

A Waste Management Company

2600 Wiles Road Pompano Beach, FL 33073 (954) 971-8701 Tel (954) 971-8703 Fax

RECEIVED

AUG 09 2013

DIVISION OF AIR RESOURCE MANAGEMENT

August 5, 2013

CERTIFIED MAIL #70073020000226892486

Mr. Jeffery Koerner, P.E., Program Administrator Division of Air Resource Management Florida Department of Environmental Protection 2600 Blair Stone Road Tallahassee, FL 32399

RE:

Wheelabrator North Broward, Inc. Title V permit # 0112120-013-AV

Minor Source Air Construction Permit Project Nos: 0112120-015-

Non-MSW Fuels

Dear Mr. Koerner:

Wheelabrator North Broward, Inc. (Wheelabrator) is seeking authorization from the Florida Department of Environmental Protection for an increase in the total quantity of nonmunicipal solid waste (MSW) material received as segregated loads from 5% to 20% at the North Broward Waste-to-Energy facility. The segregated loads would be non-hazardous solid or liquid waste. This request is being sought based on legislative changes in Chapter 707 Florida Statutes that allows the Department to allow waste-to-energy facilities to maximize acceptance and processing of non-hazardous solid and liquid wastes [Section 403.707(1)]. This request is also consistent with recent approval by the Department for a similar waste-to-energy facility.

If there are any further questions concerning this request please contact me at (954) 971-8701, extension 212 or our environmental consultant Mr. Kennard Kosky at (352) 336-5600. The Department's expeditious review of this request is appreciated.

Jim Epsilantis Plant Manager

Enclosures

Cindy Mulkey, Siting Coordination Office CC:

Chuck Faller



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AUG 09 2013

DIVIDION OF AIR RESOURCE MANAGEMENT

AIR CONSTRUCTION PERMIT APPLICATION

Wheelabrator North Broward, Inc.

Submitted To: Wheelabrator North Broward, Inc.

2600 Wiles Road

Pompano Beach, FL 33073

Submitted By: Golder Associates Inc.

6026 NW 1st Place

Gainesville, FL 32607 USA

Distribution: 4 copies FDEP

2 copies Wheelabrator North Broward, Inc.

2 copies Golder Associates Inc.

July 2013 133-87604B



APPLICATION FOR AIR PERMIT

LONG FORM



Department of Environmental Protection RECEIVED

Division of Air Resource Management

APPLICATION FOR AIR PERMIT - LONG FORM

AUG 09 2013

I. APPLICATION INFORMATION

DIVISION OF AIR RESOURCE MANAGEMENT

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

Facility Owner/Company Name: Wheelabrator North Broward, Inc.

An initial, revised, or renewal Title V air operation permit.

To ensure accuracy, please see form instructions.

Identification of Facility

2.	Site Name: Wheelabrator North Broward Waste-to-Energy Facility
3.	Facility Identification Number: 0112120
4.	Facility Location
	Street Address or Other Locator: 2600 Wiles Road
	City: Pompano Beach County: Broward Zip Code: 33073
5.	Relocatable Facility? 6. Existing Title V Permitted Facility?
_	☐ Yes ☒ No ☒ Yes ☐ No
Ap	plication Contact
1.	Application Contact Name: Chuck Faller, Florida Regional Environmental Manager
2.	Application Contact Mailing Address
	Organization/Firm: Wheelabrator North Broward, Inc.
	Street Address: 2600 Wiles Road
	City: Pompano Beach State: FL Zip Code: 33073
3.	Application Contact Telephone Numbers
	Telephone: (954) 971-8701 ext. 216 Fax: (954) 971-8703
4.	Application Contact E-mail Address: cfaller@wm.com
Ap	plication Processing Information (DEP Use)
1.	Date of Receipt of Application: 9-9-203 3. PSD Number (if applicable):
2.	Project Number(s): 0100005 Ac 4., Siting Number (if applicable):
	0112120-016-21

DEP Form No. 62-210.900(1) - Form Effective: 03/11/2010

Purpose of Application

This application for air permit is being submitted to obtain: (Check one)
Air Construction Permit
☐ Air construction permit.
☐ Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL).
Air construction permit to establish, revise, or renew a plantwide applicability limit (PAL), and separate air construction permit to authorize construction or modification of one or more emissions units covered by the PAL.
Air Operation Permit
☐ Initial Title V air operation permit.
☐ Title V air operation permit revision.
☐ Title V air operation permit renewal.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is required.
☐ Initial federally enforceable state air operation permit (FESOP) where professional engineer (PE) certification is not required.
Air Construction Permit and Revised/Renewal Title V Air Operation Permit (Concurrent Processing)
Air construction permit and Title V permit revision, incorporating the proposed project.
☐ Air construction permit and Title V permit renewal, incorporating the proposed project.
Note: By checking one of the above two boxes, you, the applicant, are requesting concurrent processing pursuant to Rule 62-213.405, F.A.C. In such case, you must also check the following box:
☑ I hereby request that the department waive the processing time requirements of the air construction permit to accommodate the processing time frames of the Title V air operation permit.

Application Comment

This application requests an increase in the total quantity of non-MSW material received as segregated loads from 5% to 20%. The segregated loads would be non-hazardous solid or liquid waste. The request is consistent with Section 403.707(1), Florida Statutes, that allows the Department to allow waste-to-energy facilities to maximize acceptance and processing of non-hazardous solid and liquid wastes.

Scope of Application

Emissions Unit ID Number	Description of Emissions Unit	Air Permit Type	Air Permit Processing Fee
001	807 TPD MSW Combustor & Auxiliary Burners - Unit 1	AC1F	N/A
002	807 TPD MSW Combustor & Auxiliary Burners - Unit 2	AC1F	N/A
003	807 TPD MSW Combustor & Auxiliary Burners - Unit 3	AC1F	N/A
	-		

Application Processing Fee	
Check one: Attached - Amount: \$	

Owner/Authorized Representative Statement

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

1.	Owner/Authorized	Representative N	lame :			
2.	Owner/Authorized Representative Mailing Address Organization/Firm:					
	Street Address:	:				
	City	:	State:			Zip Code:
3.	Owner/Authorized	Representative T	elephone Ni	ımbers	•	
	Telephone: ()	ext.	Fax:	()
4.	Owner/Authorized	Representative E	E-mail Addre	ess:		
5.	Owner/Authorized	Representative S	tatement:			
	I, the undersigned, am the owner or authorized representative of the corporation, partnership, or other legal entity submitting this air permit application. To the best of my knowledge, the statements made in this application are true, accurate and complete, and any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. I understand that a permit, if granted by the department, cannot be transferred without authorization from the department.					
	Signature			j	Date	

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: Jim Epsilantis, Plant Manager					
2.	 Application Responsible Official Qualification (Check one or more of the following options, as applicable): 					
	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.					
	 ☐ For a partnership or sole proprietorship, a general partner or the proprietor, respectively. ☐ For a municipality, county, state, federal, or other public agency, either a principal executive officer or ranking elected official. 					
<u> </u>	☐ The designated representative at an Acid Rain source or CAIR source.					
	Application Responsible Official Mailing Address Organization/Firm: Wheelabrator North Broward, Inc.					
	Street Address: 2600 Wiles Road					
	City: Pompano Beach State: FL Zip Code: 33073					
1	Application Responsible Official Telephone Numbers Telephone: (954) 971-8701 ext. 212 Fax: (954) 971-8703					
5.	Application Responsible Official E-mail Address: jepsilantis@wm.com					
6.	Application Responsible Official Certification:					
1	i ippii danon reoponoioio o iniciai communiciii					
appi that of n reas poll to constant revi the depa certi requi	the undersigned, am a responsible official of the Title V source addressed in this air permit lication. I hereby certify, based on information and belief formed after reasonable inquiry, the statements made in this application are true, accurate and complete and that, to the best my knowledge, any estimates of emissions reported in this application are based upon sonable techniques for calculating emissions. The air pollutant emissions units and air aution control equipment described in this application will be operated and maintained so as omply with all applicable standards for control of air pollutant emissions found in the autes of the State of Florida and rules of the Department of Environmental Protection and sions thereof and all other applicable requirements identified in this application to which Title V source is subject. I understand that a permit, if granted by the department, cannot ransferred without authorization from the department, and I will promptly notify the artment upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I fify that the facility and each emissions unit are in compliance with all applicable airements to which they are subject, except as identified in compliance plan(s) submitted in this application.					
appi that of n reas poll to constant revi the depa certi requi	the undersigned, am a responsible official of the Title V source addressed in this air permit lication. I hereby certify, based on information and belief formed after reasonable inquiry, the statements made in this application are true, accurate and complete and that, to the best my knowledge, any estimates of emissions reported in this application are based upon conable techniques for calculating emissions. The air pollutant emissions units and air aution control equipment described in this application will be operated and maintained so as comply with all applicable standards for control of air pollutant emissions found in the cutes of the State of Florida and rules of the Department of Environmental Protection and sions thereof and all other applicable requirements identified in this application to which Title V source is subject. I understand that a permit, if granted by the department, cannot ransferred without authorization from the department, and I will promptly notify the artment upon sale or legal transfer of the facility or any permitted emissions unit. Finally, I ify that the facility and each emissions unit are in compliance with all applicable airements to which they are subject, except as identified in compliance plan(s) submitted					

DEP Form No. 62-210.900(1) – Form Effective: 03/11/2010

Professional Engineer Certification

$\overline{}$	Dur Carriera I Francisco Marco Van J. F. Washing
1.	Professional Engineer Name: Kennard F. Kosky
<u></u>	Registration Number: 14996
2.	Professional Engineer Mailing Address
	Organization/Firm: Golder Associates Inc.**
	Street Address: 6026 NW 1st Place
_	City: Gainesville State: FL Zip Code: 32607
3.	Professional Engineer Telephone Numbers
	Telephone: (352) 336-5600 ext. 21156 Fax: (352) 336-6603
4.	Professional Engineer E-mail Address: kkosky@golder.com
5.	Professional Engineer Statement:
	I, the undersigned, hereby certify, except as particularly noted herein*, that:
	(1) To the best of my knowledge, there is reasonable assurance that the air pollutant emissions unit(s) and the air pollution control equipment described in this application for air permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
	(2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.
	(3) If the purpose of this application is to obtain a Title V air operation permit (check here \square , 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.
	(4) If the purpose of this application is to obtain an air construction permit (check here \square , 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 \boxtimes , 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.
	(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 , if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions unit has been constructed or modified in substantial accordance with the information given in the corresponding application for air construction permit and with all provisions contained in such permit.
	Signature Date (seal)

* Attach any exception to certification statement.

**Board of Professional Engineers Certificate of Authorization #00001670.

STATE

OF THE PROFESSIONAL PROFESS

II. FACILITY INFORMATION

A. GENERAL FACILITY INFORMATION

Facility Location and Type

1.	Facility UTM Coordinates Zone 17 East (km) 583.541 North (km) 2907.498		2.	Facility Latitude/Lo Latitude (DD/MM/S Longitude (DD/MN	SS)	26/17/12
3.	Governmental	4. Facility Status	5.	Facility Major	6.	Facility SIC(s):
	Facility Code:	Code:		Group SIC Code:		4052
	0	Α		49		4953
7.	Facility Comment:					

Facility Contact

1.	Facility Contact Name:				
	Chuck Faller, Florida Regional Env	ironm	ental Manage	r	
2.	Facility Contact Mailing Address.				
	Organization/Firm: Wheelabrator	North	Broward, Inc.		
	Street Address: 2600 Wiles Ro	ad			
	City: Pompano Bea	ch	State: FL	Zip Code: 33073	
3.	Facility Contact Telephone Numb	ers:			
	Telephone: (954) 971-8701	ext.	216	Fax: (954) 971-8703	
4.	Facility Contact E-mail Address:	cfaller	@wm.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:				
	E 32 D. D. 31	000 : 134 :1:	A 1.1		<u> </u>	
2.	Facility Primary Responsible	Official Mailing	Address			
	Organization/Firm:					
	Street Address:					
	City:	State	:		Zip Code:	
3.	Facility Primary Responsible	Official Telepho	ne 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."

<u> </u>	
1.	☐ Small Business Stationary Source ☐ Unknown
2.	☐ Synthetic Non-Title V Source
3.	☐ Title V Source
4.	Major Source of Air Pollutants, Other than Hazardous Air Pollutants (HAPs)
5.	☐ Synthetic Minor Source of Air Pollutants, Other than HAPs
6.	Major Source of Hazardous Air Pollutants (HAPs)
7.	☐ Synthetic Minor Source of HAPs
8.	☑ One or More Emissions Units Subject to NSPS (40 CFR Part 60)
9.	☐ One or More Emissions Units Subject to Emission Guidelines (40 CFR Part 60)
10.	☑ One or More Emissions Units Subject to NESHAP (40 CFR Part 61 or Part 63)
11.	☐ Title V Source Solely by EPA Designation (40 CFR 70.3(a)(5))
12.	Facility Regulatory Classifications Comment:
1	
	MICIAL Combuston Units 4-2 and 2 are subject to NCDC 40 CED 60 Submarts Chand Eb
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.
	MSW Combustor Units 1, 2, and 3 are subject to NSPS - 40 CFR 60, Subparts Cb and Eb.

List of Pollutants Emitted by Facility

Dist of Foliations Emitted by Fuel		T
1. Pollutant Emitted	2. Pollutant Classification	3. Emissions Cap [Y or N]?
Particulate Matter Total – PM	A	N
Particulate Matter – PM10	Α	N
Sulfur Dioxide – SO2	A	N
Nitrogen Oxides – NOx	A	N
Carbon Monoxide – CO	A	N
Fluoride – FL	À	N
Lead – Pb	В	N
Beryllium – H021	В	N
Cadmium – H027	В	N
Hydrogen Chloride – H106	A	N
Mercury – H114	В	N
Dioxin/Furan – DIOX	В	N
		*

B. EMISSIONS CAPS

Facility-Wide or Multi-Unit Emissions Caps

Facility-Wide	or Multi-Unit E	missions Caps			
1. Pollutant Subject to Emissions Cap	2. Facility-Wide Cap [Y or N]? (all units)	3. Emissions Unit ID's Under Cap (if not all units)	4. Hourly Cap (lb/hr)	5. Annual Cap (ton/yr)	6. Basis for Emissions Cap
					-
					-
Facility W	ide or Multi-Unit	 Emissions Cap Con	ment:		
•		•			

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) Attached, Document ID: Previously Submitted, Date: 06/29/10
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) Attached, Document ID: Previously Submitted, Date: 06/29/10
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) Attached, Document ID: Previously Submitted, Date: 06/29/10
	Iditional Requirements for Air Construction Permit Applications
_	
1.	Area Map Showing Facility Location: ☐ Attached, Document ID: ☐ Not Applicable (existing permitted facility)
2.	Description of Proposed Construction, Modification, or Plantwide Applicability Limit (PAL): ☑ Attached, Document ID: Part II
3.	Rule Applicability Analysis: Attached, Document ID: Part II
4.	List of Exempt Emissions Units: ☐ Attached, Document ID: ☐ Not Applicable (no exempt units at facility)
5.	Fugitive Emissions Identification: ☐ Attached, Document ID: ☐ Not Applicable
6.	Air Quality Analysis (Rule 62-212.400(7), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
7.	Source Impact Analysis (Rule 62-212.400(5), F.A.C.): ☐ Attached, Document ID: ☐ Not Applicable
8.	Air Quality Impact since 1977 (Rule 62-212.400(4)(e), F.A.C.): ☐ Attached, Document ID: ☐ 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)
A	dditional 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:
	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: 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. ☐ Attached, Document ID: ☐ Not Applicable (not an Acid Rain source) 	☐ Previously Submitted, Date:
	Phase II NO _X Averaging Plan (DEP Form N ☐ Attached, Document ID: ☐ Not Applicable	lo. 62-210.900(1)(a)1.): Previously Submitted, Date:
	New Unit Exemption (DEP Form No. 62-21 ☐ Attached, Document ID: ☐ Not Applicable	0.900(1)(a)2.): Previously Submitted, Date:
2.	CAIR Part (DEP Form No. 62-210.900(1)(b ☐ Attached, Document ID: ☐ Not Applicable (not a CAIR source))): Previously Submitted, Date:
Ac	Iditional Requirements Comment	
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,		

PART II

DESCRIPTION OF PROPOSED MODIFICATION AND RULE APPLICABILITY ANALYSIS

PART II

Application for Minor Source Air Construction Permit for an Increase in Segregated Loads for Municipal Waste Combustor (MWC) Units 1, 2, and 3 (EU IDs 001, 002, and 003)

Introduction

Wheelabrator North Broward, Inc. (Wheelabrator) is seeking authorization from the Florida Department of Environmental Protection (FDEP) for an increase in the total quantity of non-municipal solid waste (MSW) material received as segregated loads from 5% to 20% at the North Broward Waste-to-Energy facility. The segregated loads would be non-hazardous solid or liquid waste. The request is consistent with Section 403.707(1) Florida Statutes that allows the Department to allow waste-to-energy facilities to maximize acceptance and processing of non-hazardous solid and liquid wastes. The facility is located at 2600 Wiles Road, Pompano Beach, Broward County, Florida and currently operating under Title V Permit No. 0112120-014-AV (Note: Permit No. 0112120-014-AV is an administrative correction; conditions other than administrative corrections are found in Permit No. 0112120-013-AV).

The North Broward facility operates three MWC units (Unit Nos. 1, 2, and 3). MWC Unit Nos. 1, 2, and 3 each have a nominal design capacity of 747 tons per day (TPD) of MSW, and 280 million British thermal units per hour (MMBtu/hr), where the MSW has a heating value of 4,500 British thermal units per pound (Btu/lb). The combustors have a maximum short-term permitted capacity of 807 TPD of MSW, and 302.5 MMBtu/hr. The maximum permitted steam production rate for each combustor is 186,000 pounds per hour (lb/hr) when firing MSW (see Permit No. 0112120-013-AV and -014-AV).

Particulate matter (PM), sulfur dioxide (SO₂), MWC metals, and MWC acid gas emissions from the three MSW combustors are controlled by separate fabric filter baghouses and lime spray dryer absorbers. Hg emissions are reduced by pre-combustion waste separation and an activated carbon system is being installed (Project Number 0112120-012-AC). Carbon monoxide (CO) and nitrogen oxides (NO_x) emissions are controlled by good combustion controls. The three MSW combustors have been retrofitted with Selective Non-Catalytic Reduction (SNCR) NO_x controls in order to comply with the requirements in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60), Subpart Cb, *Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors that are Constructed on or Before September 20, 1994*.

Golder Associates Inc. (Golder) was contracted to prepare the necessary air permit application seeking authorization to increase the utilization of non-hazardous solid and liquid waste. The air permit application consists of the appropriate applications form [Part I; DEP Form 62-210.900(1)], a technical description of the project, and rule applicability for the project.



Proposed Project – Increase in the Amount of Segregated Loads

The current Title V Permit for the Wheelabrator North Broward Waste-to-Energy facility limits the total quantity of non-MSW material received as segregated loads to 5 percent (see Condition A4.f of Final Permit 0112120-013-AV). In 2012, the Florida Legislature provided additional direction to the Department to allow waste-to-energy facilities to maximize acceptance and processing of non-hazardous solid and liquid waste. The specific provisions are contained in Section 403.707(1) Florida Statutes (F.S.) that is presented below:

Resource Recovery and Management 403.707 Permits.

(1) A solid waste management facility may not be operated, maintained, constructed, expanded, modified, or closed without an appropriate and currently valid permit issued by the department. The department may by rule exempt specified types of facilities from the requirement for a permit under this part if it determines that construction or operation of the facility is not expected to create any significant threat to the environment or public health. For purposes of this part, and only when specified by department rule, a permit may include registrations as well as other forms of licenses as defined in s. 120.52. Solid waste construction permits issued under this section may include any permit conditions necessary to achieve compliance with the recycling requirements of this act. The department shall pursue reasonable timeframes for closure and construction requirements, considering pending federal requirements and implementation costs to the permittee. The department shall adopt a rule establishing performance standards for construction and closure of solid waste management facilities. The standards shall allow flexibility in design and consideration for site-specific characteristics. For the purpose of permitting under this chapter, the department shall allow waste-to-energy facilities to maximize acceptance and processing of nonhazardous solid and liquid waste.

Wheelabrator is seeking an increase from 5 percent to 20 percent based on following reasons. First, the increase of non-MSW as segregated loads is consistent to the Florida Legislature's direction to maximize the use on non-hazardous solid and liquid wastes in a waste-to-energy facility. Second, with the increase from 5 percent to 20 percent of non-MSW material would not change any performance or emission limiting standards and no significant increase in emissions of regulated pollutants is expected. Third, the project would demonstrate that no significant emission increase will occur by using the *Baseline Actual-to-Projected Actual Test for Modification at Existing Emission Units* in FDEP Rule 62-212.400(2)(a)1 F.A.C. Finally, the Department has issued authorization to the Lake County Resource Recovery Facility to increase non-MSW material as segregated loads from 5 percent to 20 percent based on a detailed review of applicable requirements and emission information for a waste-to-energy facility (Final Permit No. 0690046-014-AC/PSD-FL-113I).



Appendix A presents the Wheelabrator North and South Broward Supplemental Waste Approval Procedure to assure that waste from segregated loads burned in the MWC units is non-hazardous solid and liquid waste.

RULE APPLICABILITY

PSD/New Source Review (NSR)

Under Federal and State of Florida Prevention of Significant Deterioration (PSD) review requirements, all major new or modified sources of air pollutants regulated under the Clean Air Act (CAA) must be reviewed and a pre-construction permit issued. The U.S. Environmental Protection Agency (EPA) has approved Florida's State Implementation Plan (SIP), which contains PSD regulations. Therefore, PSD approval authority has been granted to FDEP. For projects approved under the Florida Power Plant Siting Act (PPSA), the PSD program is delegated.

A "major facility" is defined as any 1 of 28 named source categories that have the potential to emit 100 TPY or more, or any other stationary facility that has the potential to emit 250 TPY or more of any pollutant regulated under the CAA. "Potential to emit" means the capability, at maximum design capacity, to emit a pollutant after the application of control equipment. Once a new source is determined to be a "major facility" for a particular pollutant, any pollutant emitted in amounts greater than the PSD significant emission rates is subject to PSD review. For an existing source for which a modification is proposed, the modification is subject to PSD review if the net increase in emissions due to the modification is greater than the PSD significant emission rates.

PSD review is used to determine whether significant air quality deterioration will result from the new or modified facility. Federal PSD requirements are contained in 40 CFR 52.21, *Prevention of Significant Deterioration of Air Quality*. The State of Florida has adopted the federal PSD regulations by reference [Rule 62-212.400, Florida Administrative Code (F.A.C.)]. Major facilities and major modifications are required to undergo the following analysis related to PSD for each pollutant emitted in significant amounts:

- Control technology review
- Source impact analysis
- Air quality analysis (monitoring)
- Source information
- Additional impact analyses

The Wheelabrator North Broward Waste-to-Energy facility is a major facility under FDEP rules. For an existing major facility for which a project is proposed, the project is subject to PSD review if the net increase in emissions due to the project is greater than the PSD significant emission rates for any applicable pollutant. A "modification" is defined in FDEP Rule 62-210.200(205), F.A.C., as "any physical



change in, change in the method of operation of, or addition to a facility which would result in an increase in the actual emissions of any pollutant subject to regulation under the [Clean Air] Act, including any not previously emitted, from any emission unit or facility." Because there is an operational change and the hourly mass emission rates will potentially increase, the project is a potential modification as defined in Rules 62-210.200 and 62-212.400 (PSD), F.A.C.

To demonstrate that the proposed project is not a major modification under the Department's PSD rules, an emissions comparison between baseline actual emissions and projected actual emissions was conducted pursuant to FDEP Rule 62-212.400(2)(1), F.A.C., for Wheelabrator MSW Combustor Units 1, 2 and 3. The baseline, or current, actual emissions are the emissions over a consecutive 24-month period within the five years immediately preceding the date that a complete application is submitted. The use of different consecutive 24-month periods for each pollutant is allowed. Projected actual emissions are the maximum annual rate, in TPY, at which the existing emission unit is projected to emit a PSD pollutant in any of the five years following the date the unit resumes regular operation.

Table 1 presents the actual annual heat inputs from different fuels reported in the Annual Operating Reports (AORs) for the period 2008 through 2012. This table also presents the total actual heat input from all fuels, as well as the actual operating hours for each unit.

Table 2 summarizes the annual emissions reported in the AORs for each calendar year in the period 2008 through 2012. The carbon dioxide (CO₂) emission rates in Table 2 were obtained using the heat input and emission factors from Title 40, Part 98 of the Code of Federal Regulations (40 CFR 98), Table C-1.

Emissions of nitrous oxide (N_2O) and methane (CH_4) were also calculated based on the actual annual heat input and emission factors from 40 CFR 98, Subpart C, Table C-2. These emissions are summarized in Table 4, which also shows the CO_2 equivalent (CO_2e) rates for these pollutants.

Table 5 presents the average emissions for each consecutive two-year period based on the calendar year emissions in Tables 2, 3 and 4. The annual average emissions for each consecutive two-year period are consistent with the definition of baseline actual emissions.

The baseline actual emissions and project actual emissions are summarized in Table 6. Projected actual emissions were estimated to be just under the PSD significant emission rates for each pollutant. As a result, PSD is not applicable for the project. However, it is unlikely that increasing the amount of non-hazardous solid and liquid waste as segregated loads from 5 to 20 percent would actually increase emission rates. In addition, pursuant to Rule 62-210.200(249)(c), F.A.C., any emissions associated with the demand growth are excluded from the definition of projected actual emissions.



As provided by Rule 62-212.300(1)(e) F.A.C., Wheelabrator will monitor emissions for a period of five years following increasing the amount of non-MSW as segregated loads and provide information according to Rule 62-212.300(1)(e)2.a through d within 60 days after the end of each year.

Regulatory Restrictions on Non-Hazardous Solid and Liquid Waste Use

A review was conducted of 40 CFR 60, Subparts Cb and Eb, 40 CFR Part 129 and 403 F.S. regarding restrictions that would preclude increase the amount of non-hazardous solid and liquid wastes in the North Broward waste-to-energy facility. While there a specific requirements and definitions for municipal waste combustors, municipal solid waste, waste-to-energy facility, recovered materials, etc., there are no specific restrictions on non-hazardous solid and liquid waste so long as the applicable requirements of these federal regulations and Florida statutes and rules are met. This observation is confirmed by the analysis conducted by the Department in the Technical Evaluation and Preliminary Determination for the Lake County Resource Recovery Facility draft permit package (Draft Permit No. 0690046-014-AC/PSD-FL-113I, January 2013). In the TEPD, the Department concluded:

"After reviewing the cited federal (U.S. EPA) regulations, the law & rules of the State of Florida, nothing specifically precludes the applicant's request to burn higher quantities of 'non-hazardous solid and liquid waste' (segregated loads)." Convanta Lake II, Inc. TEPD Page 10 of 14.

Therefore, there are no apparent restrictions on increasing the amount of non-MSW being burned as segregated loads.

PROPOSED CHANGES TO EXISTING PERMIT CONDITIONS

Wheelabrator offers the following suggested changes and conditions to be included in the air construction permit. The existing conditions provided are those in the current Final Title V Permit 0112120-013-AV and -014-AV. Strikethrough denotes deletion of text and <u>underline</u> denotes additions. (Note: Only those conditions where a condition changes or an addition is needed are shown below.)

Condition A.4. Methods of Operation -- Fuels.

a. *Allowable Fuels*. The primary fuel for this facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), F.S. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in Specific Condition **A.4.d.**, below. The primary fuel for the facility is 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 (2010). Other fuels or wastes, not specifically listed herein, shall not be burned without written prior approval from the Department. Fuels or wastes specifically authorized herein do not require prior Department approval before combustion.



f. Non-MSW Material. 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 205%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average.



July 2013

Table 1. Wheelabrator North Broward Burners Nos. 1, 2 & 3 Annual Heat Inputs, 2008 - 2012

	Heat Ir	nput from Soli	id Waste (MMI	Btu/yr)	Heat In	put from Nat	ural Gas (MM	Btu/yr)			I Heat Input Stu/yr)		Actual Oper	ating Hours /yr)	
Year	Burner 1	Burner 2	Burner 3	Total	Burner 1	Burner 2	Burner 3	Total	Burner 1	Burner 2	Burner 3	Total	Burner 1	Burner 2	Burner 3
2008	2,463,858	2,456,037	2,509,848	7,429,743	6,483	4,406	6,410	17,299	2,470,341	2,460,443	2,516,258	7,447,042	8,170	8,172	8,258
2009	2,395,143	2,496,933	2,422,818	7,314,894	28,240	10,200	24,148	62,588	2,423,383	2,507,133	2,446,966	7,377,482	8,244	8,333	8,100
2010	2,484,351	2,435,652	2,446,164	7,366,167	8,321	5,679	8,968	22,968	2,492,672	2,441,331	2,455,132	7,389,135	8,358	8,144	8,295
2011	2,453,319	2,456,946	2,479,878	7,390,143	7,746	8,456	8,811	25,014	2,461,065	2,465,402	2,488,689	7,415,157	8,215	8,215	8,277
2012	2,436,516	2,377,980	2,514,240	7,328,736	15,180	5,314	6,943	27,436	2,451,696	2,383,294	2,521,183	7,356,172	8,119	8,130	8,326

Individual Fuel Heat Input as a Percent of Total Heat Input

	Heat In	nput from Soli	d Waste (MMB	Stu/yr)	Heat In	out from Nat	ural Gas (MMI	Btu/yr)
Year	Burner 1	Burner 2	Burner 3	Total	Burner 1	Burner 2	Burner 3	Total
2008	33.1%	33.0%	33.7%	99.8%	0.1%	0.1%	0.1%	0.2%
2009	32.5%	33.8%	32.8%	99.2%	0.4%	0.1%	0.3%	0.8%
2010	33.6%	33.0%	33.1%	99.7%	0.1%	0.1%	0.1%	0.3%
2011	33.1%	33.1%	33.4%	99.7%	0.1%	0.1%	0.1%	0.3%
2012	33.1%	32.3%	34.2%	99.6%	0.2%	0.1%	0.1%	0.4%

Note: All values are based on annual operating reports for the period 2008 - 2012.

Table 2. Wheelabrator North Broward Annual Emissions Reported in 2008-2012 Annual Operating Reports

Year	Pollutant	Burner No. 1 (tons)	Burner No. 2 (tons)	Burner No. 3 (tons)	Total (tons)
2008	NO _x	455.4	453.8	463.9	1,373.2
	СО	20.1	20.0	20.5	60.5
	SO ₂	44.5	44.3	45.3	134.2
	VOC	3.9	3.8	3.9	11.7
	PM	2.2	2.1	2.2	6.5
	PM ₁₀	2.2	2.1	2.2	6.5
	SAM ^a D/F	0.0 6.00E-06	0.0 6.00E-06	0.0 6.00E-06	0.0
	Hyd. Chloride	21.9	21.8	22.3	1.80E-05 66.0
	Fluorides	0.103	0.102	0.105	0.310
	Lead	0.007	0.007	0.007	0.020
	Mercury	0.014	0.014	0.014	0.041
	CO ₂	246,645	245,742	251,237	743,624
2009	NO_x	440.6	458.0	445.4	1,344
	CO	23.2	23.4	23.3	70
	SO ₂	46.6	48.6	47.1	142
	VOC	3.7	3.8	3.8	11
	PM	1.9	1.9	1.9	6
	PM ₁₀	1.9	1.9	1.9	6
	SAM ^a	0.0	0.0	0.0	0
	D/F	4.00E-06	4.00E-06	4.00E-06	1.20E-05
	Hyd. Chloride	20.2	21.1	20.5	61.8
	Fluorides	0.104	0.108	0.105	0.317
	Lead Mercury	0.004 0.012	0.004 0.012	0.004 0.012	0.012 0.037
	CO ₂	241,048	250,168	243,575	734,791
2010	NO _x	463.9	454.6	456.8	1,375
	co	32.6	31.9	32.2	97
	SO ₂	60.7	59.5	59.8	180
	VOC	3.8	3.7	3.7	11
	P M				
		2.0	1.9	1.9	6
	PM ₁₀	2.0	1.9	1.9	6
	SAM ^a D/F	0.0 4.00E-06	0.0 3.00E-06	0.0 3.00E-06	0
	Hyd. Chloride	24.6	24.1	24.2	1.00E-05 72.8
	Fluorides	0.112	0.110	0.110	0.331
	Lead	0.004	0.004	0.036	0.044
	Mercury	0.011	0.011	0.011	0.034
	CO ₂	248,801	243,779	245,021	737,601
2011	NO _x	453.2	453.9	458.1	1,365
	CO SO₂	29.9 42.5	30.0 42 .6	30.3	90
				43.0	128
	VOC	3.9	3.9	3.9	12
	PM	1.2	1.2	1.2	4
	PM ₁₀	1.2	1.2	1.2	4
	SAM ^a	0.0	0.0	0.0	0
	D/F Hyd. Chloride	2.00E-06 26.6	2.00E-06 26.6	2.00E-06 26.9	6.00E-06 80.1
	Fluorides	0.116	0.116	0.117	0.349
	Lead	0.001	0.001	0.001	0.002
	Mercury	0.009	0.009	0.009	0.027
	CO₂	245,665	246,069	248,382	740,117
2012	NO_x	467.9	456.0	482.2	1,406
	СО	23.5	22.5	23.9	70
	SO ₂	39.9	39.0	41.2	120
	VOC	4.0	3.9	4.2	12
	PM PM	1.9	1.8	1.9	6
	PM ₁₀	1.9	1.8	1.9	6
	SAM ^a D/F	0.0 1.00E-06	0.0 1.00E-06	0.0 1.00E-06	0 3.00E-06
	Hyd. Chloride	25.3	24.7	26.1	76.1
	Fluorides	0.038	0.037	0.039	0.114
	Lead	0.001	0.001	0.001	0.004
	Mercury	0.016	0.015	0.016	0.047
	CO ₂	244,420	237,993	251,707	734,120

Source: Annual Operating Report (AOR) for Wheelabrator North Broward, Inc., 2008 - 2012.



Table 3. Wheelabrator North Broward Actual Emissions as a Function of Heat Input, 2008 - 2012

IMBtu/yr) ^a	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd.								·					Hyd.				
								5	Cinoriue	Fluorides	Lead	Mercury	CO2	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Chloride	Fluorides	Lead	Mercury	CO2
2,470,341 4	455.4	20.1	3.9	44.5	2.2	2.2	6.8	6.00E-06	21.9	0.10	6.57E-03	0.01	246,644.9	0.3687	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.86E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2,423,383 4	440.6	23.2	3.7	46.6	1.9	1.9	7.1	4.00E-06	20.2	0.10	3.87E-03	0.01	241,047.9	0.3636	0.0192	0.0031	0.0384	0.0015	0.0015	0.0059	3.30E-09	0.0167	8.57E-05	3.19E-06	9.89E-06	198.
2,492,672 4	463.9	32.6	3.8	60.7	2.0	2.0	9.3	4.00E-06	24.6	0.11	3.73E-03	0.01	248,800.5	0.3722	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	3.21E-09	0.0197	8.97E-05	2.99E-06	9.08E-06	199.6
2,461,065 4	453.2	29.9	3.9	42.5	1.2	1.2	6.5	2.00E-06	26.6	0.12	6.83E-04	0.01	245,665.3	0.3683	0.0243	0.0032	0.0346	0.0010	0.0010	0.0053	1.63E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2,451,696 4	467.9	23.5	4.0	39.9	1.9	1.9	6.1	1.00E-06	25.3	0.04	1.36E-03	0.02	244,420.1	0.3817	0.0192	0.0033	0.0326	0.0015	0.0015	0.0050	8.16E-10	0.0206	3.09E-05	1.11E-06	1.28E-05	199.4
2,42 2,49 2,46	23,383 92,672 81,065	23,383 440.6 02,672 463.9 61,065 453.2	23,383 440.6 23.2 02,672 463.9 32.6 01,065 453.2 29.9	23,383 440.6 23.2 3.7 02,672 463.9 32.6 3.8 61,065 453.2 29.9 3.9	23,383 440.6 23.2 3.7 46.6 02,672 463.9 32.6 3.8 60.7 61,065 453.2 29.9 3.9 42.5	23,383 440.6 23.2 3.7 46.6 1.9 02,672 463.9 32.6 3.8 60.7 2.0 61,065 453.2 29.9 3.9 42.5 1.2	23,383 440.6 23.2 3.7 46.6 1.9 1.9 02,672 463.9 32.6 3.8 60.7 2.0 2.0 61,065 453.2 29.9 3.9 42.5 1.2 1.2	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 92,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 61,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 22,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 61,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 02,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 61,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 02,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 01,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 22,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 3.73E-03 61,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12 6.83E-04	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 02,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 3.73E-03 0.01 03.005 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12 6.83E-04 0.01	23,383	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 02,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 3.73E-03 0.01 248,800.5 0.3722 03.065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12 6.83E-04 0.01 245,665.3 0.3683	23,383	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0032 0.00	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 22,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 3.73E-03 0.01 248,800.5 0.3722 0.0262 0.0030 0.0487 31,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12 6.83E-04 0.01 245,665.3 0.3683 0.0243 0.0032 0.0346 31,696 467.9 23.5 4.0 39.9 1.9 1.9 6.1 1.00E-06 25.3 0.04 1.36E-03 0.02 244,420.1 0.3817 0.0192 0.0033 0.0326	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 22,672 463.9 32.6 3.8 60.7 2.0 2.0 9.3 4.00E-06 24.6 0.11 3.73E-03 0.01 248,800.5 0.3722 0.0262 0.0030 0.0487 0.0016 31,065 453.2 29.9 3.9 42.5 1.2 1.2 6.5 2.00E-06 26.6 0.12 6.83E-04 0.01 245,665.3 0.3683 0.0243 0.0032 0.0346 0.0010 51,696 467.9 23.5 4.0 39.9 1.9 1.9 6.1 1.00E-06 25.3 0.04 1.36E-03 0.02 244,420.1 0.3817 0.0192 0.0033 0.0326 0.0015	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.00	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.0015 0.0059 0.00	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.0015 0.0015 0.0059 3.30E-09 0.0059 0.	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.0015 0.0015 0.0059 3.30E-09 0.0167 0.0059 0.	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.0015 0.0015 0.0059 3.30E-09 0.0167 8.57E-05 0.0059	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.0015 0.0015 0.0015 0.0015 0.0015 0.0016 8.57E-05 3.19E-06 0.0015	23,383 440.6 23.2 3.7 46.6 1.9 1.9 7.1 4.00E-06 20.2 0.10 3.87E-03 0.01 241,047.9 0.3636 0.0192 0.0031 0.0384 0.0015 0.00

BURNER 2																											
	Actual Annual Heat Input						Burner	2 Actua	l Emission	s (TPY) ^b											s per Unit (lb/MMBt	Heat Input u)	, c			_	
Year	(MMBtu/yr) ^a	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO2	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO2
2008	2,460,443	453.8	20.0	3.8	44.3	2.1	2.1	6.8	6.00E-06	21.8	0.10	6.55E-03	0.01	245,741.8	0.3689	0.0162	0.0031	0.0360	0.0017	0.0017	0.0055	4.88E-09	0.0177	8.32E-05	5.32E-06	1.10E-05	199.8
2009	2,507,133	458.0	23.4	3.8	48.6	1.9	1.9	7.4	4.00E-06	21.1	0.11	4.03E-03	0.01	250,167.9	0.3654	0.0187	0.0031	0.0387	0.0015	0.0015	0.0059	3.19E-09	0.0168	8.63E-05	3.21E-06	9.96E-06	199.6
2010	2,441,331	454.6	31.9	3.7	59.5	1.9	1.9	9.1	3.00E-06	24.1	0.11	3.65E-03	0.01	243,778.7	0.3724	0.0261	0.0030	0.0488	0.0016	0.0016	0.0075	2.46E-09	0.0197	8.98E-05	2.99E-06	9.09E-06	199.7
2011	2,465,402	453.9	30.0	3.9	42.6	1.2	1.2	6.5	2.00E-06	26.6	0.12	6.84E-04	0.01	246,069.3	0.3682	0.0243	0.0032	0.0345	0.0010	0.0010	0.0053	1.62E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	2,383,294	456.0	22.5	3.9	39.0	1.8	1.8	6.0	1.00E-06	24.7	0.04	1.32E-03	0.02	237,992.9	0.3827	0.0189	0.0033	0.0327	0.0015	0.0015	0.0050	8.39E-10	0.0207	3.10E-05	1.11E-06	1.29E-05	199.7
					•									Maximum =	0.3827	0.0261	0.0033	0.0488	0.0017	0.0017	0.0075	4.88E-09	0.0216	9.41E-05	5.32E-06	1.29E-05	199.8

	Actual Annual Heat Input						Burner	3 Actua	l Emission												per Unit (Ib/MMBt)	Heat Input 」)			_		
Year	(MMBtu/yr) ^a	NO _x	co	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO2	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluoride	s Lead	Mercury	CO2
2008	2,516,258	463.9	20.5	3.9	45.3	2.2	2.2	6.9	6.00E-06	22.3	0.10	6.70E-03	0.01	251,237.4	0.3687	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.77E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2009	2,446,966	445.4	23.3	3.8	47.1	1.9	1.9	7.2	4.00E-06	20.5	0.10	3.91E-03	0.01	243,575.0	0.3640	0.0191	0.0031	0.0385	0.0015	0.0015	0.0059	3.27E-09	0.0167	8.58E-05	3.19E-06	9.90E-06	199.
2010	2,455,132	456.8	32.2	3.7	59.8	1.9	1.9	9.2	3.00E-06	24.2	0.11	3.63E-02	0.01	245,021.5	0.3721	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	2.44E-09	0.0197	8.97E-05	2.96E-05	9.08E-06	199.6
2011	2,488,689	458.1	30.3	3.9	43.0	1.2	1.2	6.6	2.00E-06	26.9	0.12	6.91E-04	0.01	248,382.1	0.3682	0.0243	0.0032	0.0345	0.0010	0.0010	0.0053	1.61E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	2,521,183	482.2	23.9	4.2	41.2	1.9	1.9	6.3	1.00E-06	26.1	0.04	1.39E-03	0.02	251,707.5	0.3825	0.0189	0.0033	0.0327	0.0015	0.0015	0.0050	7.93E-10	0.0207	3.10E-05	1.10E-06	1.29E-05	199.
	·													Maximum =	0.3825	0.0262	0.0033	0.0487	0.0017	0.0017	0.0075	4.77E-09	0.0216	9.41E-05	2.96E-05	1.29E-05	199.7

	Actual Annual Heat Input					Un	its 1,2 & :	3 Total <u>A</u>	ctual Emis		Y) ^b								_		s per Unit (lb/MMBt)	Heat Inpul I)					
Year	(MMBtu/yr) ^a	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO ₂	NO _x	со	voc	SO ₂	PM	PM ₁₀	SAM	D/F	Hyd. Chloride	Fluorides	Lead	Mercury	CO2
2008	7,447,042	1,373.2	60.5	11.7	134.2	6.5	6.5	20.5	1.80E-05	66.0	0.31	1.98E-02	0.04	743,624.0	0.3688	0.0163	0.0031	0.0360	0.0017	0.0017	0.0055	4.83E-09	0.0177	8.31E-05	5.32E-06	1.10E-05	199.7
2009	7,377,482	1,344.0	70.0	11.3	142.3	5.6	5.6	21.8	1.20E-05	61.8	0.32	1.18E-02	0.04	734,790.8	0.3644	0.0190	0.0031	0.0386	0.0015	0.0015	0.0059	3.25E-09	0.0167	8.59E-05	3.20E-06	9.92E-06	199.2
2010	7,389,135	1,375.3	96.7	11.2	180.1	5.8	5.8	27.6	1.00E-05	72.8	0.33	4.37E-02	0.03	737,600.7	0.3723	0.0262	0.0030	0.0487	0.0016	0.0016	0.0075	2.71E-09	0.0197	8.97E-05	1.18E-05	9.08E-06	199.6
2011	7,415,157	1,365.2	90.1	11.8	128.1	3.5	3.5	19.6	6.00E-06	80.1	0.35	2.06E-03	0.03	740,116.7	0.3682	0.0243	0.0032	0.0346	0.0010	0.0010	0.0053	1.62E-09	0.0216	9.41E-05	5.55E-07	7.31E-06	199.6
2012	7,356,172	1,406.1	69.9	12.1	120.1	5.6	5.6	18.4	3.00E-06	76.1	0.11	4.07E-03	0.05	734,120.5	0.3823	0.0190	0.0033	0.0327	0.0015	0.0015	0.0050	8.16E-10	0.0207	3.10E-05	1.11E-06	1.28E-05	199.6
					•									Maximum =	0.3823	0.0262	0.0033	0.0487	0.0017	0.0017	0.0075	4.83E-09	0.0216	9.41E-05	1 18E-05	1.28E-05	199.7

^a Based on AOR data; see Table 1.

BURNER 3

^b Based on AOR data; see Table 2.

^c Total actual emissions divided by total heat input.

Table 4. Wheelabrator North Broward Estimated Actual Annual Emissions of №0 and CH₄ for the Period 2008 - 2012 Burners Nos. 1, 2 & 3

	Actual		N₂O Emi	ssions			CH₄ Emi	ssions	
	Annual	Emission			CO₂e °	Emission			CO₂e °
	Heat Input ^a	Factor ^b	Annual E	missions	Rate	Factor ^b	Annual E	missions	Rate
Unit	(MMBtu/yr)	(lb/MMBtu)	(lb/yr)	(TPY)	(TPY)	(Ib/MMBtu)	(lb/yr)	(TPY)	(TPY)
olid Waste									
2008	7,429,743	3.53E-03	26,200.2	13.1	4,061.0	2.4E-02	180,126.7	90.1	1,891.3
2009	7,314,894	3.53E-03	25,795.2	12.9	3,998.3	2.4E-02	177,342.3	88.7	1,862.1
2010	7,366,167	3.53E-03	25,976.1	13.0	4,026.3	2.4E-02	178,585.4	89.3	1,875.1
2011	7,390,143	3.53E-03	26,060.6	13.0	4,039.4	2.4E-02	179,166.6	89.6	1,881.2
2012	7,328,736	3.53E-03	25,844.1	12.9	4,005.8	2.4E-02	177,677.9	88.8	1,865.6
latural Gas-F	- Firing								
2008	17,299	2.20E-04	3.8	0.002	0.6	2.2E-03	38.1	0.019	0.4
2009	62,588	2.20E-04	13.8	0.007	2.1	2.2E-03	137.9	0.069	1.4
2010	22,968	2.20E-04	5.1	0.003	0.8	2.2E-03	50.6	0.025	0.5
2011	25,014	2.20E-04	5.5	0.003	0.9	2.2E-03	55.1	0.028	0.6
2012	27,436	2.20E-04	6.0	0.003	0.9	2.2E-03	60.5	0.030	0.6
otal									
2008				13.10	4,061.6			90.1	1,891.7
2009				12.90	4,000.4			88.7	1,863.5
2010				12.99	4,027.1	==		89.3	1,875.7
2011				13.03	4,040.2			89.6	1,881.8
2012				12.93	4,006.8			88.9	1,866.3

^a Based on AOR data; see Table 1.



^b Table C-2, Subpart C, 40 CFR 98. Emission factors in kg/MMBtu were converted to lb/MMBtu by multiplying by 2.204.

^c N₂O and CH₄ are multiplied by a factor of 310 and 21, respectively, to determine CO₂ equivalence.

Table 5. Wheelbrator North Broward Annual Average Emissions for Burners 1, 2 & 3 for Each Consecutive Two-Year Period, 2008-2012

	Annual Emissions for Burners Nos. 1, 2 & 3				Two-Year Average Emissions				
	2008	2009	2010	2011	2012	2008-2009	2009-2010	2010-2011	2011-2012
Pollutant	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)	(tons)
NO _x	1,373.2	1,344.0	1,375.3	1,365.2	1,406.1	1,358.6	1,359.7	1,370.2	1,385.6
CO	60.5	70.0	96.7	90.1	69.9	65.3	83.3	93.4	80.0
SO ₂	134.2	142.3	180.1	128.1	120.1	138.2	161.2	154.1	124.1
voc	11.7	11.3	11.2	11.8	12.1	11.5	11.2	11.5	11.9
PM	6.5	5.6	5.8	3.5	5.6	6.0	5.7	4.7	4.5
PM₁0	6.5	5.6	5.8	3.5	5.6	6.0	5.7	4.7	4.5
PM _{2.5} ^a	6.5	5.6	5.8	3.5	5.6	6.0	5.7	4.7	4.5
SAM ^b	20.5	21.8	27.6	19.6	18.4	21.2	24.7	23.6	19.0
D/F	1.80Έ-05	1.20E-05	1.00E-05	6.00E-06	3.00E-06	1.50E-05	1.10E-05	8.00E-06	4.50E-06
Hyd. Chloride	66.0	61.8	72.8	80.1	76.1	63.9	67.3	76.5	78.1
Fluorides	0.31	0.32	0.33	0.35	0.11	0.31	0.32	0.34	0.23
Lead	1.98E-02	1.18E-02	4.37E-02	2.06E-03	4.07E-03	1.58E-02	2.77E-02	2.29E-02	3.06E-03
Mercury	0.04	0.04	0.03	0.03	0.05	3.87E-02	3.51E-02	3.03E-02	3.72E-02
CO₂	743,624.0	734,790.8	737,600.7	740,116.7	734,120.5	739,207.4	736,195.7	738,858.7	737,118.6
N₂O ^c (CO₂e)	4,061.6	4,000.4	4,027.1	4,040.2	4,006.8	4,031.0	4,013.7	4,033.7	4,023.5
CH₄ ^c (CO₂e)	1,891.7	1,863.5	1,875.7	1,881.8	1,866.3	1,877.6	1,869.6	1,878.8	1,874.0

^a Assuming equal to PM₁₀ emissions.

Source: Annual Operating Report (AOR) for 2008 - 2012

^b Not reported in AORs - based on assuming 10% of SO₂ converts to SO₃, all of which converts to SAM.

^c Calculated based on actual annual heat input - see Table 3.

Table 6. Wheelabrator North Broward PSD Applicability for Increase in Segregated Loads

Pollutant	Baseline (Maximum 2-Year Average Actual) Emissions ^a (TPY)	Projected Actual Emissions ^b (TPY)	Increase/Decrease in Annual Emissions ^c (TPY)	PSD Significant Emission Rates (TPY)
- F Ollutarit	(11-1)	(11-1)	(11 1)	(11 1)
NO _x	1,385.63	1,424.63	39	40
CO	93.39	192.39	99	100
SO ₂	161.16	200.16	39	40
VOC	11.94	50.94	39	40
PM	6.05	30.05	24	25
PM ₁₀	6.05	20.05	14	15
PM _{2.5}	6.05	15.05	9	10
SAM	24.68	30.68	6	7
MWC Organics	0.00	1.80E-05	3.00E-06	3.50E-06
MWC Acid Gases	239.26	278.26	39	40
Fluorides	0.34	2.34	2	3
Lead	0.03	0.05	0.02	0.6
Mercury	0.04	0.13	0.09	0.1
<u>GHGs</u>				
CO ₂	739,207.37	813,207.37	74,000.0	
N ₂ O (CO ₂ e)	4,033.66	4,437.46	403.8	
CH ₄ (CO ₂ e)	1,878.75	2,066.83	188.1	
Total GHGs (CO ₂ e)	745,119.8	819,711.7	74,591.9	75,000

^a Maximum 2-Year average emissions - see Table 5.



^b Projected actual annual emissions.

^c Projected actual emissions minus baseline actual emissions.

APPENDIX A

WHEELABRATOR NORTH AND SOUTH BROWARD SUPPLEMENTAL WASTE APPROVAL PROCEDURE

Wheelabrator North and South Broward Supplemental Waste Approval Procedure

Wheelabrator North and South Broward Supplemental Waste Approval Procedure

Contents

1.0 Initial Acceptability Determination

2.0 Waste Delivery Scheduling

3.0 Acceptance and Processing

3.1 Waste Acceptance

3.2 Waste QA/QC

3.3 Non-Conforming Waste

3.4 Periodic recertification

4.0 Facility Support Structure/Contact Point

5.0 Recordkeeping

6.0 Employee Training

Attachment A: Waste Profile Form (as of 6/17/13)

Attachment B: Special Waste Pre-Shipment Notification Form (as of 6/17/13)

1.0 Initial Acceptability Determination

The acceptability determination process begins with the waste generator or their agent completing a Waste Profile Form. A copy of the current Waste Profile form is attached but, in the event changes may have been made, the most recent version of this form can be found at WMSolutions.com. The Waste Profile Form contains the information needed to determine regulatory and permit acceptability and compatibility with the waste-to-energy process. Once completed, the Waste Profile Form, along with MSDS's, product inserts for pharmaceuticals and analytical information as applicable, is used by the Regional Waste Approval Manager to determine the acceptability or unacceptability of the waste based on the following criteria:

- Is the waste acceptable per the facility permit and applicable regulations?
- Is the facility able to manage the employee health and safety issues presented by managing this waste?
- Is the chemical composition of the waste compatible with the combustion process and air pollution control equipment operating requirements of the facility?
- Is the expected volume of the waste more than the facility can manage from a logistical handling standpoint?
- Are there any special handling requirements when the facility receives this waste?
- Are there any other operational issues that this waste could present to the facility?

During the review process the Waste Approval Manager may need additional information in order to make a determination on the acceptability of the waste. In this instance an information request would be sent back to the generator or agent. Once the Waste Approval Manager has reviewed all of the information provided and consulted with facility personnel on operational considerations, a decision will be made to accept or refuse the waste. For profiles which contain a number of different products submitted for approval, which is typical of pharmaceutical streams and some bulk loads, the facility may choose to accept some of the wastes and not accept other types of wastes.

Once the new waste has been reviewed by the Waste Approval Manager, a summary of the review will be provided to the appropriate facility manager for final approval. Any potential handling issues that need to be addressed will be identified to the facility manager. If the facility manager determines that the material cannot be safely managed by the facility then it will not receive final approval.

In all cases, once the waste is approved the generator or agent will be notified and issued an approval code. This code will be used by the generator for scheduling the load and for the facility to be able to identify the waste stream back to the original profile and ensure proper billing. Any specific special handling instructions will be maintained with the approval information. These will be referred to as needed when a load arrives at the facility.

2.0 Waste Delivery Scheduling

All waste deliveries must be scheduled with the facility prior to actual delivery. This can be accomplished by contacting the appropriate facility manager. There are numerous factors that affect the ability of a facility to accept wastes on any given day. Typically these factors are boiler availability and current waste inventories. All facilities have scheduled outages periodically. However, there are still unplanned outages that can occur which may or may not affect the ability of the facility to accept additional waste. The plant operating status and the effect on waste deliveries will be considered by the facility when the plant is contacted to schedule a delivery. At the time of scheduling or at some point prior to the waste arriving at the facility, the generator will provide a listing of the specific wastes that will be delivered to the facility. This list will be checked against the approved list and also be used to further verify the contents of the load upon delivery. This is accomplished by completion of a Special Waste Pre-Shipment Notification form by the generator or agent, and review of the form by Wheelabrator facility personnel prior to delivery. A copy of the current Special Waste Pre-Shipment Notification form is attached but, in the event changes may have been made, the most recent version of this form can be found at WMSolutions.com.

The Special Waste Pre-Shipment Notification form lists shipping, scheduling and billing information, witness and off loading requirements in addition to a Generator Non-Hazardous Waste Certification statement. By signing and dating this statement, the generator certifies that the material to be disposed of is not regulated as a hazardous waste under RCRA, or by any similar applicable federal, state or local regulation. In addition, when applicable the materials that are being disposed of are certified as controlled substances under the Controlled Substances Act. Also, the generator-signed statement certifies that the wastes to be disposed of only contain wastes approved under the approval number listed and do not contain wastes identified by Wheelabrator as unacceptable or not previously approved. Lastly, the Special Waste Pre-Shipment Notification form has a Certificate of Destruction section that is completed, including signature and date, by facility personnel once the waste has been unloaded and properly disposed of.

3.0 Acceptance and Processing

3.1 Waste Acceptance

The Wheelabrator North and South Broward facilities can accept waste in roll off containers, dump trailers and box trailers. For non-bulk loads, i.e. drum or cubic yard boxes, it is preferred to have the containers palletized, and if possible, delivered in walking floor trailers. Walking floor trailers speed up the unloading process and require less manpower to complete the job. All waste delivery personnel are required to comply with the facility's Tipping Floor Rules while at the facility and would be discussed prior to entering the Tipping Floor with all delivery personnel accompanying the load.

In addition, Wheelabrator North and South Broward have methods to transport bulk powder materials directly to the feed chute hopper rather than disposing of them into the facility pits. These methods are employed for safety reasons, eliminating the possibility of creating a powder-induced dust cloud in the facility pit. At North Broward a transport box is available at the north crane hoisting bay. Palletized drums and/or boxes of powdered waste material can be loaded into the hoisting box, raised 78 feet within the facility to the charging deck where they can then be manually removed and fed directly to a boiler's feed chute hopper. South Broward employs the same concept but uses a freight elevator rather than a hoisting box.

If needed, an unloading ramp can be used to offload palletized loads and transport the waste material within the Tipping Floor where it is pushed into the receiving pit with the front end loader. Further mixing can be

accomplished using the orange peel grapple prior to placing the material into the boiler feed hopper. Boiler operations personnel will be monitored for impacts of the waste on emissions as well as steam load. Adjustments to feed rates will be made to compensate for observed impacts if needed. An unloading ramp can also be used to offload powdered material for feeding directly to the feed chute hopper as referenced above.

3.2 Waste QA/QC

Typically waste delivered in roll-off containers and dump trailers will be dumped onto the Tipping Floor for inspection prior to being pushed into the pit. Inspections are typically visual to look for any anomalous wastes. A sample may be taken at that time to verify that the waste conforms to the associated profile. If a waste sample is taken, the facility would typically not wait for the results of the analytical testing before disposing of the waste in the pit.

Certain wastes, like pharmaceutical waste, require a more labor intensive QA/QC process. Typically with these types of loads, a portion or all of the waste may need to be direct fed into the hopper and not pushed into the pit. Part of the QA/QC process would be to identify these wastes on the truck and handle them accordingly.

3.3 Non-Conforming Waste

Any wastes that are found to be non-conforming to the associated profile will be placed in a holding area and the customer or agent notified. If information can be provided to make a waste acceptability determination, the Regional Waste Approval Manager will be contacted with the information. If the waste is found to be acceptable, it will be added to the approval. If no information can be provided immediately, or the waste is found to be unacceptable, it will be rejected back to the customer or agent. Every attempt will be made to make the determination of waste conformance with the profile before the delivery vehicle leaves the facility. However, this may not always be case and would require the generator to arrange for a truck to return to the facility to pick up the non-conforming waste(s).

3.4 Periodic recertification

On a periodic basis each waste approval is reviewed to ensure it continues to be acceptable by the facility. Typically this will happen no more frequently than annually from the date the waste was first approved.

4.0 Facility Support Structure/Contact Point

All waste acceptability inquiries are to be routed to the appropriate Sales Representative. The Sales Representative will collect the necessary information on a potential new waste needed for the Waste Approval Manager to perform the acceptability review.

5.0 Recordkeeping

Information on approved wastes will be entered into the Fastlane system. This system is used at the facility scale house to track the entry of approved wastes and haulers. This system also tracks tonnages per approval and can prevent entry of waste under a profile if the annual allowed tonnage has been exceeded, or if there are other reasons to not allow acceptance of a particular waste.

6.0 Employee Training

Employees that are involved with Supplemental Waste operations will receive training as appropriate to their position.

ATTACHMENT A

WHEELABRATOR NORTH AND SOUTH BROWARD WASTE PROFILE FORM (DOWNLOADED 6-21-13)

(NOTE: The most current form is accessed through WMsolutions.com)





	I and the second		
GENERATOR INFORMATION (MATERIAL ORIGIN)		E AS GENE	
Generator Name:	1. Billing Name:		
Site Address:	2. Billing Address:		
(City, State, ZIP)	(City, State, ZIP)		
County:	3. Contact Name:		
Contact Name:	· 4. Email:		
Email:	5. Phone: 6. Fax:		
Phone: 7. Fax:	7. WM Hauled?	Yes	☐ No
Generator EPA ID: N/A	8. P.O. Number:		
State ID: N/A	1		
MATERIAL INFORMATION	D. REGULATORY INFORMATION		
Common Name:	1. EPA Hazardous Waste?	☐ Yes*	☐ No
Describe Process Generating Material:	Code:		
	2. State Hazardous Waste?	Yes	☐ No
	Code:		
	3. Is this material non-hazardous due to Treatment,	☐ Yes*	☐ No
	Delisting, or an Exclusion?	☐ Yes*	- D N
Material Composition and Contaminants:	4. Contains Underlying Hazardous Constituents?5. Contains benzene and subject to Benzene NESHAP?	☐ Yes*	
1.	6. Facility remediation subject to 40 CFR 63 GGGGG?	☐ Yes*	
2.	7. CERCLA or State-mandated clean-up?	☐ Yes*	
3.	8. NRC or State-regulated radioactive or NORM waste?		
4	*If Yes, see Addendum (page 2) for additional questi		
≥100%	9. Contains PCBs? → If Yes, answer a, b and c.	☐ Yes	
State Waste Codes: \bigcup N/A	a. Regulated by 40 CFR 761?	☐ Yes	
Color:	b. Remediation under 40 CFR 761.61 (a)?	Yes	☐ No
Physical State at 70°F: ☐ Solid ☐ Liquid ☐ Other:	c. Were PCB imported into the US?	Yes	☐ No
Free Liquid Range Percentage: to D N/A (Solid)	10. Regulated and/or Untreated	☐ Yes	ПМ
pH: to □ N/A (Solid)	Medical/Infectious Waste?		
•	11. Contains Asbestos?	☐ Yes	
Flash Point: □ <140°F □ 140°−199°F □ ≥200° □ N/A (Solid)	→ If Yes: □ Non-Friable □ Non-Friable – Regula	ated U	Friable
ANALYTICAL AND OTHER REPRESENTATIVE INFORMATION	F. SHIPPING AND DOT INFORMATION		
Analytical attached	1. • One-Time Event • Repeat Event/Ongoing Busin		
Please identify applicable samples and/or lab reports:	Estimated Quantity/Unit of Measure:		
	☐ Tons ☐ Yards ☐ Drums ☐ Gallons ☐ Other		
	3. Container Type and Size:		
	4. USDOT Proper Shipping Name:		□ N/A
Other information attached (such as MSDS)?			
GENERATOR CERTIFICATION (PLEASE READ AND CERTIFY BY SIGNATURE) signing this EZ Profile™ form, I hereby certify that all information submitted in this and elevant information necessary for proper material characterization and to identify knom a sample that is representative as defined in 40 CFR 261 - Appendix 1 or by using a the process or new analytical) will be identified by the Generator and be disclosed to W	own and suspected hazards has been provided. Any analytical data atta an equivalent method. All changes occurring in the character of the ma	ached was o iterial (i.e., o int.	derived
am an agent signing on hehalf of the Generator I have confirmed with the			
am an agent signing on behalf of the Generator, I have confirmed with the nerator that information contained in this Profile is accurate and complete.			



EZ Profile™ Addendum

erial Information be Process Generating Material (Continued from page 1):	If more space is needed, please attach additional pages
al Composition and Contaminants (Continued from page 1):	If more space is needed, please attach additional page
	≥100%
JLATORY INFORMATION	
uestions with a "Yes" response in Section D on the EZ Profile™ form (pag	ge 1) need to be answered here.
Hazardous Waste	-
ease list all USEPA listed and characteristic waste code numbers:	
the material subject to the Alternative Debris standards (40 CFR 268.45)?	☐ Yes ☐ N
the material subject to the Alternative Soil standards (40 CFR 268.49)? → If Y	Yes, complete question 4.
the material exempt from Subpart CC Controls (40 CFR 264.1083 and 265.10	·
If Yes, please select one of the following:	·
☐ Waste has been determined to be LDR exempt [265.1083(c)(4) and 265.1083(c)(4) and 265.	1084(c)(4)) based on the fact that it meets all applicable
organic treatment standards (including UHCs for D-coded characteristic wa	
☐ Waste does not qualify for a LDR exemption, but the average VOC at the po	point of origination is <500 ppmw and this determination
was based on analytical testing (upload copy of analysis) or generator know	wledge.
e Hazardous Waste → Please list all state waste codes:	
naterial that is Treated, Delisted, or Excluded $ extstyle o$ Please indicate the category, b	
elisted Hazardous Waste □ Excluded Waste under 40 CFR 261.4 →	· · ·
eated Hazardous Waste Debris	·
erlying Hazardous Constituents $ o$ Please list all Underlying Hazardous Constitue	ents:
	n.
ene NESHAP → Please include percent water/moisture in chemical composition	ot, continue.
rene NESHAP → Please include percent water/moisture in chemical composition re you a TSDF? → If yes, please complete Benzene NESHAP questionnaire. If no	
	□<1 Mg □ 1-9.99 Mg □≥10 N
re you a TSDF? 🗲 If yes, please complete Benzene NESHAP questionnaire. If no	□ <1 Mg □ 1-9.99 Mg □ ≥10 M
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no hat is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility?	□ <1 Mg □ 1-9.99 Mg □ ≥10 M
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no hat is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw.	□ Yes □ N
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no that is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw.	□ Yes □ N □ Yes □ N
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no rehat is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342?	□ Yes □ N □ Yes □ N
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no rehat is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342? If yes, specify exemption:	w? Yes O N
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no that is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342? If yes, specify exemption: as each on your knowledge of your waste and the BWON regulations, do you believe	w? Yes Now? Yes Now? Yes Now?
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no that is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342? If yes, specify exemption: asset on your knowledge of your waste and the BWON regulations, do you believe eatment and control requirements at an off-site TSDF?	Yes
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no that is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342? If yes, specify exemption: ased on your knowledge of your waste and the BWON regulations, do you believe eatment and control requirements at an off-site TSDF? FR 63 GGGGG Does the material contain <500 ppmw VOHAPs at the point	Yes
re you a TSDF? If yes, please complete Benzene NESHAP questionnaire. If no that is your facility's current total annual benzene quantity in Megagrams? Flow weighted average benzene concentration is ppmw. this waste soil from remediation at a closed facility? Benzene concentration in remediation waste is ppmw. as material been treated to remove 99% of the benzene or to achieve <10 ppmw material exempt from controls in accordance with 40 CFR 61.342? If yes, specify exemption: asset on your knowledge of your waste and the BWON regulations, do you believe eatment and control requirements at an off-site TSDF?	Yes



Additional Profile Information

	Profile Number:
C. MATERIAL INFORMATION	
Material Composition and Contaminants (Continued from page 2):	If more space is needed, please attach additional pages
11.	ii more space is needed, picose detacinadatelonal pages
12.	-
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	≥100%
D. REGULATORY INFORMATION I. EPA Hazardous Waste a. Please list all USEPA listed and characteristic waste code numbers (Continue)	ed from page 2):

ATTACHMENT B
SPECIAL WASTE PRE-SHIPMENT NOTIFICATION FORM





SPECIAL WASTE PRE-SHIPMENT NOTIFICATION

INSTRUCTIONS: Complete all sections of this pre-shipment notification including the Generator Non-Hazardous Certification. All items contained in this shipment are to be identified on the third page of this notification. The receiving facility will complete the certificate of destruction section and return a copy of this form to the party identified under the Billing Information section.

certificate of destruction section and returunder the Billing Information section.	n a copy of this f	orm to th	e party identified
Ship From/Scheduling Information			
Delivery Date:	Delivery Tin	ne:	Estimated Tons:
Company:	Address:		
Contact:	City, State:		
Transporter:	Approval Co	de:	
Waste Description: NOTE: Please complete the detailed W this form. If the Wastes contain Contro Substances Act, or any equivalent state information, and information on the lic the controlled substances to witness des Wheelabrator Destination Facility:	lled Substances law, provide na ensure of the inc	under th	ne Controlled ubstances, schedule
Billing Information COD? (Check appl	icable box)	□Yes	□No
Company:	Bill to:		Location:
Contact:	Telephone:		
Address:	Fax:		
City, State Zip:	Purchase Order	·#:	
	lity Authorized S		inted)
Date	e		

Load Disposal Requirements		N/ /NT				
Will this load be witnessed?		Yes/No				
(NOTE: Controlled Substances must remain in possession of a properly licensed customer at all times and						
must be witnessed)						
Will this load require off loading? (i.e., not a	self- unloading vehicle)					
Will the generator or broker require direct deposit of the waste to the boiler feed chute? \Box						
Are there any other special instructions or information?						
Generator Non-Hazardous Waste Certification	on					
I certify that the materials destined for disposal identified in this preshipment manifest are not regulated as a hazardous waste under the Resource Conservation and Recovery Act Regulations found in 40 CFR Part 260 et seq., or by any similar applicable Federal, State or Local Regulations. I further certify that if the materials destined for disposal identified in this preshipment manifest are regulated as controlled substances under the Controlled Substances Act, 21 USC 801 et seq., or any equivalent state law, that I will supply an individual to accompany these substances who is properly licensed by the U.S. Drug Enforcement Agency to possess them in a reverse distribution and destruction process and that the substances will remain in the possession, custody and control of such properly licensed person until they are destroyed.						
The wastes destined for disposal covered by this certification only contain the wastes approved under the approval number listed herein and do not contain any wastes identified by Wheelabrator as being not acceptable or not previously approved.						
Name:Signature:	_					
Title: Date: _						
Certificate of Destruction						
The material listed on this manifest has been received and	Wheelabrator Facility:					
destroyed as required by the generator. Address:						
The destruction of these materials was witnessed by:	The destruction of these materials was witnessed by: City, State Zip:					
Name:	Contact Name: Telephone:					
	. s.spiione.					
Signature	Date:					
Signature:						

Waste Shipment Information

Indicate each approval code and applicable waste information.

Approval #	Waste Description	Quantity	Packaging
			_
			-
			_
			_
			_
	_		
	<u> </u>		

At Golder Associates we strive to be the most respected global group of companies specializing in ground engineering and environmental services. Employee owned since our formation in 1960, we have created a unique culture with pride in ownership, resulting in long-term organizational stability. Golder professionals take the time to build an understanding of client needs and of the specific environments in which they operate. We continue to expand our technical capabilities and have experienced steady growth with employees now operating from offices located throughout Africa, Asia, Australasia, Europe, North America and South America.

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Asia + 852 2562 3658
Australasia + 61 3 8862 3500
Europe + 356 21 42 30 20
North America + 1 800 275 3281
South America + 55 21 3095 9500

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