission determination of opacity.
- At least three one hour runs to be conducted simultaneously with particulate testing for the emissions from dry scrubber/baghouse, and ash handling building baghouse.
 - At least one lime truck unloading into the lime silo (start to finish).
- 10 Carbon monoxide emissions from stationary sources.
- 12 Lead concentration from stationary sources.
- 13A or 13B Fluoride emissions from stationary sources.
- 23 Dioxin/furan concentration.
- 18 or 25 Volatile organic compounds concentration.
- 26, 26a HCl emissions or other methods approved by DER.
- 101A Mercury emissions based on an average of three runs.
- 29 Antimony, Cadmium
- 104 Beryllium emission rate and associated moisture content.
- 108 Arsenic

Note: The weight of MSW being fed to each combustor during the stack test shall be continuously monitored and recorded by a weighing device which is properly calibrated. Stack tests shall be conducted upstream and downstream of the applicable control device for SO₂, Hg and HCl. Soot blowers shall be operated in a mode consistent with the normal cleaning requirements of the system during the compliance testing.

b. Continuous Emissions Monitoring System (CEMS)

Continuous emission monitors with recorders shall be installed, calibrated, maintained and operated subject to approval by the Department for the following:

SPECIFIC CONDITIONS:

Carbon Monoxide, Oxygen, Nitrogen Oxide, Opacity, and Sulfur Dioxide (for SO₂ one monitor shall be located upstream of the scrubber and one shall be located downstream of the baghouse), as specified in 40 CFR 60, Appendix B; total steam production (lbs/hr, pressure, and temperature) and power generation (MW) for each unit; ammonia injection rate; slaked lime; activated carbon injection or usage rates; and thermocouple to measure temperature of combustion zone (to be specified by the vendor). The monitoring devices shall meet the applicable requirements of Chapter 17-2, Section 17-2.710, F.A.C. and 40 CFR 60.45, and 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7 (a)(5). Data on monitoring equipment specifications, manufacturer, type, calibration and maintenance needs, and its proposed location after the economizer or in the air pollution control equipment outlet duct shall be provided to the South District Office for review prior to installation together with and subject to the same provisions as submittal of air pollution control equipment as mentioned earlier.

c. Testing Frequency

[Compliance with emission standards contained in Specific Condition 2 shall be determined by conducting stack tests within 120 days of completion of construction and initial operation and annually thereafter. In addition to the three test runs conducted under normal operation, three compliance test runs shall be conducted annually under soot blowing conditions for particulate and VE. Each soot blowing test run shall be a representative of normal soot blowing operation. The compliance tests may be staggered throughout the year with the approval of the Bureau of Air Regulation.] Pursuant to Rule 17-2.700(2)(b), when the Department, 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 this permit is being violated, it may require the owner or operator of the source to conduct compliance tests which identify the nature and quantity of pollutant emissions from the source and to provide a report on the results of said tests to the Department. [Compliance testing for the flyash handling Building (baghouse) and the lime silo loading operation (V.E. test) shall be conducted within 120 days of completion of

Replaced on March 15, 2000,

Replaced on March 15, 2000

4th sent,

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

construction and initial operation and annually thereafter. All notification requirements of 40 CFR parts 60 and 61 shall be complied with by the owner/operator of the SWERF.

d. Sampling Ports

The Permittee shall provide sampling ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports in accordance with Section 17-2.700, F.A.C. Drawings of testing facilities including sampling port locations as required by Section 17-2.700 shall be submitted to the South District Office for approval at least 60 days prior to construction of the sampling ports and stack.

e. Record Keeping

Lee County Solid Waste Energy Recovery Facility shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. This file shall include but not be limited to:

- (i) the data collected from in-stack monitoring instruments,
- (ii) the records on MSW input rate,
- (iii) the amount of propane gas burned per unit,
- (iv) the results of all source tests or performance tests,
- (v) the amount of ammonia, activated carbon, or other chemicals used for NOx and mercury control,
- (vi) calibration logs for all instruments,
- (vii) maintenance/repair logs for any work performed which is subject to this permit.

All measurements, records, and other data required to be maintained by SWERF shall be retained for at least two years following the date on which such measurements, records, or data are recorded and made available to the Department upon request. The permittee shall keep accurate records of MSW being fired to each combustor along with the weight percent of used tires in the waste stream being combusted on an estimated weekly basis

SPECIFIC CONDITIONS:

for the entire life of this facility. The South District office of the Department and the Bureau of Air Regulation shall be notified in writing at least 30 days prior to any compliance testing.

f. Reporting of Excess Emissions and Malfunctions

(i) A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Failures that are caused entirely or in part by poor maintenance, careless operation, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions.

(ii) Excess emissions resulting from startup, shutdown or malfunction of any source 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 24 hour period unless specifically authorized by the Department for longer duration (Rule 17-2.250(1), F.A.C.).

(iii) Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonable be prevented during startup, shutdown, or malfunction shall be prohibited (Rule 17-2.250(4), F.A.C.).

(iv) In case of excess emissions resulting from malfunctions, each source shall notify the Department or the appropriate Local Program in accordance with Section 17-4.130, Florida Administrative Code. A full written report on the malfunctions shall be submitted in a quarterly report (Rule 17-2.250(6), F.A.C.).

(v) The owner or operator shall submit excess emission reports for any calendar quarter during which there are excess emissions from the facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that no excess emissions occurred during the quarterly reporting period. The report shall include the following:

(A) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

date and time of commencement and completion of each period of excess emissions [40 CFR60.7(c)(1)].

- (B) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted [40CFR60.7(c)(2)].
- (C) 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 of adjustments [40CFR60.7(c)(3)].
- (D) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report [40CFR60.7(c)(4)].
- (E) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and all other information required by this permit recorded in a permanent form suitable for inspection [40CFR60.7(d)].

4. Miscellaneous Requirements

a. Start-up and Shut-down Procedures

During start-up procedures, propane gas shall be used to preheat the combustion zone to achieve a furnace roof temperature of 1270°F and a minimum temperature of 1800°F above the grate (at a height to be specified by the vendor) prior to the ignition of MSW.

During all shut-down procedures, propane gas shall be used to ensure that the temperature above the grate, as specified above, does not drop below 1800°F and the furnace roof temperature is maintained above 1270° while any MSW is still burning.

SPECIFIC CONDITIONS:

b. Operating Procedures

Operating procedures shall include good combustion practices and proper training and certification of all operators. The good combustion practices shall meet the guidelines established in 40 CFR 60, Subpart Ea and procedures as established by the equipment manufacturers. All operators (including supervisors) of air pollution control devices shall be properly trained and certified in accordance with the manufacturers guidelines. A list of all such certified personnel shall be submitted to the South District Office. The Permittee/Operator shall inform the District office of any planned training sessions so that Department staff may attend any such training sessions related to operation and maintenance of air pollution control devices.

The emission standards for this facility shall apply at all times, except during periods of start-up, shut-down, or malfunctions, provided that the duration of start-up, shut-down, or malfunction shall not exceed 2 hours within 24 hour period. The start-up period commences when the affected facility begins the continuous burning of MSW and does not include any warm-up period when the affected facility is combusting only propane gas and no MSW is being combusted. During all startups, shutdowns and malfunctions the owner/operator shall use best operational practices to minimize air pollutant emissions. Within 90 days prior to commencing commercial operations of this facility, the permittee shall submit to the South District Office for approval a operational procedures manual that identifies and describes best operational practices that will be used during startup, shutdown, and malfunctions of this facility.

c. Odor Control

No objectionable odors are allowed from this facility pursuant to F.A.C. Rule 17-2.620. The truck access doors to the facility shall remain closed except during normal working shifts when MSW is being received near the storage pit area to allow vehicle passage. To minimize odors at the facility, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air.

SPECIFIC CONDITIONS:

d. Auxiliary Burners

Auxiliary burners for each unit shall be fired only by propane gas and shall not exceed the 10% capacity factor as determined by 40 CFR 60.44b(d).

e. Baghouse Operations

All baghouses (except for lime silo dust collector) shall be equipped with pressure drop monitoring equipment. Baghouses shall have a maximum air to cloth ratio of 4:1. Extra bags shall be maintained at the site for emergency purposes.

f. Restriction for Type of Wastes Combusted

No biological waste, medical waste, bio-hazardous waste, sewage sludge or hazardous or unauthorized wastes shall be received or combusted at this facility without obtaining proper modification to the power plant site certification and this permit. The Permittee may combust up to 3% (by weight) of used tires along with the MSW. If the applicant wishes to combust used tires in excess of 3% (by weight) a modification to the construction permit will be required prior to increasing the feed rate of the tires. The County shall establish a household battery collection program to be specified by the applicant prior to start of construction, to further minimize mercury emissions. Chromium compounds shall not be used as an additive in the cooling tower water.

g. Fugitive (Unconfined) Emissions

Fugitive emissions at this facility shall be adequately controlled at all times. All roads shall be adequately paved and vacuum swept if appropriate, to keep free of visible dust. Speed limit signs shall be posted. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system so as to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations.

SPECIFIC CONDITIONS:

- h. The height of the boiler exhaust stack shall not be less than 275 feet above grade or the height determined to be Good Engineering Practice.
- i. The SWERF's boilers shall not be loaded in excess of their permitted capacity of 55,000 lb/hr. of MSW per unit, and 275×10^6 Btu per hour, each unit, and 186,200 lb/hour of steam, based on heating value of 5000 Btu/lb of MSW.
- j. The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity.
- k. Combustion efficiency shall be calculated by: $\%CE = (1/(1+(CO/CO_2))) \times 100$, and shall be at least 99.5% for an 8 hour average.

5. Emission Control Equipment

- a. The combustor's particulate control baghouse shall be designed, constructed and operated to achieve a maximum emission rate of 0.010 grains per dscf corrected to 7% O₂.
- b. The facility shall be equipped with dry scrubbers which are designed, constructed and operated to remove SO₂ at an efficiency of 80% by weight or to achieve an emission rate of 30 ppmdv at 7% O₂, 24 hour daily geometric average, which ever is less stringent and to cool the flue gases to an average temperature not to exceed 300°F (3-hour rolling average).
- c. The Permittee shall submit to the South Florida District and to the Bureau of Air Regulation within thirty (30) days after it becomes available, copies of technical data pertaining to the selected emissions control systems. These data should include, but not be limited to, guaranteed efficiency and emission rates, and major design parameters.

6. Stack Test Reports

- a. Two copies of the results of the emissions tests for the pollutants listed in Specific Condition No. 2 shall be submitted within forty-five days of the last sampling run

PERMITTEE: Lee County

Permit Number: PSD-FL-151

SPECIFIC CONDITIONS:

to the South District Office, and one copy of the test results shall be submitted to the Bureau of Air Regulation in Tallahassee.

- b. Emissions monitoring shall be reported to the South District Office on a quarterly basis in accordance with Section 17-2.710, F.A.C., 40 CFR, part 60, Subsection 60.7 or 40 CFR part 61 as appropriate.
 - c. Notice of anticipated and actual start-up dates of each waste combustor boiler shall be submitted to the DER South District Office and the Bureau of Air Regulation.
7. Pursuant to Recommended Order on Remand (DOAH Case No. 90-3942 EPP), Appendix B, Exhibit 96, dated May 21, 1992, evaluation test methodology for the mercury control process at this facility shall be subject to the following:
- A. The permittee must operate the pollution control equipment at the facility under procedures designed to minimize emissions of mercury and maximize the removal of mercury from the flue gas of the facility. An activated carbon injection system for mercury control approved by the Department in accordance with Specific Condition No. 2 shall be operated continuously whenever MSW is burned at the facility. The emissions of mercury from the facility shall not exceed the standard established in Specific Condition No. 2(m).
 - B. The permittee shall determine through Department-approved operational testing the feed rate for activated carbon injection which provides the most effective mercury removal over the normal operating regime for the facility while achieving the levels stated hereafter. Following determination of this feed rate, the permittee shall not reduce it without specific written permission from the Department.
 - C. The permittee acknowledges and agrees that the 140 ug/dscm mercury emission standard established by Specific Condition No. 2(m) may be reduced to a level no lower than 70 ug/dscm at 7% O₂ or its equivalent upon written notice to the permittee that Departmental review of at least four operational test results (specified according to protocol) from the facility shows that a reduction of the 140 ug/dscm

PERMITTEE: Lee County

Permit Number: PSD-FL-151


SPECIFIC CONDITIONS:

standard is statistically achievable as determined by the student T-test at the 99 percent confidence limit and is in the public interest. If the Department elects to proceed under this provision, the procedures of Section 403.516(1), Florida Statutes, shall not apply unless the permittee disputes the factual basis for the Department's determination.

- D. If the Department proposes to reduce the 140 ug/dscm mercury emission standard for the facility to a level below 70 ug/dscm at 7% O₂ or its equivalent, it shall proceed in accordance with the provisions of Section 403.516(1), Florida Statutes.

Issued this 20th day
of July, 1992

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION



Carol M. Browner, Secretary



Lawton Chiles
Governor

Florida Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

May 2, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Joseph R. Treshler
Vice President
Ogden Martin Systems, Inc.
P. O. Box 709
Brandon, Florida 23509-0709

RE: Lee County Solid Waste Energy Recovery Facility
PSD-FL-151

Dear Mr. Treshler:

The review of your September 17, 1993, letter requesting an administrative change to the conditions of the Prevention of Significant Deterioration permit (PSD-FL-151) issued to Lee County Utilities on July 20, 1992, for the waste to energy recovery facility has been completed. You requested that Specific Conditions 4e. of the permit be revised to authorize a higher air-to-cloth ratio for the ash handling building dust collection and ventilation system.

The basis of your request is that the 0.010 grains/dscf is achievable using a standard industrial HVAC baghouse having an air-to-cloth ratio within the range of 8:1 to 10:1.

Based on the foregoing, it is determined that the proposed revision to the Specific Conditions 4e. of PSD-FL-151 is acceptable and will not result in an increase in permitted annual emissions of any pollutant subject to the PSD regulations.

Authority to construct a stationary source was granted for the Lee County Solid Waste Energy Recovery Facility project, subject to the conditions in the permit to construct on July 20, 1992. This administrative change to PSD-FL-151 does not alter the commence construction deadline for this facility. This authority to construct is based solely on the requirements of 40 CFR 52.21, the federal regulations governing significant deterioration of air quality, and in no way affects the approvals under other federal or State regulatory authorities. Please be advised that a violation of any condition issued as part of this approval, as well as any construction which proceeds in material variance with information submitted in your application, may subject Lee County Solid Waste Energy Recovery Facility project to an enforcement action.

Mr. Joseph Treshler
May 2, 1994
Page Two

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes. The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, Florida Statutes.

The Petition shall contain the following information:

- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action;
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed

Mr. Joseph Treshler
May 2, 1994
Page Three

time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, F.A.C.

A copy of this letter shall be attached to the above mentioned permit and shall become a part of this permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/TH/bjb

cc: David Knowles, SD
Buck Oven
Richard Donelan

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 5/5/94 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is
hereby acknowledged.

Barbara J. Portwell 5/5/94
Clerk Date

The Specific Conditions of federal permit PSD-FL-151 shall be modified as follows:

Specific Condition No. 4e

FROM:

4.e Baghouse Operations

All baghouses (except for lime silo dust collector) shall be equipped with pressure drop monitoring equipment. Baghouses shall have a maximum air to cloth ratio of 4:1. Extra bags shall be maintained at the site for emergency purposes.

TO:

4.e Baghouse Operations

All baghouses (except for lime silo dust collector) shall be equipped with pressure drop monitoring equipment. Extra bags shall be maintained at the site for emergency purposes. Baghouse (combustion units) shall have a maximum to cloth ratio of 4:1. Baghouse (ash handling building dust collection system) shall have a maximum air-to-cloth ratio of 10:1.



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

October 11, 1994

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. G. J. Aldina, Sr. Vice President
Environmental Testing/CEM
Ogden Projects, Inc.
40 Lane Road
CN 2615
Fairfield, N.J. 07007-2615

Dear Mr. Aldina:

Re: Amendment of Permit No. PSD-FL-151(A)
Lee County Solid Waste Energy Recovery Facility

The Department is in receipt of your September 29, 1994 letter (enclosure) requesting permission to use another EPA stack test method to measure the emissions from the referenced facility that is located at Buckingham Road and State Road 82 in Ft. Myers, Lee County, Florida.

Your request is acceptable and this letter amends Specific Condition No. 3.a. of Permit No. PSD-FL-151(A) to authorize the use of EPA Method 7E, as described in 40 CFR 60, Appendix A, to measure the nitrogen oxides emissions from Units 1 and 2 of the Lee Country Solid Waste Energy Recovery facility.

A person whose substantial interests are affected by the Department's proposed permitting decision may petition for an administrative proceeding (hearing) in accordance with Section 120.57, Florida Statutes (F.S.). The petition must contain the information set forth below and must be filed (received) in the Office of General Counsel of the Department at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400. Petitions filed by the applicant of the amendment request/application and the parties listed below must be filed within 14 days of receipt of this amendment. Petitions filed by other persons must be filed within 14 days of the amendment issuance or within 14 days of their receipt of this amendment, whichever occurs first. Petitioner shall mail a copy of the petition to the applicant at the address indicated above at the time of filing. Failure to file a petition within this time period shall constitute a waiver of any right such person may have to request an administrative determination (hearing) under Section 120.57, F.S.

Mr. G. J. Aldina, Sr.
PSD-FL-151(A)
Permit Amendment
October 11, 1994
Page 2 of 3

The Petition shall contain the following information:

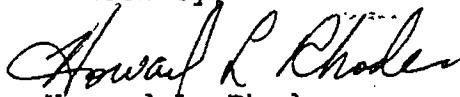
- (a) The name, address and telephone number of each petitioner, the applicant's name and address, the Department Permit File Number and the county in which the project is proposed;
- (b) A statement of how and when each petitioner received notice of the Department's action or proposed action;
- (c) A statement of how each petitioner's substantial interests are affected by the Department's action or proposed action;
- (d) A statement of the material facts disputed by Petitioner, if any;
- (e) A statement of facts which petitioner contends warrant reversal or modification of the Department's action or proposed action;
- (f) A statement of which rules or statutes petitioner contends require reversal or modification of the Department's action or proposed action; and,
- (g) A statement of the relief sought by petitioner, stating precisely the action the petitioner wants the Department to take with respect to the Department's action or proposed action.

If a petition is filed, the administrative hearing process is designed to formulate agency action. Accordingly, the Department's final action may be different from the position taken by it in this amendment. Persons whose substantial interests will be affected by any decision of the Department with regard to the request/application have the right to petition to become a party to the proceeding. The petition must conform to the requirements specified above and be filed (received) within 14 days of receipt of this amendment in the Office of General Counsel at the above address of the Department. Failure to petition within the allowed time frame constitutes a waiver of any right such person has to request a hearing under Section 120.57, F.S., and to participate as a party to this proceeding. Any subsequent intervention will only be at the approval of the presiding officer upon motion filed pursuant to Rule 28-5.207, Florida Administrative Code.

Mr. G. J. Aldina, Sr.
PSD-FL-151(A)
Permit Amendment
October 11, 1994
Page 3 of 3

A copy of this letter amendment must be attached to the referenced permit, No. PSD-FL-151(A), and shall become a part of that permit.

Sincerely,



Howard L. Rhodes
Director
Division of Air Resources
Management

HLR/WH/bjb

Enclosure

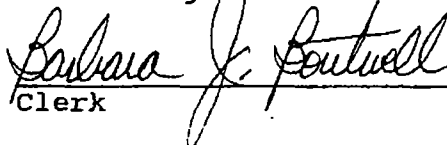
cc: David Knowles, SD
Jewell Harper, EPA
John Bunyak, NPS
Buck Oven, PPC

CERTIFICATE OF SERVICE

The undersigned duly designated deputy clerk hereby certifies that this AMENDMENT and all copies were mailed by certified mail before the close of business on 10/17/94 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT
FILED, on this date, pursuant to 120.52(11), Florida Statutes, with the designated Department Clerk, receipt of which is hereby acknowledged.


Clerk

10/17/94
Date



Department of Environmental Protection

Lawton Chiles
Governor

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Virginia B. Wetherell
Secretary

April 20, 1995

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. David S. Dee, Esquire
Landers and Parsons
310 West College Avenue
Tallahassee, Florida 32301

Dear Mr. Dee:

Re: Amendments to PSD-FL-151(A)
Lee County Solid Waste Energy Recovery Project

The Department received your request dated September 28, 1994, for minor amendments to the subject construction permit. The permit is amended as shown:

Specific Condition No. 4.a.

FROM:

4.a. Start-up and Shut-down Procedures

During start-up procedures, propane gas shall be used to preheat the combustion zone to achieve a furnace roof temperature of 1270°F and a minimum temperature of 1800°F above the grate (at a height to be specified by the vendor) prior to the ignition of MSW.

During all shut-down procedures, propane gas shall be used to ensure that the temperature above the grate, as specified above, does not drop below 1800°F and the furnace roof temperature is maintained above 1270° while any MSW is still burning.

TO:

4.a. Start-up and Shut-down Procedures

During start-up procedures, propane gas shall be used to preheat the combustion zone to achieve a minimum furnace roof temperature and a minimum temperature of 1800 degrees F above the grate (at a height to be specified by the vendor) prior to ignition of MSW. The appropriate minimum furnace roof

temperature shall be established by the Department, based on the test data collected during the facility's initial start-up operations, and shall be correlated to the minimum temperature of 1800 degrees F above the grate.

During all shutdown procedures, propane gas shall be used to ensure that the temperature above the grate, as specified above, does not drop below 1800 degrees F and the furnace roof temperature is maintained above the correlated minimum furnace roof temperature while any MSW is burning.

Specific Condition No. 4.e.

FROM:

4.e. Baghouse Operations

All baghouses (except for lime silo dust collector) shall be equipped with pressure drop monitoring equipment. Baghouses shall have a maximum air to cloth ratio of 4:1. Extra bags shall be maintained at the site for emergency purposes.

TO:

4.e. Baghouse Operations

All baghouses, except for the lime silo dust collector and the baghouses for the silos containing hydrated lime, soda ash, and activated charcoal for the facility's water treatment system, shall be equipped with pressure drop monitoring equipment.

Specific Condition No. 5.b.

FROM:

- 5.b. The facility shall be equipped with dry scrubbers which are designed, constructed and operated to remove SO₂ at an efficiency of 80% by weight or to achieve an emission rate of 30 ppmvd at 7% O₂, 24 hour daily geometric average, whichever is less stringent and to cool the flue gases to an average temperature not to exceed 300°F (3-hour rolling average).

Mr. David Dee
April 20, 1995
Page 3 of 3

TO:

- 5.b. The facility shall be equipped with dry scrubbers which are designed, constructed and operated to remove SO₂ at an efficiency of 80%, by weight, or to achieve an emission rate of 30 ppmvd at 7% O₂, 24 hour geometric average, whichever is less stringent. Except during a malfunction, the maximum flue gas temperature at the final particulate matter control device inlet, during the combustion of solid waste, shall not exceed the maximum temperature established by Rule 62-296.416(4)(a), F.A.C.

A copy of this letter shall be attached to Permit PSD-FL-151(A) and shall become a part of that permit.

Sincerely,



Howard L. Rhodes, Director
Division of Air Resources
Management

HLR/jr/t

cc: D. Knowles, SD
J. Harper, EPA
J. Bunyak, NPS
H. Oven, PPS



Jeb Bush
Governor

Department of Environmental Protection

Marjory Stoneman Douglas Building
3900 Commonwealth Boulevard
Tallahassee, Florida 32399-3000

David B. Struhs
Secretary

March 15, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

Mr. Lindsey Sampson, P.E.
Deputy Director, Solid Waste
Lee County
PO Box 398
Ft. Myers, Florida 33902-0398

Re: Modification of Permit No. PSD-FL-151 and PSD-FL-151A
Lee County Resource Recovery Facility
PSD-FL-151B

The applicant applied on August 6, 1999 to the Department for a modification to PSD permits number PSD-FL-151 and PSD-FL-151A for its Lee County Resource Recovery Facility located at 10500 Buckingham Rd., Fort Myers, Lee County, 33905. This project is PSD-FL-151B. The Department mailed an initial intent to issue and draft PSD permit modification to the applicant on October 18, 1999, and the applicant published the public notice on November 6, 1999 but subsequently commented on the initial draft. This modification addresses the original and subsequent requests of the applicant. This modification is to reduce testing requirements for certain pollutants with emissions that are well below limitations, consolidate testing for particulate matter emissions and make other minor changes to testing requirements, revise certain requirements to conform to federal standards for municipal waste combustion facilities, delete the minimum roof temperature requirement, allow for the use of natural gas as an auxiliary fuel, and revise the definition of allowable solid waste fuels. The Department has reviewed the modification requests and the referenced permits are hereby modified as follows:

Specific condition 2.m. Emission Standards.

The paragraph for this condition for mercury shall be replaced entirely by the following.

Hg (Mercury): In no case shall mercury emissions exceed 70 ug/dscm @ 7% O₂ or 85% reduction by weight, whichever is less stringent. Emissions of mercury shall also not exceed 1.38×10^{-4} lb/mmBtu, 0.0379 lb/hr per unit, and 0.166 tons/year per unit.

[Rules 62-296.416(3)(a)1 and 62-204.800(8)(b)3.d, F.A.C., 40 CFR 60.33b(a)(3) and PSD-FL-151]

Specific condition 3.a. Test Methods.

The table entry for Method 101A shall be replaced by Method 29. The table entry for Method 12 shall be replaced by Method 29. The table entry for EPA Method 25 shall be replaced by Method 25A to demonstrate compliance with VOC emissions. The table entries for EPA Methods 104 and 108 (beryllium and arsenic) shall each be replaced by EPA Method 29. The table entry for EPA Methods 7, 7C, or 19 shall be supplemented with Method 7E to demonstrate compliance with nitrogen oxides. The table entries for EPA Methods 201 and 201A shall be supplemented with Method 5 to demonstrate compliance with PM₁₀ emissions.

The table entry for 'Visible emission determination of opacity.' shall be replaced in its entirety by the following:

"Protect, Conserve and Manage Florida's Environment and Natural Resources"

Printed on recycled paper.

9. Visible emission determination of opacity.
- At least one one-hour run to be conducted simultaneously with particulate testing for the emissions from the dry scrubber/baghouse.
 - At least one 30-minute run to be conducted for the ash handling building baghouse.
 - At least one 30-minute run to be conducted for the lime silo baghouse while a truck is unloading lime into the lime silo. If the unloading is completed before 30 minutes duration, the duration of unloading shall be sufficient to meet this requirement, provided it exceeds 12 minutes.

[Rules 62-4.070(3), 62-296.416(3)(d)1, and 62-297.310(4)(a)2., F.A.C., 40 CFR 60.38b and 40 CFR 60.58b, and applicant request]

Specific condition 3.c. Testing Frequency.

The first through fourth sentences of this condition, starting with "Compliance with emission standards ..." and ending with "... approval of the Bureau of Air Regulation.", shall be replaced entirely by the following:

Compliance with the emission limitations of specific condition 2 of this permit shall be determined by annual emission testing, except that testing for arsenic, beryllium, fluoride, sulfuric acid mist, ammonia and VOC shall be performed prior to renewal of each operation permit. Testing of the MWC units for particulate matter shall be performed using three one-hour test runs so that two one-hour runs are conducted during normal operation and one one-hour run is conducted during soot blowing conditions. Compliance for visible emissions shall be determined in accordance with Rule 62-297.310(4)(a), F.A.C. [Rules 62-4.070(3), 62-297.310(4)(a), and 62-297.310(7)(a)3, F.A.C., and request of the applicant]

The sixth sentence of this condition, "Compliance testing for the flyash handling building (baghouse) and the lime silo loading operation (V.E. test) shall be conducted within 120 days of completion of construction and annually thereafter.", shall be replaced entirely by the following:

Compliance testing for particulate matter emissions from the ash handling building baghouse is waived, and an alternative standard of 5% opacity is imposed, pursuant to Rule 62-297.620(4), F.A.C. If the Department has reason to believe that the particulate weight emission standard is not being met, it shall require that compliance be demonstrated using EPA Method 5. Compliance testing for visible emissions from the ash handling building baghouse and the lime silo baghouse shall be conducted annually. [Rules 62-4.070(3) and 62-297.620(4), F.A.C., and request of the applicant]

Specific condition 4.a. Start-up and Shut-down Procedures.

This condition shall be replaced entirely by the following:

4.a. Start-up and Shut-down Procedures. During start-up and shut-down, the auxiliary burners shall be fired as needed to ensure proper combustion of wastes consistent with good operating practices as specified in 40 CFR 60.53b.

Specific condition 4.b. Operating Procedures.

The second paragraph of this condition shall be replaced entirely by the following:

The emission limitations for this facility shall apply at all times, except during periods of startup, shut down, or malfunctions, provided that the duration of startup, shut down and malfunction periods shall not exceed three hours per occurrence. 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 natural gas or propane, and no municipal solid waste is being fed to the combustor. Continuous burning is the continuous, semi-continuous, 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. During all periods of startup, shut down and malfunction, the owner or operator shall use best operational practices to minimize air pollutant emissions. The owner or operator shall maintain a manual that identifies and describes best operational practices that will be used during periods of startup, shut down and malfunction at this facility.
[Rules 62-4.070(3), and 62-210.700(1) and (5), F.A.C., 40 CFR 60.38b and 40 CFR 60.58b(a), and request of the applicant]

4.d. Auxiliary Burners.

This condition shall be replaced entirely by the following:

These devices shall be used at startup during the introduction of MSW fuel until design furnace gas temperature is achieved. They shall be fueled only with natural gas or propane. If the annual capacity factor for natural gas is greater than 10%, as determined by 40 CFR 60.41b, the facility shall be subject to 40 CFR 60.44b(d), Standards for Nitrogen Oxides.
[Rules 62-4.070(3), 62-4.160(2) and 62-210.200, F.A.C., and 40 CFR 60.40b(d)]

Specific condition 4.f. Restriction for Types of Wastes Combusted.

This condition shall be replaced entirely by the following:

4.f. Allowable Fuels. The only fuels allowed to be burned in the MWC units are solid wastes allowed by this permit, and natural gas and propane as auxiliary fuels. Other wastes shall not be burned without written prior approval from the Department. Lee County shall minimize emissions of mercury through a battery collection program. Chromium compounds shall not be used as an additive in the cooling tower water.

The primary fuel for the 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), Florida Statutes (1995).

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 shall not burn:

- (a) those materials that are prohibited by state or federal law;
- (b) those materials that are prohibited by this permit;
- (c) lead acid batteries;
- (d) hazardous waste;
- (e) nuclear waste;
- (f) radioactive waste;
- (g) sewage sludge;
- (h) explosives;

Further, the facility shall not knowingly burn:

- (i) nickel-cadmium batteries pursuant to Section 403.7192(3);
- (j) mercury containing devices and lamps pursuant to Sections 403.7186(2) & (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 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 percentage weight limitations, below. 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.

To ensure that the facility's fuel does not adversely affect the facility's combustion process or emissions, the facility operator shall:

- (a) comply with good combustion operating practices in accordance with 40 CFR 60.34b;
- (b) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
- (c) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit.

Natural gas or propane may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices.

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.
- (g) The predominantly combustible fraction of sorted construction and demolition debris. Sorting of mixed construction and demolition debris at the facility shall occur on the tipping floor or at another location approved by the Department.

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, except as provided in the following sentence. Subsequent to an initial test burn scheduled to allow Department representatives to observe, while firing 5% (by weight) tires at each of the combustion units while operating each unit at capacity that demonstrates via the CEMS that each unit can comply with the emission limits for pollutants monitored by the CEMS while firing 5% (by weight) tires, this quantity limitation shall rise from 3% to 5%. Compliance with this limitation shall be determined on a calendar monthly basis.

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 on a calendar monthly basis.

- (a) Unsorted mixtures of construction and demolition debris, or that fraction of sorted construction and demolition debris that is predominantly non-combustible. Non-combustible construction and demolition debris shall include concrete, metals, gypsum products, plaster, rock, brick, and masonry.
- (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.

The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of this condition:

Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of this condition, 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.

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 days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, 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% or 5% limitation, whichever is applicable.

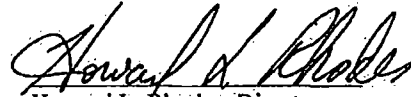
Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials shall be divided by the total weight of all waste materials received in the same calendar month, 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 62-4.070(3), F.A.C., PSD-FL-151, request of the applicant]

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 3-21-00 to the person(s) listed:

Lindsey Sampson, P.E. *
David Dee, Landers & Parsons
Karen Skinner, DEP Siting Coordination Office
David Knowles, P.E., DEP SD
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.


(Clerk)

3-21-00
(Date)



Florida Department of

Memorandum

Environmental Protection

TO: Joseph Kahn, Director, DARM
THROUGH: Trina L. Vielhauer, Chief, BAR
FROM: A.A. Linero, P.E., PA/Cindy Mulkey South Permitting Section
DATE: February 7, 2007
SUBJECT: Lee County Resource Recovery Facility
Unit 3 MWC Construction Extension
DEP File No. 0710119-005-AC, PSD-FL-151D

Attached is the final permit package for extension of the Lee County Resource Recovery Facility Unit 3 construction permit expiration date. The current construction permit (PSD-FL-151C) expired on December 31, 2006. The applicant has incurred unforeseen problems related to procurement of construction contracts and equipment. Lee County has requested to extend the expiration date to December 31, 2007. The facility has provided recent construction details and assurance that construction and testing will be completed by this time.

Comments received from Lee County during the 14-day comment period have been addressed in the attached Final Determination to Issue a Construction Permit.

We recommend your approval of the attached Final Notice and Permit.

AAL/cm

Attachments

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF PERMIT

In the Matter of an
Application for Permit by:

Lindsey J. Sampson, Director
Lee County Solid Waste Division
Post Office Box 3193
Orlando, Florida 32802

Lee County Resource Recovery Facility
Unit 3 Municipal Waste Combustor
DEP File No. 0710119-005-AC
PSD-FL-151D

Enclosed is the Final Permit (No. 0710019-005-AC) to extend the construction period for the Unit 3 Municipal Waste Combustor to December 31, 2007 at the Lee County Resource Recovery Facility. This permit is issued pursuant to Chapter 403, Florida Statutes.

Any party to this order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.



Trina L. Vielhauer, 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) and all copies were sent electronically (with Received Receipt) before the close of business on 2/12/07 to the persons listed:

D. Castro, HDR Engineering, Inc.: dcastro@hdrinc.com

K. Dunbar, HDR Engineering, Inc.: kirk.dunbar@hdrinc.com

Jon Iglehart, DEP South District: jon.iglehart@dep.state.fl.us

Mike Halpin, Siting: mike.halpin@dep.state.fl.us

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.

Mary J. Harvey 2/12/07
(Clerk) (Date)



Florida Department of Environmental Protection

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

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Sole
Secretary

PERMITTEE:

Lee County
Post Office Box 398
Fort Myers, Florida 33902-0398

Authorized Representative:

Lindsey J. Sampson
Director, Solid Waste Division

Lee County Resource Recovery Facility
Unit 3 MWC and Lime Silo
DEP File No. 0710119-005-AC
PSD-FL-151D
Expires: December 31, 2007

PROJECT AND LOCATION

This permit incorporates all conditions from the latest Air Construction Permit (PSD-FL-151C, 0710119-002-AC), excluding Appendix BD, and extends the expiration date by one calendar year. The permit authorizes construction of a third municipal waste combustor, and a lime storage silo and associated equipment at the existing resource recovery facility. The municipal waste combustion unit will not exceed a nominal tonnage capacity of 660 tons per day and maximum heat input of 291.5 million Btu per hour. The facility is located at 10500 Buckingham Rd., Fort Myers, Lee County.

STATEMENT OF BASIS

This permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.). The permittee is authorized to perform the proposed work in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

The following are attached as part of this permit.

Final Permit	PSD-FL-151C
Appendix GC	General Conditions

Joseph Kahn, Director
Division of Air Resource Management

SECTION I. GENERAL INFORMATION

FACILITY DESCRIPTION

The existing facility consists of a municipal waste combustion plant with two mass burn municipal waste combustion units. The facility currently has a capacity of 660 tons/day per unit for a total of 1,320 tons per day of solid waste fuel with a nominal higher heating value of 5,000 Btu per pound. This is equal to a maximum heat input of 275 million Btu per hour per unit, for a total heat input not to exceed 550 million Btu per hour. The facility converts solid waste into saleable energy. It produces up to 40 megawatts of electricity. The facility is self-sufficient and operates on a small portion of the power it generates. The remaining electricity is sold to an electric utility market. The facility is owned by Lee County, and was designed, built and is currently operated by Ogden-Martin Systems of Lee, Inc. (although the corporate name changed to Covanta Energy Corporation, effective March 14, 2001). The Lee County Resource Recovery Facility began operation in August 1994.

The facility's existing mass burn combustion system incorporates the technology of German-based Martin GmbH. The waterwall furnaces are equipped with Martin® reverse-reciprocating grates and ash handling systems. Waste is combusted and reduced to an inert ash residue. Each existing unit is equipped with a slaked lime scrubber followed by a baghouse, a selective non-catalytic reduction system for reduction of nitrogen oxide emissions, and a carbon injection system for control of mercury emissions.

PROJECT DESCRIPTION

This permit extends the expiration date of the previously issued permit (No. PSD-FL-151C, 0710119-002-AC) which allowed the applicant to construct a third municipal waste combustion unit (Unit 3), which is substantially similar to the existing two units. Unit 3 will have additional controls in order to comply with the more stringent New Source Performance Standards and Best Available Control Technology limits. The new municipal waste combustion unit will not exceed a nominal tonnage capacity of 660 tons per day and maximum heat input of 291.5 million Btu per hour. Accordingly, as a large municipal waste combustor, this unit is subject to the requirements of the Code of Federal Regulations Title 40, Part 60 (40 CFR 60), Subpart Eb. Dry flue gas scrubbers, baghouse, selective non-catalytic reduction, and carbon injection will be utilized to control emissions from the combustor. Flue gas recirculation is authorized but not required. The existing facility also contains existing lime silo and ash handling systems, which will be impacted via increased throughput of the new unit. An additional lime silo will be constructed, which stores pebble lime, used to make lime slurry.

EMISSIONS UNITS

This permit addresses the following emissions units:

EU ID	Emissions Unit Description
006	Unit 3 660 Tons per day nominal MSW Incinerator
007	Lime Silo

REGULATORY CLASSIFICATION

Title I, Part C, Clean Air Act (CAA): The facility is a PSD-major facility pursuant to Rule 62-212, F.A.C.

Title I, Section 111, CAA: Unit 3 is subject to the New Source Performance Standards of 40 CFR 60, Subpart Eb-Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994.

Title I, Section 112, CAA: The facility is a "Major Source" of hazardous air pollutants.

Title IV, CAA: The facility does not operate units subject to the Acid Rain provisions of the Clean Air Act.

Title V, CAA: The facility is a Title V or "Major Source of air pollution" in accordance with Chapter 62-213, F.A.C.

SECTION I. GENERAL INFORMATION

PERMITTING AUTHORITY

All documents related to applications for permits to construct, operate or modify an emissions unit shall be submitted to the Bureau of Air Regulation of the Florida Department of Environmental Protection at 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400. Copies of all such documents shall also be submitted to the Compliance Authority.

COMPLIANCE AUTHORITY

All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department of Environmental Protection South District Office at 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33901-3881.

RELEVANT DOCUMENTS

The documents listed below are not a part of this permit; however, this information is specifically related to the permitting action and is on file with the Department.

- Lee County Letter dated January 16, 2007.
- Department's Final Determination issued concurrently with this Final Permit.

SECTION II. ADMINISTRATIVE REQUIREMENTS

1. **General Conditions:** The permittee shall operate under the attached General Conditions listed in Appendix GC of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 F.S. [Rule 62-4.160, F.A.C.]
2. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403, F.S.; Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 F.A.C.; and the Title 40, Parts 51, 52, 60, and 63 of the CFR, adopted by reference in Rule 62-204.800, F.A.C. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
3. **New or Additional Conditions:** For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
4. **Permit Expiration:** For good cause, the permittee may request that this PSD Air Construction Permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60) days prior to the expiration of this permit. [Rules 62-4.080(3), F.A.C.]
5. **PSD Source Obligation:**
 - a. Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - b. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of Subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
 - c. At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of Subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.
[Rule 62-212.400(12), F.A.C.]
6. **Modifications:** No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an Air Construction Permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Chapters 62-210 and 62-212, F.A.C.]
7. **Title V Permit:** This permit authorizes construction or modification of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V Operation Permit is required for regular operation of the permitted emissions units. The permittee shall apply for a Title V Operation

SECTION II. ADMINISTRATIVE REQUIREMENTS

Permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V Operation Permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220 and Chapter 62-213, F.A.C.]

8. Annual Operating Report: The Annual Operating Report shall be completed each year and submitted to the appropriate Department division, district or Department-approved local air pollution control program office by March 1st of each year. Emissions shall be computed in accordance with the provisions of subsection 62-210.370(2), F.A.C. [Rule 62-210.370, F.A.C.]

SECTION III - EMISSIONS UNITS SPECIFIC CONDITIONS

EU 006 and 007 MSW Incinerator and Lime Silo

This section of the permit addresses the following existing emissions units.

EU ID	Emissions Unit Description
006	Unit 3 660 Tons per day nominal MSW Incinerator
007	Lime Silo

ADMINISTRATIVE REQUIREMENTS

1. Relation to Other Permits: This permit supersedes permit, PSD-FL-151C (0710119-002-AC), dated October 13, 2003. The provisions of the Air Construction Permit PSD-FL-151C, attached, are incorporated into this Air Construction Permit with the following changes:
 - a. The expiration date is extended to December 31, 2007.
 - b. Because the requirements of Appendix BD were incorporated into the permit's terms and conditions, Appendix BD is no longer attached as part of the permit.
- [Rule 62-212.300, F.A.C.]

FINAL DETERMINATION
TO ISSUE A CONSTRUCTION PERMIT
LEE COUNTY RESOURCE RECOVERY FACILITY
DEP FILE NO. 0710119-005-AC

On January 22, 2007 the Florida Department of Environmental Protection (Department) distributed an "Intent to Issue Air Construction Permit" that extended the construction period of the Unit 3 Municipal Waste Combustor at the Lee County Resource Recovery Facility to December 31, 2007.

The package included the Department's Draft Air Construction Permit, the Intent to Issue Air Construction Permit, and the Public Notice of Intent to Issue Air Construction Permit. The Department sent copies of the package to various persons and agencies. Lee County published the Public Notice in the *Fort Myers News-Press* on January 25, 2007 and provided to the Department the required proof of publication.

The Department has reasonable assurance that the project will not result in significant net emission increases from the units that would otherwise require a review under the Rules for the Prevention of Significant Deterioration (PSD) at Paragraph 62-212.400, Florida Administrative Code or 40 CFR 52.21.

No requests for administrative hearings were received on the Notice of Intent to Issue.

Written comments were received during the 14-day public comment period from the Lee County Solid Waste Division on February 06, 2007. No comments were received from other agencies or the public regarding the Draft Air Construction Permit.

Lee County's comments identified inconsistencies between specific conditions within the permit 0710119-002-AC (which is incorporated into this permit by reference) and its associated Appendix BD. A condition has been added to Section III, Emissions Units Specific Conditions clarifying that the conditions of the permit alone constitute BACT, and Appendix BD is no longer attached as part of this permit.

The final decision by the Department is to issue the permit as drafted.



Jeb Bush
Governor

Department of Environmental Protection

Twin Towers Office Building
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

David B. Struhs
Secretary

PERMITTEE:

Lee County
Lee County Resource Recovery Facility
P.O. Box 398
Fort Myers, Florida 33902

ID No.	0710119
Permit No.	0710119-002-AC
PSD No.	PSD-FL-151C
SIC No.	4953
Expires:	December 31, 2006

Authorized Representative:
Mr. Lindsey Sampson
Director, Solid Waste Division

PROJECT AND LOCATION:

This permit allows the applicant to construct a third municipal waste combustor (MWC), along with a lime storage silo and associated appurtenances. The new MWC will be constructed at the existing municipal waste combustion facility. The municipal waste combustion unit will not exceed a nominal tonnage capacity of 660 TPD and maximum heat input of 291.5 million Btu per hour (MMBtu/hr).

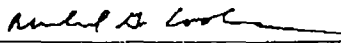
The facility is located at 10500 Buckingham Rd., Fort Myers, Lee County. The UTM coordinates of this facility are Zone 17; 424.21 km E; 2945.7 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297 and Subpart Eb of the NSPS of 40CFR60. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

Attached appendix is part of this permit:

Appendix GC Construction Permit General Conditions
Appendix BD BACT Determination


Michael G. Cooke, Director
Division of Air Resources
Management

"More Protection, Less Process"

Printed on recycled paper

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION I. FACILITY INFORMATION

SUBSECTION A. FACILITY DESCRIPTION

The existing facility consists of a municipal waste combustion facility with two mass burn municipal waste combustion (MWC) units. The facility currently has a capacity of 660 tons/day per unit for a total of 1,320 tons per day of solid waste fuel with a nominal HHV of 5,000 Btu/lb. This is equal to a maximum heat input of 275 MMBtu/hour per unit, for a total heat input not to exceed 550 MMBtu/hr. The facility converts solid waste into saleable energy. It produces up to 40 MW of electricity. The facility is self-sufficient and operates on a small portion of the power it generates. The remaining electricity is sold to an electric utility market. The facility is owned by Lee County, and was designed, built and is currently operated by Ogden-Martin Systems of Lee, Inc. (although the corporate name changed to Covanta Energy Corporation, effective March 14, 2001). The Lee County Resource Recovery Facility began operation in August 1994.

The facility's existing mass burn combustion system incorporates the technology of German-based Martin GmbH. The waterwall furnaces are equipped with Martin® reverse-reciprocating grates and ash handling systems. Waste is combusted and reduced to an inert ash residue. Each existing unit is equipped with a slaked lime scrubber followed by a baghouse, an SNCR system for reduction of NO_x emissions, and a carbon injection system for control of mercury emissions.

This permit allows the applicant to construct a third MWC unit, which is substantially similar to the existing two units, albeit with additional controls as required in order to comply with the more stringent NSPS and BACT limits. The new municipal waste combustion unit will not exceed a nominal tonnage capacity of 660 TPD and maximum heat input of 291.5 MMBtu/hr. Accordingly, as a large MWC, this unit is subject to the requirements of 40 CFR 60, Subpart Eb. Dry flue gas scrubbers, baghouse, SNCR, and carbon injection will be utilized to control emissions from the combustor. Flue Gas Recirculation (FGR) is authorized but not required. The existing facility also contains existing lime silo and ash handling systems, which will be impacted via increased throughput of the new unit. An additional lime silo will be constructed, which stores pebble lime, used to make lime slurry.

SUBSECTION B. REGULATORY CLASSIFICATION

This facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), nitrogen oxides (NO_x), carbon monoxide (CO), or volatile organic compounds (VOC) exceeds 100 tons per year (TPY).

This facility is within an industry included in the list of the 28 Major Facility Categories per Table 62-212.400-1, F.A.C. Because emissions are greater than 100 TPY for at least one criteria pollutant, the facility is also a Major Facility with respect to Rule 62-212:400, Prevention of Significant Deterioration (PSD).

Project: Lee County Resource Recovery Facility
Facility ID No. 0710119
SIC: 4953

Lee County
Fort Myers, Florida

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION I. FACILITY INFORMATION

Based on the initial Title V permit application received June 17, 1996, this facility is a major source of hazardous air pollutants (HAPs).

SUBSECTION C. PERMIT SCHEDULE:

- June 13, 2003 notice of intent published in Ft. Myers News-Press
- June 12, 2003 issued revised notice of intent to issue permit
- April 14, 2003 notice of intent published in Ft. Myers News-Press
- April 4, 2003 issued notice of intent to issue permit
- February 28, 2003 application deemed complete

SUBSECTION D. RELEVANT DOCUMENTS:

The documents listed below are the basis of the permit. They are specifically related to this permitting action. These documents are on file with the Department.

- Application received (Bureau of Air Regulation) on November 12, 2002
- Department's Request For Additional Information dated December 11, 2002
- Applicant's response to Department's Request and related information submitted by Lee County and its consultants (various dates)

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

SUBSECTION A. ADMINISTRATIVE

- A.1 **Regulating Agencies:** All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (FDEP) at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. All documents related to reports, tests, and notifications should be submitted to the Department's South District Office (DEPSD), 2295 Victoria Avenue, Suite 364, Fort Myers, Florida 33902 and phone number 239/332-6975.
- A.2 **General Conditions:** The owner and operator are subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- A.3 **Terminology:** The terms used in this permit have specific meanings as defined in the corresponding chapters of the Florida Administrative Code.
- A.4 **Forms and Application Procedures:** The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. [Rule 62-210.900, F.A.C.]
- A.5 **Application for Title V Permit:** An application for a modification of the Title V operating permit, pursuant to Chapter 62-213, F.A.C., must be submitted to the DEP's Bureau of Air Regulation and a copy to DEPSD. [Chapter 62-213, F.A.C.]
- A.6 **New or Additional Conditions:** Pursuant to Rule 62-4.080, F.A.C., for good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time.

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

SUBSECTION B. CONSTRUCTION REQUIREMENTS

- B.1 Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit (s) shall be in accordance with the capacities and specifications stated in the application. The unit is subject to all applicable provisions of Chapter 403, F.S. and Florida Administrative Code Chapters 62-4, 62-204, 62-212, 62-213, 62-296, 62-297 and the Code of Federal Regulations Section 40, Part 60, adopted by reference in the Florida Administrative Code (F.A.C.) regulations [Rule 62-204.800, F.A.C.]. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations [Rule 62-210.300, F.A.C.]

SUBSECTION C. OPERATIONAL REQUIREMENTS

- C.1 Changes/Modifications: The owner or operator shall submit to the Department's Bureau of Air Regulation, for review any changes in, or modifications to: the method of operation; process or pollution control equipment; increase in hours of operation; equipment capacities; or any change which would result in an increase in potential/actual short term or long term emissions. Depending on the size and scope of the modification, it may be necessary to submit an application for, and obtain, an air construction permit prior to making the desired change. [Rule 62-4.030, 62-210.300 and 62-4.070(3), F.A.C.]
- C.2 Plant Operation - Problems: If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the owner or operator shall notify the DEPSD as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; the steps being taken to correct the problem and prevent future recurrence; and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit and the regulations. [Rule 62-4.130, F.A.C.]
- C.3 Operating Procedures shall include good combustion practices and proper training and certification of all operators. The good combustion practices shall meet the guidelines established in 40 CFR 60, Subpart Eb and procedures as established by recognized industry standards. All operators (including supervisors) of air pollution control device shall be properly trained and certified in plant specific equipment. A list of all such certified personnel shall be submitted to the DEPSD. Department's staff shall be given notice of any formal training sessions related to operation and maintenance of air pollution control devices. [Rule 62-204.800(8), F.A.C. and 62-4.070 (3), F.A.C.]

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SECTION II. EMISSION UNIT(S) GENERAL REQUIREMENTS

C.4 Exceptions and Approval of Alternate Procedures and Requirements: An Alternate Sampling Procedure (ASP) may be requested from the Bureau of Air Monitoring and Mobile Sources of the Florida Department of Environmental Protection in accordance with the procedures specified in **Rule 62-297.620, F.A.C.**

SUBSECTION D. MONITORING OF OPERATIONS

Determination of Process Variables

- D.1 The permittee shall operate and maintain equipment and/or instruments necessary to determine process variables, such as heat input, when such data is needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- D.2 Equipment and/or instruments used to directly or indirectly determine such process variables, including devices such as belt scales, weigh 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.]

SUBSECTION E. OTHER REQUIREMENTS

E.1 Waste Disposal: The owner or operator shall treat, store, and dispose of all liquid, solid, and hazardous wastes in accordance with all applicable Federal, State, and Local regulations. This air pollution permit does not relieve the permittee from securing any other types of required permits, licenses, or certifications.

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. 40 CFR 60, NSPS, GENERAL PROVISIONS

The following emission limitations shall apply to the affected emissions unit after compliance testing is completed. As used in this permit, initial operations shall mean after the initial compliance testing is complete. This section addresses the following emissions unit:

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION	SYSTEM
-006	660 Tons per day nominal MSW Incinerator	MSW Unit 3

The affected emissions units shall comply with all applicable requirements of 40 CFR 60, General Provisions, Subpart A.

- A.1 [40 CFR 60.7, Notification and record keeping]
- A.2 [40 CFR 60.8, Performance tests]
- A.3 [40 CFR 60.11, Compliance with standards and maintenance requirements]
- A.4 [40 CFR 60.12, Circumvention]
- A.5 [40 CFR 60.13, Monitoring requirements]
- A.6 [40 CFR 60.19, General notification and reporting requirements]

The affected emissions units shall comply with all applicable provisions of the 40 CFR 60, Subpart Eb-Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996. In addition the emissions unit shall also comply with all the conditions listed in Section II (Emissions Unit General Requirements) of this permit.

[Rule 62-4.070(3), 62-204.800(8) and 62-296.416, F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION B. SPECIFIC CONDITIONS:

The following specific conditions apply to the following emissions unit.

EMISSIONS UNIT No.	EMISSIONS UNITS DESCRIPTION
-006	660 Tons per day nominal MSW Incinerator

OPERATIONAL REQUIREMENTS

- B.1 The combustor (boiler) shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity. [Rule 62-4.070(3), F.A.C.]
- B.2 Process Operating Rates: The municipal waste combustor unit (MWC) shall have a nominal rated capacity of 660 tons of waste per day. Maximum heat input shall be 291.5 MMBtu/hr. [Rules 62-4.070(3) and 62-204.800(8), F.A.C., 40 CFR 60.51b and 60.58b(j)]
- B.3 Load Level: *Unit load* means the steam load of the municipal waste combustor (MWC) measured as specified in 40 CFR 60.58b(i)(6). Compliance with load level requirements shall be determined by a steam meter using ASME Power Test Code for Steam Generating Units, Power Test Code 4.1, section 4 (see 40 CFR 60.58b(i)(6)(ii) & (iii)). The MWC unit shall not operate at a load level greater than 110 percent of the unit's *maximum demonstrated unit load* based on 4-hour block averaged measurements of steam flow. The maximum demonstrated unit load is the highest arithmetic averaged measurement of steam flow recorded for four consecutive hours during the most recent dioxin/furan performance stack test in which compliance with the dioxin/furan emission limit was achieved. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b) and condition D.7 of this permit. [Rule 62-204.800(8), F.A.C., 40 CFR 60.51b; 60.53b(b); and 60.58b(i)(6)&(8)]
- B.4 Emission Control Equipment

Particulate Matter

The unit shall be equipped with a particulate control baghouse designed, constructed and operated so as not to exceed a maximum emission rate of 20.6 mg/dscm corrected to 7 percent O₂. The baghouse shall be equipped with pressure drop monitoring equipment.

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Spray Dryer Scrubber

The unit shall be equipped with a spray dryer scrubber designed, constructed and operated so as to remove SO₂ at an efficiency of 80 percent, or not to exceed a maximum emission rate of 26 ppmvd corrected to 7 percent O₂ based upon a 24-hour block geometric mean, whichever is less stringent.

Carbon Injection

The unit shall be equipped with a carbon injection system. The carbon injection rate must be measured continuously and maintained in compliance with the requirements set forth in this permit as well as 40 CFR 60.58b(m).

Selective Non-Catalytic Reduction System

The unit shall be equipped with a selective non-catalytic reduction system designed, constructed and operated so as not to exceed a maximum NO_x emission rate of 150 ppmvd corrected to 7 percent O₂ on a 24-hour block arithmetic mean (midnight to midnight) as well as 110 ppmvd corrected to 7 percent O₂ on a 12-month rolling average and designed to meet 15 ppmvd @ 7% O₂ ammonia slip on a 24 hour average. Notwithstanding these requirements, the unit shall be granted a period of 12 calendar months from the initial compliance test of the MWC, in order to meet the 110 ppmvd NO_x and the 30 ppm ammonia slip limits identified within this permit. During this initial calendar year of operation, the 12-month rolling average limit for NO_x shall be 140 ppmvd @ 7% O₂ based upon the actual number of calendar months since initial operation. For each month after the initial calendar year of operation, the 12-month rolling average limitation shall be reduced by 2.5 ppmvd @ 7% O₂ until reaching the BACT limit of 110 ppmvd @ 7% O₂ on a 12-month rolling average. The ammonia slip limit shall be 50 ppmvd @ 7% O₂ for the first 12 calendar months from initial operation and shall be adjusted as set forth in paragraph B.10 (5), below. Note: Nothing in this permit shall be construed as an authorization to exceed the opacity standard specified herein.

Within 30 days after it becomes available, but before commencement of construction of the air pollution control equipment, the Permittee shall submit to the DEPSD copies of technical data pertaining to the selected emission control systems. This data should include, but not be limited to the manufacturer's guarantees, design inlet and outlet emission rates, and major design parameters. [Rule 62-4.070(3), F.A.C.]

- B.5 Stack Height: The height of the boiler exhaust stack shall not be less than 276 feet above grade (271 feet for structural stack plus 5 feet for flue).
- B.6 Fuels: The primary fuel for the unit 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

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Section 403.706(5), Florida Statutes (1995). [Rule 62-4.070(3), F.A.C., and request of applicant]

B.6.1 Subject to the limitations contained in this permit, the authorized fuels for the unit also include the other solid wastes that are not MSW which are described below. However, the unit shall not burn:

- (a) those materials that are prohibited by state or federal law;
- (b) those materials that are prohibited by this permit;
- (c) lead acid batteries;
- (d) hazardous waste;
- (e) nuclear waste;
- (f) radioactive waste;
- (g) sewage sludge;
- (h) explosives;
- (i) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

Further, the facility shall not knowingly burn:

- (j) nickel-cadmium batteries pursuant to Section 403.7192 (3);
- (k) mercury containing devices and lamps pursuant to Sections 403.7186(2) & (3);
- (l) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from similar generators (or sources); and
- (m) segregated loads of biological waste.

B.6.2 The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the unit 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.

B.6.3 The unit 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 unit, and subject to a percentage weight limitation, below (B.6.6. and B.6.7). 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.

B.6.4 To ensure that the unit's fuel does not adversely affect the unit's combustion process or emissions, the unit operator shall:

- (a) comply with good combustion operating practices in accordance with 40 CFR 60.53b;

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- (b) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
- (c) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

These steps shall be used to ensure and verify continuous compliance with the emissions limitations in this permit.

Natural gas or propane may be used as fuel during warm-up, startup, shutdown, and malfunction periods, and at other times when necessary and consistent with good combustion practices.

B.6.5 Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the unit:

- (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 unit. 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;
- (f) Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings; and
- (g) The predominantly combustible fraction of sorted construction and demolition debris. Sorting of mixed construction and demolition debris at the unit shall occur on the tipping floor or at another location approved by the Department.

B.6.6 Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the unit. The total quantity of waste tires received as segregated loads and burned at the unit shall not exceed 3%, by weight, of the unit's total fuel. Compliance with this limitation shall be determined by using a calendar monthly average in accordance with specific condition B.24 below.

B.6.7 Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the unit (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as

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segregated loads and burned at the unit shall not exceed 5% by weight of the unit's total fuel. Compliance with this limitation shall be determined by using a calendar monthly average in accordance with specific condition B.24 below.

- (a) Unsorted mixtures of construction and demolition debris, or that fraction of sorted construction and demolition debris that is predominantly non-combustible. Non-combustible construction and demolition debris shall include concrete, metals, gypsum products, plaster, rock, brick, and masonry.
- (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.

B.7 Startup/Shutdown/Malfunctions

- (a) 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

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

Department for longer duration. See also NSPS requirements set forth in paragraphs b, c and d below. [Rule 62-210.700, F.A.C.]

- (b) The emission limitations for this unit shall apply at all times, except during periods of warm-up, startup, shutdown, or malfunctions (SSM), provided that the duration of startup, shutdown, or malfunction periods do not exceed 3 hours per occurrence. The duration of warm-up periods is not limited. The startup period commences when the affected unit begins the continuous burning of waste and does not include any warm-up period when the affected unit is combusting only natural gas or propane and waste is not being introduced to the combustor. The use of waste solely to provide thermal protection to the grate during the warm-up periods when waste is not being fed to the combustor is not considered to be continuous burning. During all startups, shutdowns, and malfunctions, the owner/operator shall use best operational practices to minimize air pollutant emissions. [Rule 62-204.800(8), F.A.C. and 40 CFR 60.58]
- (c) A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner. Excess emissions that are caused entirely or in part by poor maintenance, careless operation, any other preventable upset condition, or preventable equipment breakdown shall not be considered malfunctions. Excess emissions resulting from startup, shutdown or malfunction of any source 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 3 hours per occurrence, except as noted in Condition B.7(d). [Rule 62-204.800(8), F.A.C. and 40 CFR 60.58]
- (d) Due to safety and equipment concerns, the SSM exemption period is allowed to be extended to a maximum of 15 hours in certain circumstances. The extended exemption applies only to CO emission limits in 40 CFR 60.53b(a) i.e., combustor operating practices during the following two situations:
- A loss of boiler water control (e.g., boiler waterwall tube failure); or
 - A loss of combustion air control (loss of a combustion air fan, loss of an induced draft fan, or combustion grate bar failure).

Normal operating practices for controlling CO emissions involves the use of auxiliary fuel burners. However, use of these burners when operators cannot control boiler water or combustion air could result in the possibility of an explosion or severe damage to the MWC. Rule 62-210.700, and 62-204.800(8), F.A.C. and 40 CFR 60.58b(a)(1)]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

EMISSION LIMITATIONS & STANDARDS

B.8 Emissions from the MWC unit shall not exceed the limits listed in the following table.
[BACT]

Pollutant Name	Standard(s)	Lbs/hour	TPY
Particulate Matter (PM ₁₀)	20.6 mg/dscm, corrected to 7% O ₂	5.12	22.3
MWC Metals (PM)	20.6 mg/dscm, corrected to 7% O ₂	5.12	22.3
Sulfur Dioxide (SO ₂)	26 ppm, or 80% reduction, at 7% O ₂ ⁽¹⁾	56.9	249.4
Sulfuric Acid Mist (SAM)	15 ppmvd @ 7% O ₂	15.1	66.1
Nitrogen Oxides (NO _x)	110 ppm @ 7% O ₂ - 12-month rolling avg. 140 ppm @ 7% O ₂ - 12-month rolling avg. * 150 ppm @ 7% O ₂ - 24 hour average	70.8	289.4
Carbon Monoxide (CO)	80 ppm @ 7% O ₂ - 12-mo rolling avg. 100 ppm @ 7% O ₂ - 4 hr average	23.0 28.73	100.6
Mercury (Hg)	0.028 mg/dscm @ 7% O ₂ or 85% reduction ⁽¹⁾	0.0168	0.0736
Visible Emissions (VE)	10 %, 6 minute average		
Lead (Pb)	0.2 mg/dscm, corrected to 7% O ₂	0.05	0.22
MWC Acid Gas (HCl)	25 ppm or 95% reduction @ 7% O ₂ ⁽¹⁾	46.76	204.8
Hydrogen Fluoride (HF)	3.5 ppmvd @ 7% O ₂	0.718	3.145
Cadmium (Cd)	0.02 mg/dscm @ 7% O ₂	.005	0.022
Dioxin/Furan (PCDD/F)	13 ng/dscm, corrected to 7% O ₂	3.2 x 10 ⁻⁶	1.4 x 10 ⁻⁵
Ammonia	15 ⁽²⁾ / 30 ppmvd @ 7% O ₂ 50 ppmvd @ 7% O ₂ *		

Notes to table:

* - For the 12-month calendar period following initial operation only.

Abbreviations

ug/dscm: Micrograms per dry standard cubic meter

mg/dscm: Milligrams per dry standard cubic meter

ng/dscm: Nanograms per dry standard cubic meter

ppm: Part per million dry volume

Dioxins/ furans: Total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans

Note (1) Whichever standard is less stringent.

Note (2) Design Standard.

[40 CFR 60.58b, Rules 62-210.200, 62-212.400 (BACT), 62-204.800(8) and 62-4.070(3), F.A.C., and request of applicant]

B.9 Auxiliary Burners: Auxiliary burners shall be fired only with natural gas or propane.
[Rule 62-4.070(3), F.A.C.]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

COMPLIANCE AND PERFORMANCE TESTING

B.10 Stack Testing

Compliance with the emission limits for visible emissions (opacity), carbon monoxide (CO), nitrogen oxides (NO_x), and sulfur dioxide (SO₂) in specific condition B.8 of this permit shall be demonstrated by continuous emission monitoring systems (CEMS) as required by specific condition B.13.

Compliance tests for the other pollutants listed in specific condition B.8 shall be performed annually (unless indicated otherwise) by using the following reference methods as described in 40 CFR 60, Appendix A and/or 40 CFR 61 Appendix B adopted by reference in Chapter 62-204, F.A.C. or any other method as approved by FDEP, in accordance with Chapter 62-297, F.A.C. Stack tests may also require Method 1, 2, 3/3A/3B and 4 tests as appropriate. Testing shall be conducted in accordance with the requirements of 40 CFR 60.58b Compliance and Performance Testing. With the exception of mercury testing, emission determinations based on stack tests shall be the average of three valid test runs pursuant to Rule 62-297.310(1), F.A.C. A test protocol shall be submitted for approval to the DEPSD at least 45 days prior to the initial testing. [Rule 62-204.800(8), F.A.C. and Chapter 62-297, F.A.C.]

Method 5 ⁽¹⁾	Determination of Particulate Matter Emissions from Stationary Sources.
Method 9	Visual Determination of the Opacity of Emissions from Stationary Sources.
Method 13A/B ⁽⁴⁾	Determination of Total Fluoride Emission from Stationary Sources.
Method 23 ⁽²⁾	Determination of Dioxin/Furan Conc. from Stationary Sources.
Method 26 ⁽³⁾ or 26A	Determination of HCl emissions.
Method 29 ^{(3) (4)}	Determination of Metals Emissions from Stationary Sources.
Method CTM-027 ⁽⁵⁾	Conditional Test Method for Collection and Analysis of Ammonia.

- (1) Pursuant to 40 CFR 60.58b(c)(3) 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 ± 14 °C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run. Since the limit for MWC Metals (as PM) is identical to the limit for PM₁₀, one annual test may suffice in determining compliance with both limits.

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- (2) Dioxin/Furan emission limit expressed as the total mass of tetra- through octa-chlorinated dibenzo-p-dioxins and dibenzofurans. The unit may perform less frequent testing for dioxin/furan emissions, as allowed by 40 CFR 60.38b(b) and 60.58b(g)(5)(iii) and (6) with prior notice to the Department, if the unit's dioxin/furan emissions do not exceed 7 ng/dscm corrected to 7% O₂ and if the existing two MWC units' dioxin/furan emissions do not exceed 15 ng/dscm each, corrected to 7% O₂.
- (3) SO₂, Mercury and HCl stack tests upstream and downstream of the control device(s) shall be conducted to calculate percent control. Demonstration of the SO₂ emission limit shall be used as a surrogate for determining compliance with the SAM emission limit.
- (4) The mercury emission rate shall be limited to no more than 0.028 mg/dscm at 7% O₂ or an 85% reduction (whichever is less stringent) based upon three valid test runs (annually) pursuant to Rule 62-297.310(1), F.A.C. However, the applicant may eliminate one test run per year in the event that the single run yields an inlet Hg concentration above 0.450 mg/dscm at 7% O₂, and the carbon injection system can be shown to have been operating properly. In the alternative, the applicant may retest within 30 days after receiving test results showing that the inlet Hg concentration was above 0.450 mg/dscm at 7% O₂ in two or more test runs, provided the applicant demonstrates that the carbon injection system was working properly during the test runs.
- (5) The ammonia slip rate shall be initially established for a 12-month period at 50 ppmvd @ 7% O₂ and based upon quarterly stack test results. Thereafter, the ammonia slip rate shall be established at 30 ppmvd @ 7% O₂ based upon quarterly stack test results. However, if the ammonia CEMS demonstrates that the quarterly ammonia slip average for the calendar quarter preceding the scheduled quarterly test is 15 ppmvd @ 7% O₂ or less, then CEMS data shall substitute for the required quarterly stack test.

B.11. **Test Procedures:** Compliance tests shall meet all applicable requirements (i.e., testing frequency, minimum compliance duration, etc.) of Chapter 62-297, F.A.C. The Method 9 test shall be conducted during one run of the particulate matter test. The particulate matter test shall be conducted under conditions representative of normal operations and at least one test run shall be conducted during a normal (soot blowing) cycle. Initial performance tests for SO₂, CO and NO_x shall be conducted using CEMS in accordance with the methods and requirements of 40 CFR 60.58b(e)(4), (h)(3) and (i)(3) respectively. Simultaneous CEMS data for NO_x shall be submitted with the quarterly ammonia stack test data and results. All test reports shall include the information required by 40 CFR 60.59b(f). [Rules 62-4.070(3), 62-297.310 and 62-204.800(8), F.A.C.; 40 CFR 60.58b and 40 CFR 60.59b]

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- B.12 Stack Testing Facilities: The owner or operator shall install stack testing facilities in accordance with Rule 62-297.310(6), F.A.C. The owner or operator shall provide ports in the air pollution control equipment outlet duct or stack and shall provide access to the sampling ports. [Rule 62-297.310(6)(c), F.A.C.]

MONITORING OF OPERATIONS

- B.13 Continuous Monitoring: Compliance with the emission limits for carbon monoxide (CO), nitrogen oxides (NO_x) and sulfur dioxide (SO₂) in specific condition B.8 of this permit shall be demonstrated by continuous emission monitoring systems (CEMS) operated in accordance with the requirements of 40 CFR 60.58b. Oxygen (O₂), and opacity shall be monitored by continuous monitoring systems. Monitors for sulfur dioxide and oxygen shall be located both upstream of the dry scrubber and downstream of the baghouse in order to calculate percentage removal efficiency. A CEMS shall be installed for the purpose of measuring ammonia slip from this emissions unit (with a range of 100ppm), and used for informational purposes rather than continuous compliance (other than as allowed for in specific condition B.10). For purposes of the RATA, this CEMS shall be compared to CTM-027. All continuous monitoring systems shall be installed, calibrated, maintained and operated as required by 40 CFR 60.13 and shall conform to all applicable Performance Specifications in 40 CFR 60, Appendix B. Quality assurance procedures shall conform to all applicable sections of 40 CFR 60, Appendix F. Initial performance evaluations shall be completed within 180 days after initial startup of the unit. Data on continuous monitor equipment specifications, manufacturer, type, calibration and maintenance needs, and proposed locations shall be provided to the DEPSD for review at least 90 days prior to installation. [Rules 62-4.070(3) and 62-204.800(8), F.A.C.; 40 CFR 60.58b]
- B.14 Continuous Load Monitoring: The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, measure steam flow in kilograms (or pounds) per hour on a continuous basis, and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam flow shall be calculated in 4-hour block arithmetic averages. Higher loads are allowed for testing purposes pursuant to 40 CFR 60.53b(b). [Rule 62-204.800(8), F.A.C., 40 CFR 60.51b; 60.53b(b); and 60.58b(i)(6)]
- B.15 Charging Rate Monitoring: The average daily solid waste charging rate shall be determined on a monthly basis and recorded for the MWC unit. The daily charging rate shall be determined each month on an average daily basis for the 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 unit, 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

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

used to determine the number of operating hours for each day during the preceding calendar month. [Rules 62-204.800(8) and 62-4.070(3), F.A.C.]

- B.16 Compliance with the PM Control Device Temperature: The MWC unit is required to continuously monitor and record the flue gas temperature at the inlet to the PM control device in accordance with the requirements at 40 CFR 60.58b(i)(7). The PM control device temperature shall be calculated in 4-hour block arithmetic averages. The MWC unit shall be allowed to operate up to 17°C (30° F) above the unit's maximum demonstrated PM control device temperature. The maximum demonstrated PM control device temperature is the highest 4-hour arithmetic measurement of temperature at the inlet to the PM control device recorded for 4 consecutive hours during the most recent dioxin/furan performance test which complied with the limits given above. The PM control device inlet temperature and the steam flow for the unit during the stack test shall be continuously monitored and recorded in accordance with 40 CFR 60, Subpart Eb. Higher temperatures are allowed for testing purposes, as specified at 40 CFR 60.53b(c). [Rule 62-204.800(8), F.A.C., 40 CFR 60.53b(c) and 60.58b(i)(7) and (9)]
- B.17 Carbon Injection Rate: The optimal carbon injection rate in pounds-per hour shall be determined preceding and during the initial compliance test. Optimization should be based upon the maximum expected mercury inlet concentrations as well as necessary operating parameters such as the screw feeder speed, hopper volume, hopper refill frequency, or other parameters appropriate to the feed system being employed. During operation of the MWC unit, the carbon injection system shall be provided with a continuous indication of the injection rate and the carbon mass feed rate must equal or exceed the level which was determined as optimal. The owner or operator shall estimate the total carbon usage for the unit for each calendar quarter by utilizing the measured carbon mass feed rate (lb/hr) for each hour of operation of the MWC unit based on the continuous indicator for carbon mass feed rate, and the total number of operating hours of operation during the calendar quarter. [Rule 62-204.800(8), F.A.C. and 40 CFR 60.58b(m)]
- B.18 Continuous Monitors: Continuous monitors with recorders shall be installed, calibrated, maintained and operated for the unit subject to review by the DEPSD for the following operational parameters:
- Total steam production (mass/hr, pressure and temperature)
 - Carbon injection system feed rate (kg/hr or lb/hr)
 - Particulate matter control device inlet temperature
- [Rule 62-204.800(8), F.A.C. and 40 CFR 60.58b]

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

RECORD KEEPING AND REPORTING REQUIREMENTS

B.19 Reports and Records:

All measurements, records and other data (test reports, etc.) required to be maintained by this facility shall be retained for at least five (5) years following the date on which such measurements, records and other data are recorded. Such records shall be maintained at the facility and shall include but not be limited to the items listed below. These records shall be made available upon request to the DEPSD for inspection at the facility. [Rules 62-4.070(3) and 62-4.160(14)(b), F.A.C., 40 CFR 60.59b]

- (a) Data collected from all monitoring instruments, including continuous monitoring systems, steam flow measurements and PM control device temperatures;
- (b) Continuous steam flow records on a 4-hour block average basis;
- (c) Records of daily solid waste charging rates and hours of operation derived from monthly truck scale data, refuse pit inventory, and operational records;
- (d) Results of all source tests or performance tests; and records of the maximum demonstrated unit load specified by condition B.3 of this permit.
- (e) Amounts of activated carbon used for emissions control;
- (f) Calibration logs for all instruments subject to this permit;
- (g) Maintenance/repair logs for any work performed which is subject to this permit;
- (h) Records showing the names of facility personnel who have been provisionally or fully certified, and who have completed the MWC operator training course, and who have completed reviews of the operating manual, including the dates and documentation of certification/review.
- (i) Records demonstrating compliance with the percentage limitations on segregated solid wastes required by specific condition B.24 of this permit.

B.20 Excess Emission Reports:

B.20.1 Quarterly Reports:

The owner or operator shall submit excess emission reports for any calendar quarter during which there are excess emissions from the unit pursuant to 40 CFR 60.7(c). If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report quarterly stating that no excess emissions occurred during the quarterly reporting period. The report shall include the following:

- (a) The magnitude of excess emissions computed in accordance with 40 CFR 60.13(h), any conversion factors used, and the date and time of commencement and completion of each period of excess emissions. [40 CFR 60.7(c)(1)]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

- (b) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventive measures adopted. [40 CFR 60.7(c)(2)]
- (c) The date and time identifying each period during which the continuous monitoring system (CEM/COM) was inoperative except for zero and span checks, and the nature of the system repairs or adjustments. [40 CFR 60.7(d)(2) as applicable]
- (d) When no excess emissions have occurred or the continuous monitoring system (CEM/COM) has not been inoperative, repaired, or adjusted, such information shall be stated in the report. [40 CFR 60.7(c)(4)]

B.20.2 Other Excess Emission Reports:

In case of excess emissions resulting from malfunctions*, the owner or operator shall notify the DEPSD in accordance with Section 62-4.130, F.A.C. The DEPSD shall be notified within one working day excluding weekends and holidays of: the nature, extent, and duration of the excess emissions; the cause of the excess emissions; and the actions taken to correct the problem. In addition, the DEPSD may request a written summary report of the incident. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the DEPSD.

* Malfunction is defined at Rule 62-210.200, F.A.C. to mean any unavoidable mechanical and/or electrical failure of air pollution control equipment or process equipment or of a process resulting in operation in an abnormal or unusual manner.
[Rules 62-4.130 and 62-210.700(6), F.A.C.]

B.21 Continuous Emission Monitoring System Reports: For CEM and other monitoring systems required by this permit, data on monitoring equipment specifications, manufacturer, type, calibration and maintenance needs, and proposed sampling location shall be provided to the DEPSD for review at least 90 days prior to installation.
[Rule 62-4.070(3), F.A.C.]

B.22 Operating Reports: Before March 1st of each year, the owner or operator shall submit to the DEPSD the Annual Operating Report [DEP Form No. 62-210.900(5)], which summarizes operations for the previous calendar year.

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

No later than February 1st of each year, the owner or operator shall submit an annual report for the previous calendar year including the information required by 40 CFR 60.59b(g)(1) through (4), as applicable.

In addition, if applicable, the owner or operator shall submit to the DEPSD the information required in 40 CFR 60.59b(h) on a semiannual basis.

[Rule 62-210.370(3), F.A.C. and 40 CFR 60.59b(g) and, if applicable, 40 CFR 60.59b(h)]

B.23 Sampling Reports: Drawings of testing facilities including sampling port locations as required by Section 62-297.310(8)(c) shall be submitted to the DEPSD for review at least 60 days prior to construction of the sampling ports.

B.24 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.6.6 and B.6.7:

Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition B.6.6 and B.6.7, 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.

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 current month. The resultant weight of tires at the end of each calendar month (excluding tires stored at the waste tire processing facility) shall be divided by the total weight of all waste materials received during each calendar month, and the resultant number shall be multiplied by 100 to express the ratio as a percent. The percentage computed shall be compared to the 3% limitation.

Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction (restricted materials) shall be computed, and the daily total shall be added to the sum of the daily totals of the current month. The resultant total weight of restricted materials at the end of each calendar month shall be divided by the total weight of all waste materials received during each calendar month, and the resultant number shall be multiplied by 100 to express the ratio as a percent. The percentage computed shall be compared to the 5% limitation.

Subsequent to an initial test burn scheduled to allow Department representatives to observe, while firing 5% (by weight) tires at the combustion unit while operating the unit at capacity that demonstrates via the CEMS that the unit can comply with the emission limits for pollutants monitored by the CEMS while firing 5% (by weight) tires, this

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

quantity limitation shall rise from 3% to 5%. Compliance with this limitation shall be determined on a calendar monthly basis.

B.25 Heat Input Reporting Requirements. The owner or operator shall submit to the DEPSD notification of the date of initial startup as provided by 40 CFR 60.7. Such notification shall include the design heat input capacity of the affected unit, and the annual capacity factor at which the owner or operator anticipates operating the unit based on the fuels fired.

[40 CFR 60.59b(b)]

B.26 Report of Vendor and Equipment Selection. Within 60 days of selection of a primary vendor for this project, a report detailing the design features of the MWC equipment to be installed shall be submitted to the DEPSD. Such report shall include the nominal and maximum design capacities of the furnace, grates and boiler, and shall detail operating rates such as heat input, steam production, mass throughput and turndown capability.

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

OPERATOR TRAINING AND CERTIFICATION

B.27 Requirements

(a) One of the following persons must be on duty at the facility at any time during which the MWC unit is operating: a fully certified chief facility operator or shift supervisor; or a provisionally certified chief facility operator or shift supervisor who is scheduled to take the full certification exam according to the schedule specified in Specific Condition III.B.27(b). This requirement shall take effect 6 months after the date of startup of the unit. If this person must leave the facility during his or her operating shift, a provisionally certified control room operator who is on site may fulfill this requirement. A qualified, provisionally certified control room operator may temporarily replace the fully certified shift supervisor during specific periods when the certified shift supervisor is excused from work due to vacation or illness and after notification to the Department's South District Office. **[40 CFR 60.54b(c)]**

(b) No later than the date 6 months after the date of startup of the unit, each chief facility operator and shift supervisor shall obtain and maintain a current provisional operator certification and be scheduled for a full certification exam, or receive a full certification, from either the ASME or an equivalent State-approved certification program. **[40 CFR 60.54b(a) and (b)]**

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

- (c) Each chief facility operator, shift supervisor, and control room operator must complete the EPA or State approved MWC operator training course no later than 6 months after the date of startup of the unit. **[40 CFR 60.54b(d)]**

- (d) A site-specific operating manual shall be developed and updated on an annual basis which meets the requirements of 40 CFR 60.54b(e). A training program shall be established to review the operating manual with each person who has responsibilities affecting the operation of the MWC including but not limited to chief facility operators, shift supervisors, control room operators, ash handlers, maintenance personnel, and crane/load handlers. Each person must undergo initial training no later than the date 6 months after the date of startup of the unit or the date prior to the day that person assumes responsibilities affecting operation of the facility, whichever is later, and annually thereafter pursuant to 40 CFR 60.54b(f). The operating manual must be kept in a readily accessible location for all persons required to undergo training. **[40 CFR 60.54b(e), (f) and (g)]**

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION C. SPECIFIC CONDITIONS:

The following specific conditions apply to the indicated emissions unit.

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION
-007	Lime Silo
(existing)	Ash and Carbon Handling

EMISSION LIMITATIONS

C.1 Lime & Carbon Silos and Ash Handling System:

Particulate emissions from these emissions units shall be limited as follows:

- (a) PM emissions from the lime storage silo shall be controlled by a baghouse. Visible emissions shall not exceed 5% opacity in accordance with specific condition C.3.
- (b) PM emissions from the activated carbon storage silo exhaust shall be controlled by a baghouse. Visible emissions shall not exceed 5% opacity in accordance with specific condition C.3.
- (c) Visible emissions from the ash conveyor systems, transfer points, buildings, or enclosures of ash conveying systems shall not occur more than 5 percent of the time during the observation period, except during times of maintenance or repair of these systems.
- (d) The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. The ash handling facilities shall be enclosed. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system, or otherwise handled in a manner to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations.

[Rule 62-4.070(3), F.A.C., and 40 CFR 60.55b]

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

COMPLIANCE AND PERFORMANCE TESTING

- C.2 Fugitive Emissions Compliance: The compliance method for the ash handling facilities shall be EPA Method 22, Visual Determination of Fugitives Emissions From Material Sources.
- (a) The minimum observation time will be three hours, and will include periods when ash is being transferred from the MWC unit to the storage area, and when ash is being loaded for disposal.
- (b) Compliance testing shall be conducted within 180 days of completion of construction and initial operation and annually thereafter.
[Rule 62-4.070(3), F.A.C., and 40 CFR 60.55b]
- C.3. Carbon and Lime Storage Silos PM Compliance Requirements: Compliance testing for the lime and carbon silos shall be conducted within 180 days of completion of construction and initial operation and annually thereafter. The visible emission tests shall be performed for each silo during filling operations using EPA Method 9. Permanent stack testing facilities are not required for the lime and carbon silos. The owner or operator may install temporary stack sampling facilities to conduct such a test, if required.
[Rule 62-297.620(4), F.A.C.]

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION D. COMMON CONDITIONS:

The following specific conditions apply to the following emissions units.

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION
-006	660 Tons per Day nominal MSW Incinerator
-007	Lime Silo
(existing)	Ash and Carbon Handling

OPERATIONAL REQUIREMENTS

- D.1 These emissions units are allowed to operate continuously (8760 hours/year).
[Rule 62-210.200, F.A.C. Definitions-Potential to emit (PTE)]
- D.2 Odor Control: No objectionable odors are allowed from this facility. The truck access doors to the unit shall remain closed except during normal working shifts when MSW is being received at the storage pit area. To minimize odors at the unit, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air. [Rule 62-296.320(2), F.A.C.]
- D.3 Startup/Shutdown/Malfunctions
- (a) In order to minimize excess emissions during startup/shutdown/malfunction these emissions units shall adhere to best operational practices to minimize emissions.
- The duration of excess emissions from the lime silo or the carbon silo shall be minimized but in no case exceed 2 hours per 24 hour period.
[Rule 62-210.700, F.A.C.]
- (b) 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.]
- (c) Within 90 days prior to completion of construction of the unit, the owner or operator shall submit to the DEPSD an operational procedures manual that identifies and describes best operational practices that will be used during startup, shutdown, and malfunctions.

EMISSION LIMITATIONS

Project: Lee County Resource Recovery Facility
Facility ID No. 0710119
SIC: 4953

Lee County
Fort Myers, Florida

AIR CONSTRUCTION PERMIT 0710119-002-AC, PSD-FL-151C

SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

- D.4 Facility Fugitive (Unconfined) Emissions: Fugitive emissions at this facility shall be adequately controlled at all times. All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust. Speed limit signs shall be posted. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering and leaving) shall be under negative air pressure. **[Rule 62-296.320(4)(c), F.A.C.]**

COMPLIANCE AND PERFORMANCE TESTING

- D.5 Test Notification: The owner or operator shall notify the DEPSD in writing at least 30 days (for the initial test) and 15 days (for the annual tests) prior to each scheduled compliance test to allow witnessing. The notification shall include the compliance test date, place of such test, the expected test time, the facility contact person for the test, and the person or company conducting the test. The 30 or 15 day notification requirement may be waived at the discretion of the DEPSD. Likewise, if circumstances prevent testing during the test window specified for the emissions unit, the owner or operator may request an alternate test date before the expiration of this window. **[Rule 62-297.310, F.A.C. and 40 CFR 60.8]**
- D.6 Special Compliance Tests: When the Department, after investigation, has good reason (such as substantiated complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in Rule 62-204, 62-210, 62-212, 62-296 and 62-297, F.A.C. or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the facility to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions units and to provide a report on the results of said tests to the DEPSD. **[Rule 62-297.310(7)(b), F.A.C.]**
- D.7 Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit in operation at permitted capacity. Permitted capacity 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 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. See also specific conditions B.2 and B.3 of this permit for limitations related to unit load for the MWC unit. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b) and condition B.3 of this permit. **[Rule 62-297.310(2) and (2)(b), F.A.C., and 40 CFR 60.53b(b)]**

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SECTION III. EMISSION UNIT(S) SPECIFIC CONDITIONS

RECORD KEEPING AND REPORTING REQUIREMENTS

**D.8 Emission Compliance Stack Test Reports:
[Rule 62-297.310(8), F.A.C., and 40 CFR 60.59b(f)]**

- (a) A *test report* indicating the results of the required compliance tests shall be filed with the DEPSD as soon as practical, but no later than 60 days after the last sampling run is completed.
- (b) The *test report* shall provide sufficient detail on the tested emissions unit and the procedures used to allow the Department to determine if the test was properly conducted and if the test results were properly computed. At a minimum, the test report shall provide the applicable information listed in Rule 62-297.310(8), F.A.C.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

- G.1 The terms, conditions, requirements, limitations, and restrictions set forth in this permit are "Permit Conditions" and are binding and enforceable pursuant to Sections 403.161, 403.727, or 403.859 through 403.861, Florida Statutes. The permittee is placed on notice that the Department will review this permit periodically and may initiate enforcement action for any violation of these conditions.
- G.2 This permit is valid only for the specific processes and operations applied for and indicated in the approved drawings or exhibits. Any unauthorized deviation from the approved drawings or exhibits, specifications, or conditions of this permit may constitute grounds for revocation and enforcement action by the Department.
- G.3 As provided in Subsections 403.087(6) and 403.722(5), Florida Statutes, the issuance of this permit does not convey and vested rights or any exclusive privileges. Neither does it authorize any injury to public or private property or any invasion of personal rights, nor any infringement of federal, state or local laws or regulations. This permit is not a waiver or approval of any other Department permit that may be required for other aspects of the total project which are not addressed in the permit.
- G.4 This permit conveys no title to land or water, does not constitute State recognition or acknowledgment of title, and does not constitute authority for the use of submerged lands unless herein provided and the necessary title or leasehold interests have been obtained from the State. Only the Trustees of the Internal Improvement Trust Fund may express State opinion as to title.
- G.5 This permit does not relieve the permittee from liability for harm or injury to human health or welfare, animal, or plant life, or property caused by the construction or operation of this permitted source, or from penalties therefore; nor does it allow the permittee to cause pollution in contravention of Florida Statutes and Department rules, unless specifically authorized by an order from the Department.
- G.6 The permittee shall properly operate and maintain the facility and systems of treatment and control (and related appurtenances) that are installed or used by the permittee to achieve compliance with the conditions of this permit, as required by Department rules. This provision includes the operation of backup or auxiliary facilities or similar systems when necessary to achieve compliance with the conditions of the permit and when required by Department rules.
- G.7 The permittee, by accepting this permit, specifically agrees to allow authorized Department personnel, upon presentation of credentials or other documents as may be required by law and at a reasonable time, access to the premises, where the permitted activity is located or conducted to:
- a) Have access to and copy and records that must be kept under the conditions of the permit;
 - b) Inspect the facility, equipment, practices, or operations regulated or required under this permit, and,
 - c) Sample or monitor any substances or parameters at any location reasonably necessary to assure compliance with this permit or Department rules.
- Reasonable time may depend on the nature of the concern being investigated.
- G.8 If, for any reason, the permittee does not comply with or will be unable to comply with any condition or limitation specified in this permit, the permittee shall immediately provide the Department with the following information:
- a) A description of and cause of non-compliance; and
 - b) The period of noncompliance, including dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate, and prevent recurrence of the non-compliance.

APPENDIX GC
GENERAL PERMIT CONDITIONS [F.A.C. 62-4.160]

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

- G.9** In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
- G.10** The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
- G.11** This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
- G.12** This permit or a copy thereof shall be kept at the work site of the permitted activity.
- G.13** This permit also constitutes:
- a) Determination of Best Available Control Technology (X)
 - b) Determination of Prevention of Significant Deterioration (X); and
 - c) Compliance with New Source Performance Standards (X).
- G.14** The permittee shall comply with the following:
- a) Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b) The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.
 - c) Records of monitoring information shall include:
 - 1. The date, exact place, and time of sampling or measurements;
 - 2. The person responsible for performing the sampling or measurements;
 - 3. The dates analyses were performed;
 - 4. The person responsible for performing the analyses;
 - 5. The analytical techniques or methods used; and
 - 6. The results of such analyses.
- G.15** When requested by the Department, the permittee shall within a reasonable time furnish any information required by law, which is needed to determine compliance with the permit. If the permittee becomes aware that relevant facts were not submitted or were incorrect in the permit application or in any report to the Department, such facts or information shall be corrected promptly.

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL REGULATION
NOTICE OF PERMIT

In the matter of an
Application for Permit by:

DER File No. PSD-FL-151
Lee County

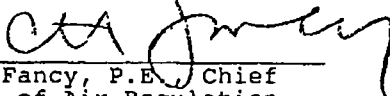
David S. Dee, Esquire
Carlton, Fields, Ward, Emmanuel,
Smith & Cutler, P.A.
Post Office Box 190
Tallahassee, FL 32302

Enclosed is Permit Number PSD-FL-151 to construct a waste to energy recovery facility comprised of Units No. 1 and 2 in Fort Myers, Lee County, Florida. This permit are issued pursuant to Section(s) 403, Florida Statutes.

Any party to this Order (permit) has the right to seek judicial review of the permit pursuant to Section 120.68, Florida Statutes, by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Office of General Counsel, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400; 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 30 days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL REGULATION

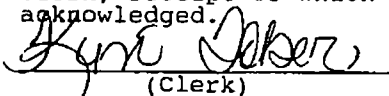

C. H. Fancy, P.E., Chief
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, FL 32399-2400
904-488-1344

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT and all copies were mailed before the close of business on 7-20-92 to the listed persons.

Clerk Stamp

FILING AND ACKNOWLEDGMENT FILED,
on this date, pursuant to
§120.52(11), Florida Statutes,
with the designated Department
Clerk, receipt of which is hereby
acknowledged.


(Clerk)

7-20-92
(Date)

Copies furnished to:

David Knowles, South District
Jewell Harper, EPA
Chris Shaver, NPS