0570127-002-AC RCVd 9-16-1997

## City of Tampa, Florida Environmental Services

McKay Bay Refuse-to-Energy Facility Air Pollution Control Equipment and Facility Improvements

Source Modification Construction Air Permit Application

**Volume II** 

Application for Air Permit-Long Form No. 62-210.900(1)

Prepared by:

Camp Dresser & McKee Inc.
Tampa, Florida

RTP Environmental Associates Inc.
Green Brook, New Jersey

September 1997



Section 1

# Department of Environmental Protection

## **DIVISION OF AIR RESOURCES MANAGEMENT**

## APPLICATION FOR AIR PERMIT - LONG FORM

## I. APPLICATION INFORMATION

## **Identification of Facility Addressed in This Application**

1. Facility Owner/Company Name:		
City of Tampa		
2 Sita Nama		
2. Site Name :		
McKay Bay Refuse-to-Energy Facility	,	
3. Facility Identification Number:	0570127	[ ] Unknown
4. Facility Location :		
McKay Bay Refuse-to-Energy Facility		
Street Address or Other Locator:	107 North 34th Street	
City: Tampa	County: Hillsborough	Zip Code: 33605-6210
5. Relocatable Facility?	6.	Existing Permitted Facility?
[ ] Yes [X] No		[X] Yes [] No

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## Owner/Authorized Representative or Responsible Official

	·	
1. Name and Title of Owner/Authorized Representative or Responsible Official:		
	Greco	
Title: Mayo	Or .	
2. Owner or Authorized Representa	tive or Responsible Official Mailing Address:	
Street Address: 30 City: Ta State: FI		
3. Owner/Authorized Representation	ve or Responsible Official Telephone Numbers:	
Telephone: (8	Fax: (813)274-8127	
4. Owner/Authorized Representative or Responsible Official Statement:  I, the undersigned, am the owner or authorized representative* of the non-Title V source addressed in this Application for Air Permit or the responsible official, as defined in Rule 62-210.200, F.A.C., of the Title V source addressed in this application, whichever is applicable. I hereby certify, based on information and belief formed after reasonable inquiry, that the statements made in this application are true, accurate and complete and that, to the best of my knowledge, any estimates of emissions reported in this application are based upon reasonable techniques for calculating emissions. The air pollutant emissions units and air pollution control equipment described in this application will be operated and maintained so as to comply with all applicable standards for control of air pollutant emissions found in the statutes of the State of Florida and rules of the Department of Environmental Protection and revisions thereof. I understand that a permit, if granted by the Department, cannot be transferred without authorization from the Department, and I will promptly notify the Department upon sale or legal transfer of any permitted emissions units.		

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<sup>\*</sup> Attach letter of authorization if not currently on file.

## **Scope of Application**

<b>Emissions Unit ID</b>	Description of Emissions Unit	Permit Type
101	Municipal Waste Combustion Unit #1	
102	Municipal Waste Combustion Unit #2	
103	Municipal Waste Combustion Unit #3	
104	Municipal Waste Combustion Unit #4	
105	Flyash Silo/Ash Handling System	
106	Lime Storage Silos	
107	Activated Carbon Storage Silo	
108	MWC Auxiliary Burner - Unit #1	
109	MWC Auxiliary Burner - Unit #2	
110	MWC Auxiliary Burner - Unit #3	
111	MWC Auxiliary Burner - Unit #4	

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## Purpose of Application and Category

Category I: All Air Operation Permit Applications Subject to Processing Under Chapter 62-213, F.A.C.
This Application for Air Permit is submitted to obtain:
[ ] Initial air operation permit under Chapter 62-213, F.A.C., for an existing facility which is classified as a Title V source.
[ ] Initial air operation permit under Chapter 62-213, F.A.C., for a facility which, upon start up one or more newly constructed or modified emissions units addressed in this application, would become classified as a Title V source.
Current construction permit number:
[ ] Air operation permit renewal under Chapter 62-213, F.A.C., for a Title V source.  Operation permit to be renewed:
[ ] Air operation permit revision for a Title V source to address one or more newly constructed modified emissions units addressed in this application.  Current construction permit number:
Operation permit to be revised:
[ ] Air operation permit revision or administrative correction for a Title V source to address one or more proposed new or modified emissions units and to be processed concurrently with the air construction permit application.
Operation permit to be revised/corrected:

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·	
[ ] Air operation permit revision for a Title V source for reasons of modification of an emissions unit.	her than construction or
Operation permit to be revised:	
	the state of the s
Reason for revision:	The second second
Category II: All Air Operation Permit Applications Subject to Proceed 62-210.300(2)(b), F.A.C.	ssing Under Rule
This Application for Air Permit is submitted to obtain:	
[ ] Initial air operation permit under Rule 62-210.300(2)(b), F.A.C seeking classification as a synthetic non-Title V source.	C., for an existing facility
Current operation/construction permit number(s):	
	1 4
[ ] Renewal air operation permit under Fule 62-210.300(2)(b), F.A source.	C., for a synthetic non-Title V
Operation permit to be renewed:	
[ ] Air operation permit revision for a synthetic non-Title V source.	
Operation permit to be revised:	
Reason for revision :	• .
Category III: All Air Construction Permit Applications for All Facil	ities and Emissions Units
This Application for Air Permit is submitted to obtain:	
[X] Air construction permit to construct or modify one or more emis (including any facility classified as a Title V source).	ssions units within a facility
I. Part 4 - 2 DEP Form No. 62-210.900(1) - Form Effective: 3-21-96	

Current operation permit number(s), if any : A029-206279

[ ] Air construction permit to make federally enforceable an assumed restriction on the potential emissions of one or more existing, permitted emissions units.

Current operation permit number(s):

[ ] Air construction permit for one or more existing, but unpermitted, emissions units.

#### **Application Processing Fee**

Check one	:

[X] Attached - Amount :

\$250.00

[ ] Not Applicable.

#### **Construction/Modification Information**

1. Description of Proposed Project or Alterations:

The facility's existing four mass-burn combustion units will be upgraded to achieve greater combustion control and improve combustion efficiency. The existing grate furnaces, rotary kilns, electrostatic precipitators (ESP) and ID fans will be replaced. The existing waste heat boiler may also be modified to be compatible with the new combustion system. The new air pollution control (APC) equipment consist of a spray dryer absorber (SDA), a fabric filter (FF), an activated carbon injection (ACI) system, and an ID fan installed downstream of each combustor. In addition, selective non-catalytic reduction (SNCR) systems and auxiliary fuel burners will be installed in the combustion zone of the furnaces. The two existing stacks will be replaced with a single new stack.

These facility enhancements will result in a net decrease in actual emissions. The City of Tampa is seeking, with this application, to modify its existing air permit (No. A029-206279). Because of more stringent requirements in the Emissions Guidelines for Municipal Waste Combustors (40 CFR 60 Subpart Cb as adopted in FAC 62-204.800(8)), and improvements made possible by the proposed retrofit, the proposed air emissions limits will be the same or lower that those in the existing permit. In addition, some new limits will be established for pollutants that have not been limited before. Table 1-1 in the Volume 1 of this application shows a comparison of existing and proposed emission limits.

2. Projected or Actual Date of Commencement of Construction:

12-Aug-1998

3. Projected Date of Completion of Construction:

21-Jan-2001

#### **Professional Engineer Certification**

1. Professional Engineer Name:

Douglas W. Fredericks

Registration Number:

44261

2. Professional Engineer Mailing Address:

Organization/Firm: Camp Dresser & McKee, Inc.

Street Address: 1715 N. Westshore Blvd. S#875

City: Tampa

State: FL Zip Code: 33602-

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3. Professional Engineer Telephone Numbers:

Telephone: (813)221-2900 Fax: (813)221-8787

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#### 4. Professional Engineer Statement:

- I, the undersigned, hereby certified, 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 pollutant control equipment described in this Application for Air Permit, when properly operated and maintained, will comply with all applicable standards for control of air pollutant emissions found in the Florida Statutes and rules of the Department of Environmental Protection; and
- (2) To the best of my knowledge, any emission estimates reported or relied on in this application are true, accurate, and complete and are either based upon reasonable techniques available for calculating emissions or, for emission estimates of hazardous air pollutants not regulated for an emissions unit addressed in this application, based solely upon the materials, information and calculations submitted with this application.

If the purpose of this application is to obtain a Title V source air operation permit (check here ] if so), I further certify that each emissions unit described in this Application for Air Permit, when properly operated and maintained, will comply with the applicable requirements identified in this application to which the unit is subject, except those emissions units for which a compliance schedule is submitted with this application.

If the purpose of this application is to obtain an air construction permit for one or more proposed new or modified emissions units (check here [X] if so), I further certify that the engineering features of each such emissions unit described in this application have been designed or examined by me or individuals under my direct supervision and found to be in conformity with sound engineering principles applicable to the control of emissions of the air pollutants characterized in this application.

If the purpose of this application is to obtain an initial air operation permit or operation permit revision for one or more newly constructed or modified emissions units (check here [ ] if so), I further certify that, with the exception of any changes detailed as part of this application, each such emissions 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.

\* Attach any exception to certification statement.

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#### **Application Contact**

1. Name and Title of Application Contact:

Name: Douglas W. Fredericks

Title: **Project Engineer** 

2. Application Contact Mailing Address:

Organization/Firm:

Camp Dresser & McKee, Inc.

Street Address:

1715 N Westshore Blvd Suite875

City:

Tampa

FL

State:

Zip Code:

33602-

3. Application Contact Telephone Numbers:

Telephone: (813)221-2900

Fax:

(813)221-8787

#### **Application Comment**

The City of Tampa is proposing to install new air pollution control (APC) equipment and make other improvements to the City's McKay Bay Refuseto Energy Facility (Facility). The proposed improvements (collectively "the Retrofit") will allow the Facility to meet the new emissions limits and monitoring requirements established by the U.S. EPA's Emissions Guidelines (EG) for large Municipal Waste Combustors (MWC), which are codified in 40 Code of Federal Regulations (CFR) Subpart Cb and adopted by the Florida Department of Environmental Protection (FDEP) in Florida Administrative Code (FAC) 62-204.800(8).

The proposed improvements to the APC equipment consist of replacing the existing electrostatic precipitators (ESP) with spray dry absorbers (SDA), fabric filters (FF), activated carbon injection (ACI) systems, and selective non-catalytic reduction (SNCR) systems. The new APC equipment will require storage silos for lime and carbon. Particulate matter (PM) emissions during silo filling operations will be controlled with fabric filter dust collectors. The City is also planning to improve and upgrade each MWC, most likely by replacing the existing grate furnaces, rotary kilns, and waste heat boilers. New bottom and fly ash handling systems will also be installed to support the new combustion and APC systems, and a new ash residue storage building will be constructed. The two existing 165-foot stacks (two units per stack) will be replaced by a single, multi-flued 201-foot stack.

With this application, the City is requesting amendments to its existing air permit (AO-29206279) and authorization to proceed with the Retrofit in compliance with the EG. Revisions to the existing operating

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permit required by the EG include:

New emission limits and/or averaging times for nearly all pollutants, including emission limits for pollutants not currently regulated by the existing permit [carbon monoxide (CO), dioxins/furans, hydrogen chloride (HCl), and cadmium (Cd)].

Continuous emissions monitoring (CEM) for sulfur dioxide (SO2), nitrogen oxides (NOx), and CO not currently required under the existing permit.

Annual compliance tests for pollutants not measured by CEM [PM, lead (Pb), mercury (Hg), Cd, HCl, dioxins/furans, and opacity for the MWC and fugitive sources], including some new pollutants and monitoring methods not included in the existing permit.

Real-time, continuous monitoring of Good Combustion Practices (GCP) parameters (steam or feedwater flow to precisely monitor MWC load and PM device inlet temperature) to minimize MWC organic emissions as well as other parameters such as carbon injection rates to ensure compliance with facility-specific requirements established by compliance tests.

In addition to the EG requirements, the City is proposing additional revisions to the existing operating permit for the Facility after the proposed improvements consistent with current industry practices and EG definitions as follows:

Replacement of the VOC limit with the EG requirement for GCP and continuous CO monitoring.

More accurate definition of the types of fuels allowed to be processed at the Facility consistent with the EG definition of municipal solid waste (MSW).

More complete description of the allowable MWC operating conditions which recognizes unit operations under a wide range of MSW heat contents.

Restricting auxiliary burner natural gas usage in each MWC to less than 10 percent of the total annual gross heat input to obviate the NOx monitoring and reporting requirements under 40 CFR 60 Subpart Db.

Requirement under 40 CFR 60 Subpart E to determine the amount of MSW combusted be determined on a daily average basis for each MWC using the Facility's truck scale weight data for a calendar month and MWC operating data for the same calendar month.

## Section 2

#### II. FACILITY INFORMATION

#### A. GENERAL FACILITY INFORMATION

#### Facility, Location, and Type

1. Facility UTM Coordinates:

Zone:

17

East (km):

360.20

North (km):

3092.21

2. Facility Latitude/Longitude:

Latitude (DD/MM/SS):

56

57

Longitude (DD/MM/SS):

82

25 15

3. Governmental

4. Facility Status

Code:

5. Facility Major Group SIC Code: 6. Facility SIC(s):

Facility Code:

Α

49

4953

7. Facility Comment:

#### **Facility Contact**

1. Name and Title of Facility Contact:

George Woodward Plant Manager

2. Facility Contact Mailing Address:

Organization/Firm:

McKay Bay Refuse-to-Energy Facility

Street Address:

107 N. 34th St.

City:

Tampa

State: FL Zip Code: 33605-6210

3. Facility Contact Telephone Numbers:

Telephone:

(813)248-1457

Fax: (813)247-2052

## **Facility Regulatory Classifications**

1. Small Business Stationary Source?	
1. Sman Business stationary source:	N
	14
2. Title V Source?	
	Y
	•
3. Synthetic Non-Title V Source?	
	N
	14
4. Major Source of Pollutants Other than Hazardous Air Pollutants (HAPs)?	
(	Y
	•
5. Synthetic Minor Source of Pollutants Other than HAPs?	
	N
	• •
6. Major Source of Hazardous Air Pollutants (HAPs)?	
(-1. 1. 5)	Y
	•
7. Synthetic Minor Source of HAPs?	
	N
	1,
8. One or More Emissions Units Subject to NSPS?	
,	Y
	•
9. One or More Emission Units Subject to NESHAP?	
J	N
	1,
10. Title V Source by EPA Designation?	
and the first of the second of	N
	1,
11. Facility Regulatory Classifications Comment:	
The second state of the second	
Section 2 of Volume 1 provides an air quality regulatory overview for the facility.	The list that
follows also appears in Appendix A with notes.	
Transfer of the second	

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## Rule Applicability Analysis

See Volume 1, Section 2

II. Part 3a - 1

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#### **List of Applicable Regulations**

40 CFR 82 Protection of Stratospheric Ozone

FAC 62-4 Permits

FAC 62-103 Rules of Administrative Procedure

FAC 62-210 Stationary Sources- General Requirements

FAC 62-210.300 Permits Required

FAC 62-210.300(3)(a)5 Exemption for internal combustion engines

FAC 62-210.300(3)(a)16 Exemption for brazing, soldering or welding equipment

FAC 62-210.300(3)(a)20-(3)(a)21 Exemption for emergency electrical generators, heating units, etc.

FAC 62-210.300(5) Notification of Startup

FAC 62-210.300(6) Emission Unit Reclassification

FAC 62-210.350 Public Notice and Comment

FAC 62-210.350(3) Additional Public Notice Requirements for Title V sources

FAC 62-210.360 Administrative Permit Corrections

FAC 62-210.370(3) Annual Operating Reports

II. Part 3b - 1

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## **List of Applicable Regulations**

FAC 62-210.550 (GEP) Stack Height Policy

FAC 62-210.650 Circumvention

FAC 62-210.700 Excess Emissions

FAC 62-210.900 Forms and Instructions

FAC 62-213 Operating Permits for Major Sources

FAC 62-256 Open Burning and Frost Protection Fires

FAC 62-296 Stationary Sources- Emission Standards

FAC 62-296.320(2) Objectionable Odor Prohibited

FAC 62-296.320(3) Industrial, Commercial, and Municipal Open Burning Prohibited

FAC 62-296.320(4)(c) Unconfined Emissions of Particulate Matter

FAC 62-296.416(3)(e) Specific Emission Limiting and Performance Standards for Mercury

FAC 62-296.320(4)(a) General Particulate Emission Limiting Standards

FAC 62-296.500 RACT - VOC and NOx Emitting Facilities Not Applicable

FAC 62-296.600 RACT - Lead Not Applicable

II. Part 3b - 2

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#### **List of Applicable Regulations**

FAC 62-296.700 RACT - Particulate matter

40 CFR 60 Subpart A New Source Performance Standards - General Provisions

40 CFR 60 Subpart E Standards of Performance for Incinerators

FAC 62-210.700 Excess Emissions

FAC 62-296.320(4)(b) General Visible Emission Standards

FAC 62-296.401(3) Specific Emission Limiting and Performance Standards Requirements for Incinerators

FAC 62-297.310(1) Required Number of Tests

FAC 62-297.310(2) Operating Rate during testing

FAC 62-297.310(3) Calculation of Emission Rate

FAC 62-297.310(4) Applicable Test Procedures

FAC 62-297(5) Required Stack Sampling Facilities

FAC 62.297.310(6) Frequency of Compliance Tests

FAC 62-297.310(7) Test Reports

40 CFR 50 Ambient Air Quality Standards

II. Part 3b - 3

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## **List of Applicable Regulations**

FAC 62-204.800(8) Emissions Guidelines for Municipal Waste Combustors incorporated by reference

40 CFR 60 Subpart Cb Emissions Guidelines for Existing Municipal Waste Combustors (MWCs)

40 CFR 60 Subpart Db Standards of Performance for Industrial-Commercial-Institutional Steam Generati

40 CFR 61 National Emission Standards for Hazardous Air Pollutants (NESHAP)

FAC-62-212 Stationary Sources Preconstruction Review

II. Part 3b - 4

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## C. FACILITY POLLUTANTS

## **Facility Pollutant Information**

1. Pollutant Emitted	2. Pollutant Classification
SO2	A
NOX	A
CO .	A
H107	A
PM	В
РВ	В
H114	В
H027	В
H021	В
DIOX	В
HCL	A

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Facility Pollutant Information	Pollutant 1	
1. Pollutant Emitted:	SO2	
2. Requested Emissions Cap:		
	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code		
4. Facility Pollutant Comment:		
No emissions cap is requested. T	The pollutant is subject to limitation in the EG.	

Facility Pollutant Information	Pollutant2	
1. Pollutant Emitted: NOX		
2. Requested Emissions Cap:	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment:		
No emissions cap is requested. The pol	llutant is subject to limitation in the	e EG.

Facility Pollutant Information	Pollutant 3	
1. Pollutant Emitted: CO		
2. Requested Emissions Cap:	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:	1	
4. Facility Pollutant Comment:  No emission cap is requested. The pollut	tant is subject to limitation in the	e EG.

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Facility Pollutant Information	Pollutant 4	
1. Pollutant Emitted: H107		
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment:  No emissions cap is requested. The po	Ilutant is subject to limitation in the	existing operating permit.
•	Ilutant is subject to limitation in the	existing operating permit.

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Facility Pollutant Information	Pollutant5	
1. Pollutant Emitted: PM		
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment:		
No emissions cap is requested. The poll	utant is subject to limitation in the	e EG.

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Facility Pollutant Information	Pollutant 7	
1. Pollutant Emitted: PB		
2. Requested Emissions Cap:	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment:		
No emissions cap is requested. The pollu	tant is subject to limitation in the E	G.

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Facility Pollutant Information	Pollutant 8	
1. Pollutant Emitted:	H114	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code	:	
4. Facility Pollutant Comment:		
No emissions cap is requested. T	he pollutant is subject to limitation in the E	G.

Facility Pollutant Information	Pollutant 9	
1. Pollutant Emitted: H027		
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment:		E.C.
No emissions cap is requested. The pol	nutant is subject to limitation in the	EG.

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Facility Pollutant Information	Pollutant 10	
1. Pollutant Emitted: H021		
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment:		
No emissions cap is requested. The pollut	ant is subject to limitation in	the existing operating permit.

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Facility Pollutant Information	Pollutant 11 11	
1. Pollutant Emitted: DIC	Σ	
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code:		
4. Facility Pollutant Comment:  No emissions cap is requested. The	pollutant is subject to limitation in the	EG.

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Facility Pollutant Information	Pollutant 12	
1. Pollutant Emitted: HCL		_
2. Requested Emissions Cap :	(lbs/hour)	(tons/year)
3. Basis for Emissions Cap Code :		
4. Facility Pollutant Comment:		
No emissions cap is requested. The poll	utant is subject to limitation in the	e EG.

## D. FACILITY SUPPLEMENTAL INFORMATION

## **Supplemental Requirements for All Applications**

1. Area Map Showing Facility Location:	Append. A Fig 1
2. Facility Plot Plan:	Append. A Fig 2
3. Process Flow Diagram(s):	Append. A Fig 3
4. Precautions to Prevent Emissions of Unconfined Particulate Matter :	Append. A Att 1
5. Fugitive Emissions Identification:	Append A, Att 2
6. Supplemental Information for Construction Permit Application :	Volume 1

## Additional Supplemental Requirements for Category I Applications Only

7. List of Proposed Exempt Activities:	NA	
8. List of Equipment/Activities Regulated under Title VI:	NA	
9. Alternative Methods of Operation :	NA	
10. Alternative Modes of Operation (Emissions Trading):	NA	
11. Identification of Additional Applicable Requirements :	NA	
12. Compliance Assurance Monitoring Plan :	NA	
13. Risk Management Plan Verification :	NA	
14. Compliance Report and Plan :	NA	
15. Compliance Certification (Hard-copy Required) :	NA	

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## III. EMISSIONS UNIT INFORMATION

## A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissio	ns Unit Information Section 1
Municipa	al Waste Combustion Unit #1
Type of	Emissions Unit Addressed in This Section
1. Regu	lated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Singl	e Process, Group of Processes, or Fugitive Only? Check one :
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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<b>Emissions Unit Information Section</b> 1
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## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

## **Emissions Unit Description and Status**

1. Description of Emissions Unit	t Addressed in This Section:	
Municipal Waste Combustion U	nit #1	•
2. Emissions Unit Identification	Number: 101	
[ ] No Corresponding ID [ ] Unknown		
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major
Code: A	[ ] Yes [X] No	Group SIC Code: 49
6. Emissions Unit Comment :  This combustion unit will have	a dedicated flue in a single four-fl	ue stack.
This compassion and will have	a acateatea flac in a single four fl	

III. Part 2 - 1

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<b>Emissions Unit Information Section</b>	1
Municipal Waste Combustion Unit #1	

<b>Emissions Unit</b>	Control Equipment	1
-----------------------	-------------------	---

1. Description:			
Fabric Filter			
•			
2. Control Device or Method Code :	16		

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Emissions Unit Information Section	1
Municipal Waste Combustion Unit #1	

**Emissions Unit Control Equipment** 

1. Description:	
Spray Dryer Absorber	
·	
2. Control Device or Method Code:	41

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<b>Emissions Unit Information Section</b>	1
Municipal Waste Combustion Unit #1	

#### **Emissions Unit Control Equipment**

1.	Description:	
	Selective Non-Catalytic Reduction System	
2.	Control Device or Method Code:	107

III. Part 3 - 3

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Municipal Waste Combustion Unit #1	
Emissions Unit Control Equipment 4	
1. Description:	
Activated Carbon Injection	
2. Control Device or Method Code: 48	

1

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**Emissions Unit Information Section** 

<b>Emissions Unit Information Section</b>	2
Municipal Waste Combustion Unit #2	

#### **Emissions Unit Control Equipment** 1

1. Description:	
Fabric Filter	
2. Control Device or Method Code :	16

### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

<b>Emissions Unit Information Section</b>	1
Municipal Waste Combustion Unit #1	

#### **Emissions Unit Details**

1. Initial Startup Date:	22-Jan-2001	
2. Long-term Reserve Shutdown Date :		
3. Package Unit:		· · · · · · · · · · · · · · · · · · ·
Manufacturer: To be provided once a vene	dor is selected	Model Number: To be provided
4. Generator Nameplate Rating:	MW	
5. Incinerator Information :		
Dwell Temperature:		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature:		Degrees Fahrenheit

#### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate :	120	mmBtu	/hr	
2. Maximum Incinerator Rate :	23958.33	lb/hr	287.50	tons/day
3. Maximum Process or Throughpu	it Rate :			
4. Maximum Production Rate:	23858		lbs/hour steam	
5. Operating Capacity Comment: See operating window in Section 6	of Volume 1.			

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule :				
	24 hours/day	7 days/week		
	52 weeks/year	8,760 hours/year		

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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #1	1
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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#### **Emissions Unit Information Section**

1

Municipal Waste Combustion Unit #1

#### **List of Applicable Regulations**

Refer to Volume 1, Section 2

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#### E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 1		
Municipal Waste Combustion Unit #1		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram :	See Vol. 1 Fi	ig 6-4
2. Emission Point Type Code: 2		
3. Descriptions of Emission Points Comprising this Emissio (limit to 100 characters per point) Not Applicable for sources with single emission points	ns Unit for VE	E Tracking:
4. ID Numbers or Descriptions of Emission Units with this	Emission Poin	t in Common :
Emission units 1-4 will have a dedicted flue within a common	n stack.	
5. Discharge Type Code :	V	
6. Stack Height:	201	feet
7. Exit Diameter :	4.2	feet
8. Exit Temperature :	289	°F
9. Actual Volumetric Flow Rate :	. 60894	acfm
10. Percent Water Vapor:	14.77	%
11. Maximum Dry Standard Flow Rate:	36686	dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone: 17 East (km): 360.196	North (kr	n): 3092.208
14. Emission Point Comment :		

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#### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 1
Municipal Waste Combustion Unit #1
Segment Description and Rate: Segment 1
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):
The new municipal waste combustion units will have either a refractory, rotary waterwall, or a stoker waterwall furnace.
2. Source Classification Code (SCC): 5-01-999-99
3. SCC Units: Tons Burned (all solid fuels)
4. Maximum Hourly Rate: 11.98 5. Maximum Annual Rate: 104,937.50
6. Estimated Annual Activity Factor: 100.00
7. Maximum Percent Sulfur : 8. Maximum Percent Ash :
9. Million Btu per SCC Unit: 10
10. Segment Comment :

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### G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Information Section**

I

Municipal Waste Combustion Unit #1

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - SO2	041	016	: EL
2 - NOX	107		EL
3 - CO			EL
4 - VOC			EL
5 - H114	048	016	EL
6 - H027	016 .		EL
7 - H021	016		EL
8 - HCL	041	016	EL
9 - H107	041	016	EL
10 - DIOX	041	016	EL
11 - PB	016		EL

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### G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>	1
Municipal Waste Combustion Unit #1	

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
12 - PM	016		EL

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	nissions Unit Information Section 1 unicipal Waste Combustion Unit #1
	Ilutant Potential/Estimated Emissions: Pollutant 1
1.	Pollutant Emitted: SO2
2.	Total Percent Efficiency of Control: 75.00 %
3.	Potential Emissions:
	40.85 lb/hour 178.95 tons/year
4.	Synthetically Limited?
	[ ] Yes [X ] No
5.	Range of Estimated Fugitive/Other Emissions:
	to tons/year
6.	Emissions Factor:  Reference: Emissions Guidelines
7.	Emissions Method Code: 0
8.	Calculations of Emissions :
	See Volume 1, Appendix B
9.	Pollutant Potential/Estimated Emissions Comment :
	The Emission Guidelines specifies a 75% removal or a concentration of 29 ppmdv @ 7% O2, whichever is less stringent. Based on a 600 ppmdv maximum inlet, the percent removal basis is less stringent.

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<b>Emissions Unit Inform</b> Municipal Waste Combu		1		
Pollutant Information S	Section 1			
Allowable Emissions	1			
1. Basis for Allowable	Emissions Code :	RULE		
2. Future Effective Date	of Allowable Emis	sions :		
3. Requested Allowable	Emissions and Uni	ts: 75.00	per	cent removal
4. Equivalent Allowable	e Emissions :			
	40.87	lb/hour	179.00	tons/year
5. Method of Complian	ce:			
Continuous Emission	Monitors			
6. Pollutant Allowable	Emissions Comment	t (Desc. of Related	Operating Me	thod/Mode):
Allowable emission is	based on a 75% remo	oval of 600 ppmdv in	let @ 7% O2.	

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Municipal Waste Combustion Unit #1		
Pollutant Potential/Estimated Emissions: Pollutant	2	
1. Pollutant Emitted: NOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 40.10 lb/hour	175.65	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor : Reference : Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment :		
Emissions Guidelines for large MWCs		

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DEP Form No. 62-210.900(1) - Form

	nissions Unit Information Section  unicipal Waste Combustion Unit #1
Po	ollutant Information Section 2
<u>Al</u>	lowable Emissions 1
1.	Basis for Allowable Emissions Code: RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 205.00 ppmdv @ 7% O2
4.	Equivalent Allowable Emissions:
	40.11 lb/hour 175.69 tons/year
5.	Method of Compliance:
	Continuous Emissions Monitor
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
	Allowable emissions request is based on the Emissions Guidelines for MWCs.

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1		
Pollutant Potential/Estimated Emissions: Pollutant	3	
1. Pollutant Emitted: CO		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 11.91 lb/hour	52.18	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	o tons/year
6. Emissions Factor : Reference : Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment :		
Based on Emissions Guidelines for large MWCs.		

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Pollutant Information Section 3						
Allowable Emissions 1						
1. Basis for Allowable Emissions Code:	RULE					
2. Future Effective Date of Allowable Emissio	ns:					
3. Requested Allowable Emissions and Units:	100.00	pp	mdv @ 7% O2			
4. Equivalent Allowable Emissions:			_			
11.91	lb/hour	52.18	tons/year			
5. Method of Compliance :						
Continuous Emission Monitor						
6. Pollutant Allowable Emissions Comment (I	Desc. of Related	Operating Me	ethod/Mode):			
The allowable emissions is based on the Emissi		-	,			

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	missions Unit Information Section unicipal Waste Combustion Unit #1	1			
<u>Po</u>	llutant Potential/Estimated Emissions	s: Pollutant	4		
1.	Pollutant Emitted: VOC				
2.	Total Percent Efficiency of Control:		%		
3.	Potential Emissions:				
	2.25	lb/hour	9.86	tons/year	
4.	Synthetically Limited? [ ] Yes [X ] No				
5.	Range of Estimated Fugitive/Other En	nissions:			
			t	0	tons/year
6.	Emissions Factor: Reference: current permit li	mit			
7.	Emissions Method Code: 0				,
8.	Calculations of Emissions :				
	See Appendix B of Volume 1.				
9.	Pollutant Potential/Estimated Emission	ns Comment :			

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Emissions Unit Information See Municipal Waste Combustion Un		_		
Pollutant Information Section	4			
Allowable Emissions 1	-			
1. Basis for Allowable Emission	s Code :	OTHER	_	
2. Future Effective Date of Allo	wable Emission	s:		
3. Requested Allowable Emission	ons and Units :			
4. Equivalent Allowable Emission	ons :	_		
	2.25	lb/hour	9.86	tons/year
5. Method of Compliance :				
Methods 18A or 25A				
6. Pollutant Allowable Emission	s Comment (D	esc. of Related Op	perating Meth	od/Mode):
Requested emission limit is bas	ed on the existing	g permit limit (AO	29-206279).	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1	
Pollutant Potential/Estimated Emissions: Pollutant 5	
1. Pollutant Emitted: H114	
2. Total Percent Efficiency of Control: 85.00 %	
3. Potential Emissions : lb/hour	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No	
5. Range of Estimated Fugitive/Other Emissions:	to tons/year
6. Emissions Factor : Reference : Emissions Guidelines	
7. Emissions Method Code :	
8. Calculations of Emissions:	
See Appendix B of Volume 1	
9. Pollutant Potential/Estimated Emissions Comment:	
The combination of the State Mercury Rile and the Emissions Guidelic concentration of 70 ug/dscm, whichever is less stringent. Based on a grant maximum inlet, the percent removal basis is less stringent.	• •
Item No. 3, above: Potential Emissions: 0.014 lb/hour 0.061 tons/year (ELSA does not permit enough digits in this line.)	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1	-	
Pollutant Information Section 5		
Allowable Emissions 1		
1. Basis for Allowable Emissions Code:	RULE	
2. Future Effective Date of Allowable Emissions	:	
3. Requested Allowable Emissions and Units:	85.00	percent removal
4. Equivalent Allowable Emissions :		
11	o/hour	tons/year
5. Method of Compliance:		
Method 29		
6. Pollutant Allowable Emissions Comment (Des	sc. of Related Oper	ating Method/Mode):
Allowable emission limit is based on the Emission maximum inlet concentration of 900 ug/dscm @ '		WC, and 85% removal of a
Item No. 4, above: Equivalent Allowable Emissions: 0.0014 lb/hour 0.061 tons/year (ELSA does not allow enough digits in this line)		

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Municipal Waste Combustion Unit #1		
Pollutant Potential/Estimated Emissions: Pollutant	6	
1. Pollutant Emitted: H027		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : lb/hour		tons/year
4. Synthetically Limited? [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor: Reference: Emissions Guidelines		<del>-</del>
7. Emissions Method Code: 0		
8. Calculations of Emissions:		
See Appendix B, Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:		
Item No. 3, above:		
Potential Emissions: 0.00409 lb/hour 0.018 tons/year		
(ELSA does not allow enough digits in this line.)		

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Emissions Unit Information Section Municipal Waste Combustion Unit #1	1	
Pollutant Information Section 6		
Allowable Emissions 1	_	
1. Basis for Allowable Emissions Code :	RULE	<del> </del>
2. Future Effective Date of Allowable Em	nissions :	
3. Requested Allowable Emissions and U	Inits: 40.00	ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :		
	lb/hour	tons/year
5. Method of Compliance:		
Method 29		
6. Pollutant Allowable Emissions Commo	ent (Desc. of Related Oper	rating Method/Mode):
The allowable emission limit is based on	the Emissions Guidelines fo	r large MWCs.
Item No. 4, above:		
Equivalent Allowable Emissions: 0.00409 lb/hour 0.018 tons/year		
(FI SA does not allow enough digits in th	is line )	

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Municipal Waste Combustion Unit #1		
Pollutant Potential/Estimated Emissions: Pollutant	7	
1. Pollutant Emitted: H021	_	
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : lb/hour		tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor : Reference : Current permit limit		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B, Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:		
Item No. 3, above:		
Potential Emissions: 0.000115 lb/hour 0.000504 tons/year		
(ELSA does not allow enough digits in this line.)		

DEP Form No. 62-210.900(1) - Form

Emissions Unit Information Section  Municipal Waste Combustion Unit #1	1	
Pollutant Information Section 7		
Allowable Emissions 1		
1. Basis for Allowable Emissions Code:	OTHER	
2. Future Effective Date of Allowable Emis	ssions :	
3. Requested Allowable Emissions and Uni	its: 1.15	10-4 lb/hour
4. Equivalent Allowable Emissions :		
	lb/hour	tons/year
5. Method of Compliance :		
Method 29		
6. Pollutant Allowable Emissions Commen	nt (Desc. of Related Operation	ng Method/Mode):
The allowable emission limit requested is ba	ased on the existing permit lim	nit (AO 29-206279).
Item No. 4, above: Equivalent Allowable Emissions: 0.000115 lb/hour 0.000504 tons/year (ELSA does not allow enough digits in this	line.)	

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Emissions Unit Information Section Municipal Waste Combustion Unit #1	1		
Pollutant Potential/Estimated Emissions:	Pollutant	8	
1. Pollutant Emitted: HCL			
2. Total Percent Efficiency of Control:	95.00	%	
3. Potential Emissions :			
15.51	b/hour	67.92	tons/year
4. Synthetically Limited?			
[ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other Emiss	sions:		
		to	tons/year
6. Emissions Factor : Reference : Emissions Guidelin	es		
7. Emissions Method Code: 0			
8. Calculations of Emissions:			
See Appendix B of Volume 1.			
9. Pollutant Potential/Estimated Emissions (	Comment :		
The Emissions Guidelines specify a 95% re whichever is less. Based on a 2000 ppmdv less stringent.			

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1	_			
Pollutant Information Section 8				
Allowable Emissions 1				
1. Basis for Allowable Emissions Code:	RULE			
2. Future Effective Date of Allowable Emissions	<u>s</u> :			_
3. Requested Allowable Emissions and Units :	95.00	peı	cent removal	_
4. Equivalent Allowable Emissions :				
15.51 1	lb/hour	67.92	tons/year	
5. Method of Compliance :				
Methods 26 and 26A				
6. Pollutant Allowable Emissions Comment (De	esc. of Related C	perating Me	thod/Mode):	
The emission limit requested is based on a 95% r	removal of a 2000	ppmdv inlet	@ 7% O2.	

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	nissions Unit Info unicipal Waste Comb		ion <u>1</u>		
<u>Po</u>	llutant Potential/E	stimated Emiss	ions : Pollutan	t <u>9</u>	
1.	Pollutant Emitted	H107			
2.	Total Percent Effic	ciency of Control	1:	%	
3.	Potential Emission	s:	lb/hour	6.57	tons/year
4.	Synthetically Limi [ ] Yes	ted? [X ] No			
5.	Range of Estimate	d Fugitive/Other	Emissions:	to	tons/year
6.	Emissions Factor : Reference :		it limit		
7.	Emissions Method	Code: 0			
8.	Calculations of En	nissions :			
	See Appendix A of	f Volume 1			
9.	Pollutant Potential	/Estimated Emis	sions Comment :		,

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1	_		
Pollutant Information Section 9			
Allowable Emissions 1			
1. Basis for Allowable Emissions Code:	OTHER		
2. Future Effective Date of Allowable Emission	as:		
3. Requested Allowable Emissions and Units:	1.50	lb/hr	
4. Equivalent Allowable Emissions :			
1.50	lb/hour	6.57	tons/year
5. Method of Compliance:		*	
6. Pollutant Allowable Emissions Comment (De	esc. of Related O	perating Metho	od/Mode):
Emission limit is based on current permit limits	(AO 29-206279).		

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1			
Pollutant Potential/Estimated Emissions: Pollutant	10		
1. Pollutant Emitted: DIOX			
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:			
lb/hour			tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		_	
5. Range of Estimated Fugitive/Other Emissions:	-		
		to	tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb			
7. Emissions Method Code: 0	-		
8. Calculations of Emissions :			
See Appendix B of Volume 1.			
9. Pollutant Potential/Estimated Emissions Comment :			
Item No. 3 above:			
Potential emissions:			
3.07 x 10-6 lb/hour 1.34 x 10-5 tons/year (ELSA does not permit entry of this many digits in this line	ne.)		

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Emissions Unit Information Section  Municipal Waste Combustion Unit #1		
Pollutant Information Section 10		
Allowable Emissions 1		
1. Basis for Allowable Emissions Code:	RULE	
2. Future Effective Date of Allowable Emissions :		
3. Requested Allowable Emissions and Units :	30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions :		
lb/	hour	tons/year
5. Method of Compliance :		
Method 23		
6. Pollutant Allowable Emissions Comment (Desc	c. of Related Oper	rating Method/Mode):
The allowable emissions limit is based on the Emis	sions Guidelines fo	or large MWCs.
Item No. 4., above:		
Eqauivalent Allowable Emissions:		
3.07 x 10 -6 lb/hour 1.34 x 10-5 tons/year		
(ELSA does not permit this many digits in this line	-	
(ELSA does not allow entry of this many digits in t	mai iine.)	

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	nissions Unit Information Section Inicipal Waste Combustion Unit #1
<u>Po</u>	llutant Potential/Estimated Emissions: Pollutant 11
1.	Pollutant Emitted: PB
2.	Total Percent Efficiency of Control: %
3.	Potential Emissions:  0.05 lb/hour 0.20 tons/year
4.	Synthetically Limited? [ ] Yes [X ] No
5.	Range of Estimated Fugitive/Other Emissions:  to tons/year
6.	Emissions Factor: Reference: Emissions Guidelines
7.	Emissions Method Code: 0
8.	Calculations of Emissions:
	See Appendix B of Volume 1.
9.	Pollutant Potential/Estimated Emissions Comment:

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	issions Unit Information Section  1  nicipal Waste Combustion Unit #1
Po	utant Information Section 11
<u>Al</u>	owable Emissions 1
1.	Basis for Allowable Emissions Code : RULE
2.	Future Effective Date of Allowable Emissions :
3.	Requested Allowable Emissions and Units: 440.00 ug/dscm @ 7% O2
4.	Equivalent Allowable Emissions :
	0.05 lb/hour 0.20 tons/year
5.	Method of Compliance:
	Method 29
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
	The emission limit requested is based on the Emissions Guidelines for large MWCs.

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	unicipal Waste Combustion Unit #1			
<u>Po</u>	Ilutant Potential/Estimated Emissions: Pollut	tant12		
1.	Pollutant Emitted: PM			
2.	Total Percent Efficiency of Control:	%		
3.	Potential Emissions:			
	2.81 lb/hour	12.31	tons/y	year
4.	Synthetically Limited? [ ] Yes [X ] No			
5	Range of Estimated Fugitive/Other Emissions:			
J.	range of Estimated Lagraves office Emissions.		to	tons/year
6.	Emissions Factor:			
	Reference: Emissions Guidelines			
7.	Emissions Method Code: 0			
8.	Calculations of Emissions:			
	See Appendix B of Volume 1.			
9.	Pollutant Potential/Estimated Emissions Commen	t:		

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	ons Unit Information Spal Waste Combustion U		1			
Polluta	nt Information Section	12				
Allowa	ble Emissions 1	_				
1. Bas	is for Allowable Emission	ons Code :	RULE			
2. Fut	ure Effective Date of All	owable Emissic	ons :			
3. Rec	uested Allowable Emiss	ions and Units	: 0.01	gr/o	lscf @ 7% O2	
4. Equ	ivalent Allowable Emiss	sions:				_
		2.81	lb/hour	12.31	tons/year	
5. Me	thod of Compliance:					
Me	thod 5					
6. Pol	lutant Allowable Emissic	ons Comment (I	Desc. of Related (	Operating Me	thod/Mode):	
The	requested allowable limit	is 0.12 gr/dscf @	97% O2. This num	nber does not f	it in field # 3 above.	

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#### I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section  Municipal Waste Combustion Unit #1	
<u>Visible Emissions Limitation</u> : Visible Emissions Limitation	1
1. Visible Emissions Subtype: 15	
2. Basis for Allowable Opacity: OTHER	
3. Requested Allowable Opacity:	
Normal Conditions: 10	%
Exceptional Conditions:	%
Maximum Period of Excess Opacity Allowed:	min/hour
4. Method of Compliance :	
Method 9 and Continuous Opacity Monitor	
5. Visible Emissions Comment:	
The opacity limit is based on Emissions Guidelines for large MWC	units.

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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

1. Parameter Code: VE	2. Pollutant :
3. CMS Requirement: RULE	
4. Monitor Information :	
Manufacturer:	
Model Number:	
Serial Number:	
5. Installation Date :	
6. Performance Specification Test Date	<u> </u>
5. Terrormance Specification Test Date	•

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## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section 1 Municipal Waste Combustion Unit #1  Continuous Monitoring System: Continuous Monitor 2			
1. Parameter Code: EM	2. Pollutant : CO		
3. CMS Requirement: RULE			
4. Monitor Information :  Manufacturer :  Model Number :  Serial Number :			
5. Installation Date :			
6. Performance Specification Test Date :			
7. Continuous Monitor Comment :			
Information above to be provided.			

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### J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section 1 Municipal Waste Combustion Unit #1			
Continuous Monitoring System: Continuous 1. Parameter Code: EM	2. Pollutant: NOX		
3. CMS Requirement :			
4. Monitor Information :			
Manufacturer : Model Number : Serial Number :			
5. Installation Date :			
6. Performance Specification Test Date :			
7. Continuous Monitor Comment :			
Information above to be provided.			

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## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Municipal Waste Combustion Unit #1					
Continuous Monitoring System: Conti	Continuous Monitoring System: Continuous Monitor 4				
1. Parameter Code: EM	2. Pollutant: SO2				
3. CMS Requirement :	<u>'</u>				
4. Monitor Information :					
Manufacturer:					
Model Number:					
Serial Number :					
5. Installation Date :					
6. Performance Specification Test Date :					
7. Continuous Monitor Comment :					
, . Common months					
Information above to be provided.					

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

En	Emissions Unit Information Section 1		
Mu	Municipal Waste Combustion Unit #1		
<u>PS</u>	<u>D</u>	Increment Consumption Determination	
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?	
[	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.	
[	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.	
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.	
]	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.	
[ X	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.	

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[X]	The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emiss unit consumes increment.	
[ ]	The facility addressed in this application is classified as an EPA major source pursuant to	

2. Increment Consuming for Nitrogen Dioxide?

[	]	The facility addressed in this application is classified as an EPA major source pursuant to
		paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C.,
		and the emissions unit addressed in this section commenced (or will commence) construction
		after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes
		increment.

[	]	The facility addressed in this application is classified as an EPA major source, and the		
		emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If		
		so, baseline emissions are zero, and emissions unit consumes increment.		

- [ ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- [ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Increment Consumi	ing/Expanding Code:		
PM: 0	SO2: C	NO2: E	
4. Baseline Emissions	:		
PM:	0.0000 lb/hour	0.0000 tons/year	
SO2:	0.0000 lb/hour	0.0000 tons/year	
NO2:		189.7000 tons/year	
5. PSD Comment :		<u></u>	
	III. Part 12 - 14		

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III. Part 12 - 15

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Municipal waste Combustion Unit #1				
Supplemental Requirements for All Applications	Supplemental Requirements for All Applications			
1. Process Flow Diagram:	App. A, Fig. 3			
2. Fuel Analysis or Specification:	Vol. 1, Sect. 6			
3. Detailed Description of Control Equipment :	To be provided.			
4. Description of Stack Sampling Facilities :	To be provided.			
5. Compliance Test Report :	NA			
6. Procedures for Startup and Shutdown:	NA			
7. Operation and Maintenance Plan :	NA			
8. Supplemental Information for Construction Permit Application :	NA			
9. Other Information Required by Rule or Statue :	NA			
Additional Supplemental Requirements for Category I Application	ns Only			
10. Alternative Methods of Operations :	NA			
11. Alterntive Modes of Operation (Emissions Trading):	NA			
·				

III. Part 13 - 1

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**Emissions Unit Information Section** 

12. Identification of A	Additional Applicable Requirements:	NA	
13. Compliance Assu Plan :	rance Monitoring	NA	
14. Acid Rain Application (Hard-copy Required):			
NA	Acid Rain Part - Phase II	(Form No. 62-210.900(1)(a))	
NA	Repowering Extension Pl	an (Form No. 62-210.900(1)(a)1.)	
NA	New Unit Exemption (Fo	rm No. 62-210.900(1)(a)2.)	
NA	Retired Unit Exemption (	Form No. 62-210.900(1)(a)3.)	

DEP Form No. 62-210.900(1) - Form

### III. EMISSIONS UNIT INFORMATION

### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 2					
Municipal Waste Combustion Unit #2					
Type of Emissions Unit Addressed in This Section					
1. Regulated or Unregulated Emissions Unit? Check one:					
[X] The emissions unit addressed in this Emissions Unit Information Section is a regular emissions unit.	ated				
[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregemissions unit.	gulated				
2. Single Process, Group of Processes, or Fugitive Only? Check one:					
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a sir process or production unit, or activity, which produces one or more air pollutants are has at least one definable emission point (stack or vent).	-				
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a graphocess or production units and activities which has at least one definable emission (stack or vent) but may also produce fugitive emissions.	_				
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one process or production units and activities which produce fugitive emissions only.	or more				

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### B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :		
Municipal Waste Combustion Ur	nit #2	
2. Emissions Unit Identification	Number: 102	
[ ] No Corresponding I	D [ ] U	nknown
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major
Code: A	[ ] Yes [X] No	Group SIC Code: 49
6. Emissions Unit Comment :		
This combustion unit will have a dedicated flue in a single four-flue stack.		

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<b>Emissions Unit Information Section</b>	2
Municipal Waste Combustion Unit #2	

### **Emissions Unit Control Equipment** 1

1. Description:			
Fabric Filter			
2. Control Device or Method Code:	16		
•			

III. Part 3 -

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Municipal Waste Combustion Unit #2	
Emissions Unit Control Equipment	2
1. Description:	
Spray Dryer Absorber	ı
2. Control Device or Method Code :	41

III. Part 3 - 2

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<b>Emissions Unit Information Section</b>	2
Municipal Waste Combustion Unit #2	

### **Emissions Unit Control Equipment**

1. Description:	
Selective Non-Catalytic Reduction System	
2. Control Device or Method Code :	107

Emissions Unit Information Section Municipal Waste Combustion Unit #2	
Emissions Unit Control Equipment	4
1. Description:	
Activated Carbon Injection	
2. Control Device or Method Code :	48

III. Part 3 -

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### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

<b>Emissions Unit Information Section</b>	2
Municipal Waste Combustion Unit #2	

### **Emissions Unit Details**

1. Initial Startup Date:	22-Jan-2001	
2. Long-term Reserve Shutdown Date :		
3. Package Unit:  Manufacturer: To be provided once a v	endor is selected	Model Number: To be provided
4. Generator Nameplate Rating:	MW	
5. Incinerator Information:		
Dwell Temperature:		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate:	120	mmBtu	ı/hr	
2. Maximum Incinerator Rate:	23958.33	lb/hr	287.50	tons/day
3. Maximum Process or Throughpu	ıt Rate :			
4. Maximum Production Rate:	23858		lbs/hour steam	
5. Operating Capacity Comment: See operating window in Section 6	of Volume 1.			

### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:			
	24 hours/day	7 days/week	
	52 weeks/year	8,760 hours/year	

III. Part 4 - 2

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### D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #2	
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

III. Part 6a - 2

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### **Emissions Unit Information Section**

Municipal Waste Combustion Unit #2

### List of Applicable Regulations

Refer to Volume 1, Section 2

III. Part 6b - 2

2

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### E. EMISSION POINT (STACK/VENT) INFORMATION

2

Municipal Waste Combustion Unit #2		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram :	See Vol. 1 Fi	ig 6-4
2. Emission Point Type Code : 2		
3. Descriptions of Emission Points Comprising this Emission (limit to 100 characters per point)  Not Applicable for sources with single emission points	ns Unit for VE	E Tracking:
4. ID Numbers or Descriptions of Emission Units with this I	Emission Point	t in Common :
Emission units 1-4 will have a dedicted flue within a common	stack.	
5. Discharge Type Code:	V	
6. Stack Height:	201	feet
7. Exit Diameter :	4.2	feet
8. Exit Temperature :	289	°F
9. Actual Volumetric Flow Rate:	60894	acfm
10. Percent Water Vapor:	14.77	%
11. Maximum Dry Standard Flow Rate:	36686	dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		·
Zone: 17 East (km): 360.196	North (kr	m): 3092.208
14. Emission Point Comment :		

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**Emissions Unit Information Section** 

### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 2	
Municipal Waste Combustion Unit #2	
Segment Description and Rate: Segment	1
1. Segment Description (Process/Fuel Type and Ass	ociated Operating Method/Mode):
The new municipal waste combustion units will have waterwall furnace.	either a refractory, rotary waterwall, or a stoker
2. Source Classification Code (SCC): 5-01-999-	99
3. SCC Units: Tons Burned (all solid fuels)	
4. Maximum Hourly Rate: 11.98 5.	Maximum Annual Rate: 104,937.50
6. Estimated Annual Activity Factor: 100.00	
7. Maximum Percent Sulfur : 8.	Maximum Percent Ash:
9. Million Btu per SCC Unit: 10	
10. Segment Comment :	

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### G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

### Emissions Unit Information Section Municipal Waste Combustion Unit #2

1. Pollutant Emitted	2. Primary Control Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
1 - SO2	041	016	EL
2 - NOX	107		EL
3 - CO			EL
4 - VOC			EL
5 - H114	048	016	EL
6 - H027	016		EL
7 - H021	016		EL
8 - HCL	041	016	EL
9 - H107	041	016	EL .
10 - DIOX	041	016	EL
11 - PB	016		EL

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## G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section
Municipal Waste Combustion Unit #2

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
12 - PM	016		EL

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Emissions Unit Information Section Municipal Waste Combustion Unit #2	2			
Pollutant Potential/Estimated Emissions :	Pollutant	1		
1. Pollutant Emitted: SO2				
2. Total Percent Efficiency of Control:	75.00	%		
3. Potential Emissions :				
	lb/hour	178.95	tons/year	
4. Synthetically Limited?				
[ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Emis	ssions:			
		to		tons/year
6. Emissions Factor : Reference : Emissions Guideli	nes			
7. Emissions Method Code: 0			-	
8. Calculations of Emissions:				
See Volume 1, Appendix B				
9. Pollutant Potential/Estimated Emissions	Comment:			
The Emission Guidelines specifies a 75% whichever is less stringent. Based on a 60 stringent.				

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<b>Emissions Unit Information Section</b>	2
Municipal Waste Combustion Unit #2	 

Po	Pollutant Information Section 1							
<u>Al</u>	owable Emissions 1							
1.	Basis for Allowable Emissions Code : RULE							
2.	Future Effective Date of Allowable Emissions :							
3.	Requested Allowable Emissions and Units: 75.00 percent removal							
4.	Equivalent Allowable Emissions :							
	40.87 lb/hour 179.00 tons/year							
5.	Method of Compliance :							
	Continuous Emission Monitors							
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):							
	Allowable emission is based on a 75% removal of 600 ppmdv inlet @ 7% O2.							

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Emissions Unit Information Section  Municipal Waste Combustion Unit #2		
Pollutant Potential/Estimated Emissions: Pollutant	2	
1. Pollutant Emitted: NOX	_	
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 40.10 lb/hour	175.65	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor : Reference : Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :	-	
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment :		
Emissions Guidelines for large MWCs		

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	unicipal Waste Combustion Unit #2
Po	ollutant Information Section 2
<u>Al</u>	lowable Emissions 1
1.	Basis for Allowable Emissions Code : RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 205.00 ppmdv @ 7% O2
4.	Equivalent Allowable Emissions:
	40.11 lb/hour 175.69 tons/year
5.	Method of Compliance :
	Continuous Emissions Monitor
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
	Allowable emissions request is based on the Emissions Guidelines for MWCs.

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Municipal Waste Combustion Unit #2			
Pollutant Potential/Estimated Emissions: Pollutant	3		
1. Pollutant Emitted: CO	_		
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions:			
11.91 lb/hour	52.18	tons/year	
4. Synthetically Limited? [ ] Yes [X ] No	_		
5. Range of Estimated Fugitive/Other Emissions:			
		to	tons/year
6. Emissions Factor : Reference : Emissions Guidelines			
7. Emissions Method Code : 0			
8. Calculations of Emissions :			
See Appendix B of Volume 1			
9. Pollutant Potential/Estimated Emissions Comment :			
Based on Emissions Guidelines for large MWCs.			

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Emissions Unit Information Section	2
Municipal Waste Combustion Unit #2	

3

The allowable emissions is based on the Emissions Guidelines for MWCs.

**Pollutant Information Section** 

All	owable Emissions 1					
		_				
1.	Basis for Allowable Emission	ns Code:	RULE			
2	Future Effective Date of Allo	wahle Emissio	ins ·			
٠.	Tutare Effective Bate of Time	Wasie Emissio				
	D	177.				
3.	Requested Allowable Emission	ons and Units:	100.00	ppn	ndv @ 7% O2	
4.	Equivalent Allowable Emissi	ons:				
			44 .71			
		11.91	lb/hour	52.18	tons/year	
5	Method of Compliance:					
٥.	Memod of Compilance.					
	Continuous Emission Monitor					
			_			
6.	Pollutant Allowable Emission	ns Comment (I	Desc. of Related Op	perating Me	thod/Mode):	

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[ ] Yes [X ]  Range of Estimated Fu  Emissions Factor: Reference:  Emissions Method Cod  Calculations of Emission  See Appendix B of Vol	Pollutant Emitted: VOC  Total Percent Efficiency of Potential Emissions:  Synthetically Limited?  [ ] Yes [X] N  Range of Estimated Fugition  Emissions Factor: Reference: cur  Emissions Method Code:  Calculations of Emissions  See Appendix B of Volume	Pollutant Emitted: VOC  Total Percent Efficiency of Control Potential Emissions:  2.2.  Synthetically Limited?  [ ] Yes [X] No  Range of Estimated Fugitive.  Emissions Factor: Reference: current  Emissions Method Code:  Calculations of Emissions: See Appendix B of Volume 1.	Pollutant Potential/Estimated Emi Pollutant Emitted: VOC  Total Percent Efficiency of Cont  Potential Emissions:  2.25  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Oth  Emissions Factor:  Reference: current pe  Emissions Method Code: 0  Calculations of Emissions:  See Appendix B of Volume 1.	Ilutant Potential/Estimated Emission  Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions Factor:  Reference: current permit  Emissions Method Code: 0  Calculations of Emissions:  See Appendix B of Volume 1.	Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emise  Emissions Factor: Reference: current permit lim  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Ilutant Potential/Estimated Emissions:  Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25   lb.  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Ilutant Potential/Estimated Emissions: Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25   Ib/hour  Synthetically Limited?  [ ] Yes [X] No  Range of Estimated Fugitive/Other Emissions:  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions:  See Appendix B of Volume 1.	Ilutant Potential/Estimated Emissions: Polluta  Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25   lb/hour  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions:  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions:  See Appendix B of Volume 1.	Ilutant Potential/Estimated Emissions: Pollutant  Pollutant Emitted: VOC  Total Percent Efficiency of Control:  Potential Emissions:  2.25   lb/hour  Synthetically Limited?  [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions:  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions:	Ilutant Potential/Estimated Emissions: Pollutant  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.3  Synthetically Limited?  [ ] Yes [X] No  Range of Estimated Fugitive/Other Emissions:  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions:  See Appendix B of Volume 1.	Pollutant Potential/Estimated Emissions: Pollutant   4	Illutant Potential/Estimated Emissions: Pollutant 4  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.86  Synthetically Limited? [] Yes [X] No  Range of Estimated Fugitive/Other Emissions: to  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Pollutant Potential/Estimated Emissions: Pollutant 4  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.86  Synthetically Limited? [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions: to  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Illutant Potential/Estimated Emissions: Pollutant  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.86 tons/y  Synthetically Limited? [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions: to  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Ilutant Potential/Estimated Emissions: Pollutant 4  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.86 tons/year  Synthetically Limited? [ ] Yes [X] No  Range of Estimated Fugitive/Other Emissions: to  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.	Illutant Potential/Estimated Emissions: Pollutant 4  Pollutant Emitted: VOC  Total Percent Efficiency of Control: %  Potential Emissions: 2.25 lb/hour 9.86 tons/year  Synthetically Limited? [ ] Yes [X ] No  Range of Estimated Fugitive/Other Emissions: to tons/year  Emissions Factor: Reference: current permit limit  Emissions Method Code: 0  Calculations of Emissions: See Appendix B of Volume 1.

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Emissions Unit Information Section  Municipal Waste Combustion Unit #2	2		
Withhelpar waste Combustion Onit #2			
Pollutant Information Section 4	-		
Allowable Emissions 1			
1. Basis for Allowable Emissions Code:	ОТНЕ	ER	
2. Future Effective Date of Allowable Emi	ssions :		
3. Requested Allowable Emissions and Un	iits :		
4. Equivalent Allowable Emissions:			
2.25	lb/hour	9.86	tons/year
5. Method of Compliance :			
Methods 18A or 25A			
6. Pollutant Allowable Emissions Comme	nt (Desc. of Relate	d Operating M	ethod/Mode):
Requested emission limit is based on the ex	xisting permit limit (	(AO 29-206279)	).

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Emissions Unit Information Section Municipal Waste Combustion Unit #2	
Pollutant Potential/Estimated Emissions: Pollutant 5	
1. Pollutant Emitted: H114	
2. Total Percent Efficiency of Control: 85.00 %	
3. Potential Emissions : lb/hour	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No	
5. Range of Estimated Fugitive/Other Emissions: to	tons/year
6. Emissions Factor: Reference: Emissions Guidelines	
7. Emissions Method Code:	
8. Calculations of Emissions:	
See Appendix B of Volume 1	
9. Pollutant Potential/Estimated Emissions Comment:	
The combination of the State Mercury Rile and the Emissions Guidelines strongentration of 70 ug/dscm, whichever is less stringent. Based on a 900 maximum inlet, the percent removal basis is less stringent.	
Item No. 3, above: Potential Emissions: 0.014 lb/hour 0.061 tons/year (ELSA does not permit enough digits in this line.)	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #2								
Pollutant Information Section 5								
Allowable Emissions 1								
1. Basis for Allowable Emissions Code: RULE								
2. Future Effective Date of Allowable Emissions :								
3. Requested Allowable Emissions and Units: 85.00 percent removal								
4. Equivalent Allowable Emissions :								
lb/hour tons/year								
5. Method of Compliance:								
Method 29								
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):								
Allowable emission limit is based on the Emissions Guidelines for MWC, and 85% removal of a maximum inlet concentration of 900 ug/dscm @ 7% O2.								
Item No. 4, above:								
Equivalent Allowable Emissions:								
0.0014 lb/hour 0.061 tons/year (ELSA does not allow enough digits in this line.)								

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Municipal Waste Combustion Unit #2			
Pollutant Potential/Estimated Emissions: Pollutant	6		
1. Pollutant Emitted: H027			
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions :lb/hour			tons/year
4. Synthetically Limited?  [ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other Emissions:		to	tons/year
6. Emissions Factor : Reference : Emissions Guidelines			
7. Emissions Method Code: 0			
8. Calculations of Emissions:			
See Appendix B, Volume 1.			
9. Pollutant Potential/Estimated Emissions Comment :			
Item No. 3, above:			
Potential Emissions:			
0.00409 lb/hour 0.018 tons/year (ELSA does not allow enough digits in this line.)			

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	Emissions Unit Information Section  Municipal Waste Combustion Unit #2								
	Illutant Information Section 6								
All	lowable Emissions 1								
1.	Basis for Allowable Emissions Code : RULE								
2.	Future Effective Date of Allowable Emissions:								
3.	Requested Allowable Emissions and Units: 40.00 ug/dscm @ 7% O2								
4.	Equivalent Allowable Emissions:								
	lb/hour tons/year								
5.	Method of Compliance :								
	Method 29								
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):								
	The allowable emission limit is based on the Emissions Guidelines for large MWCs.								
	Item No. 4, above: Equivalent Allowable Emissions: 0.00409 lb/hour 0.018 tons/year (ELSA does not allow enough digits in this line.)								

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7	
%	
	tons/year
to	tons/year
	%

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Emissions Unit Information Section Municipal Waste Combustion Unit #2	2	
Pollutant Information Section 7	_	
Allowable Emissions 1		
1. Basis for Allowable Emissions Code :	OTHER	
2. Future Effective Date of Allowable Em	issions :	
3. Requested Allowable Emissions and Ur	nits : 1.15	10-4 lb/hour
4. Equivalent Allowable Emissions :		
	lb/hour	tons/year
5. Method of Compliance :		
Method 29		
6. Pollutant Allowable Emissions Comme	ent (Desc. of Related Ope	erating Method/Mode):
The allowable emission limit requested is	based on the existing pern	nit limit (AO 29-206279).
Item No. 4, above: Equivalent Allowable Emissions: 0.000115 lb/hour 0.000504 tons/year (ELSA does not allow enough digits in this	s line.)	

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	Municipal Waste Combustion Unit #2									
Pol	lutant Potential/Estimate	d Emissions	Pollutant	8						
1.	Pollutant Emitted: HCI				-					
2.	Total Percent Efficiency of	f Control:	95.00	%						
3.	Potential Emissions:									
		15.51	lb/hour	67.92	tons/year					
4.	Synthetically Limited?	_								
	[ ] Yes [X ] N	o								
5.	Range of Estimated Fugiti	ve/Other Emi	ssions:							
					to	tons/year				
6.	Emissions Factor : Reference : Em	issions Guidel	ines							
7.	Emissions Method Code:	0								
8.	Calculations of Emissions	:								
	See Appendix B of Volume	e 1.								
9.	Pollutant Potential/Estima	ted Emissions	s Comment:							
	The Emissions Guidelines specify a 95% removal or a concentration of 29 ppmdv @ 7% O2, whichever is less. Based on a 2000 ppmdv maximum inlet @ 7% O2, the percent removal basis is less stringent.									

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Emissions Unit Information Section 2
Municipal Waste Combustion Unit #2
Pollutant Information Section 8
Allowable Emissions 1
1. Basis for Allowable Emissions Code: RULE
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 95.00 percent removal
4. Equivalent Allowable Emissions :
15.51 lb/hour 67.92 tons/year
5. Method of Compliance :
Methods 26 and 26A
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
The emission limit requested is based on a 95% removal of a 2000 ppmdv inlet @ 7% O2.

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### H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section  Municipal Waste Combustion Unit #2		
Pollutant Potential/Estimated Emissions: Pollutar	nt <u>9</u>	
1. Pollutant Emitted: H107		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 1.50 lb/hour	6.57	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor : Reference : current permit limit		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
See Appendix A of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment	:	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #2
Pollutant Information Section 9
Allowable Emissions 1
Basis for Allowable Emissions Code : OTHER
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 1.50 lb/hr
4. Equivalent Allowable Emissions :
1.50 lb/hour 6.57 tons/year
5. Method of Compliance:

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Emission limit is based on current permit limits (AO 29-206279).

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Municipal Waste Combustion Unit #2		
Pollutant Potential/Estimated Emissions: Pollutant	10	
1. Pollutant Emitted: DIOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : lb/hour		tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor: Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:		
Item No. 3 above: Potential emissions: 3.07 x 10-6 lb/hour 1.34 x 10-5 tons/year (ELSA does not permit entry of this many digits in this line)	ne.)	

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Emissions Unit Information Section Municipal Waste Combustion Unit #2		
Pollutant Information Section 10	ı	
Allowable Emissions 1		
1. Basis for Allowable Emissions Code:	RULE	
2. Future Effective Date of Allowable Er	nissions :	
3. Requested Allowable Emissions and U	Units: 30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions:		
	lb/hour	tons/year
5. Method of Compliance :		
Method 23		
6. Pollutant Allowable Emissions Comm	nent (Desc. of Related Op	perating Method/Mode):
The allowable emissions limit is based or	n the Emissions Guidelines	s for large MWCs.
Item No. 4., above: Eqauivalent Allowable Emissions: 3.07 x 10 -6 lb/hour 1.34 x 10-5 tons/yea (ELSA does not permit this many digits i (ELSA does not allow entry of this many	in this line.)	

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### H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

	nicipal Waste Combustion Unit #2
<u>Po</u>	lutant Potential/Estimated Emissions: Pollutant 11
1.	Pollutant Emitted: PB
2.	Total Percent Efficiency of Control: %
3.	Potential Emissions:  0.05 lb/hour 0.20 tons/year
4.	Synthetically Limited? [ ] Yes [X] No
5.	Range of Estimated Fugitive/Other Emissions:  to tons/year
6.	Emissions Factor : Reference : Emissions Guidelines
7.	Emissions Method Code: 0
8.	Calculations of Emissions:
	See Appendix B of Volume 1.
9.	Pollutant Potential/Estimated Emissions Comment :

Emissions Unit Information Section 2 Municipal Waste Combustion Unit #2
Pollutant Information Section 11
Allowable Emissions 1
1. Basis for Allowable Emissions Code : RULE
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 440.00 ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :
0.05 lb/hour 0.20 tons/year
5. Method of Compliance :
Method 29
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
The emission limit requested is based on the Emissions Guidelines for large MWCs.

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### H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #2	2		
Pollutant Potential/Estimated Emissions	Pollutant	12	
1. Pollutant Emitted: PM			
2. Total Percent Efficiency of Control:		%	
3. Potential Emissions:			
2.81	lb/hour	12.31	tons/year
4. Synthetically Limited?			
[ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other Emi	ssions:		
		to	tons/year
6. Emissions Factor:			
Reference: Emissions Guidel	ines		
7. Emissions Method Code: 0			_
8. Calculations of Emissions :			
See Appendix B of Volume 1.			
9. Pollutant Potential/Estimated Emissions	Comment:		

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Imissions Unit Information Section  1
ollutant Information Section 12
dlowable Emissions 1
. Basis for Allowable Emissions Code : RULE
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 0.01 gr/dscf @ 7% O2
L. Equivalent Allowable Emissions :
2.81 lb/hour 12.31 tons/year
5. Method of Compliance :
Method 5
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
The requested allowable limit is 0.12 gr/dscf @7% O2. This number does not fit in field # 3 above.

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #2				
<u>Visible Emissions Limitation</u> : Visible Emissions Limitation 1				
1. Visible Emissions Subtype:	15			
2. Basis for Allowable Opacity:	OTHER			
3. Requested Allowable Opacity:				
	Conditions: 10 %			
Exceptional C Maximum Period of Excess Opacity				
4. Method of Compliance :	4. Method of Compliance :			
Method 9 and Continuous Opacity Monitor				
5. Visible Emissions Comment:				
The opacity limit is based on Emissions Guidelines for large MWC units.				

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. Parameter Code : VE	2. Pollutant :
. CMS Requirement : RULE	
. Monitor Information :	
Manufacturer:	•
Model Number:	
Serial Number :	
. Installation Date :	
. Performance Specification Test Date :	
Continuous Monitor Comment:	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #2				
Continuous Monitoring System: Continuous Monitor 2				
1. Parameter Code : EM	2. Pollutant: CO			
3. CMS Requirement: RULE				
4. Monitor Information :				
Manufacturer:				
Model Number:				
Serial Number :				
5. Installation Date :				
6. Performance Specification Test Date :				
7. Continuous Monitor Comment :				
Information above to be provided.				

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. Parameter Code : EM	2. Pollutant : NOX
6. CMS Requirement :	
. Monitor Information :	 
Manufacturer : Model Number : Serial Number :	
. Installation Date :	
. Performance Specification Test Date	:
. Continuous Monitor Comment :	
Information above to be provided.	

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Municipal Waste Combustion Unit #2				
Continuous Monitoring System: Continuous Monitor 4				
1. Parameter Code: EM	2. Pollutant: SO2			
3. CMS Requirement :				
4. Monitor Information :				
Manufacturer:				
Model Number:				
Serial Number:				
5. Installation Date :				
6. Performance Specification Test Date:	•			
7. Continuous Monitor Comment :				
Information above to be provided.				

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### K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

E	mis	sions Unit Information Section 2
M	unic	cipal Waste Combustion Unit #2
<u>P</u> :	SD	Increment Consumption Determination
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?
[	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ]	X]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	In	crement Consun	ning for Nitroge	n Dioxid	le?		·
[ X	[]		has undergone l			undergoing PSD reviously, for nitrogen o	iew as part of this dioxide. If so, emissions
[	] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.						
[	] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.						
[	]	] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.						
3.	Ir	ncrement Consu	ming/Expanding	g Code :			
		PM:	С	SO2:	C	NO2:	Е
4.	В	Baseline Emissio	ns:				
		PM:	0.0000	lb/hour		0.0000	tons/year
		SO2:	0.0000	lb/hour		0.0000	tons/year
		NO2:				189.7000	tons/year

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5. PSD Comment:

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

2

Municipal Waste Combustion Unit #2	
Supplemental Requirements for All Applications	
1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification :	Vol. 1, Sect. 6
3. Detailed Description of Control Equipment:	To be provided.
4. Description of Stack Sampling Facilities :	To be provided.
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue:	NA
Additional Supplemental Requirements for Category I Application	ns Only
10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

12. Identification of A	Additional Applicable Requirements	: NA
13. Compliance Assu Plan:	rance Monitoring	NA
14. Acid Rain Applic	eation (Hard-copy Required) :	
NA	Acid Rain Part - Phase	II (Form No. 62-210.900(1)(a))
NA	Repowering Extension	Plan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (I	Form No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption	n (Form No. 62-210.900(1)(a)3.)

#### III. EMISSIONS UNIT INFORMATION

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Municip	al Waste Combustion Unit #3
Type of	Emissions Unit Addressed in This Section
1. Regu	ulated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Sing	le Process, Group of Processes, or Fugitive Only? Check one :
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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**Emissions Unit Information Section** 3

<b>Emissions Unit Information Section</b> 3	3
---	---

# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :					
Municipal Waste Combustion Unit #3					
2. Emissions Unit Identification	Number: 103				
[ ] No Corresponding ID [ ] Unknown					
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major			
Code: A	[ ] Yes [X] No	Group SIC Code: 49			
6. Emissions Unit Comment :					
This combustion unit will have a dedicated flue in a single four-flue stack.					

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<b>Emissions Unit Information Section</b>	3
Municipal Waste Combustion Unit #3	

### Emissions Unit Control Equipment 1

1. Description:			
Fabric Filter			
	•		
2. Control Device or Method Code :	16		

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<b>Emissions Unit Information Section</b>	3
Municipal Waste Combustion Unit #3	

**Emissions Unit Control Equipment** 2

1. Description:			
Spray Dryer Absorber			
	_		
2. Control Device or Method Code :	41		

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<b>Emissions Unit Information Section</b>	3	
Municipal Waste Combustion Unit #3		

**Emissions Unit Control Equipment** 3

1.	Description:	
	Selective Non-Catalytic Reduction System	
2.	Control Device or Method Code:	107

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<b>Emissions Unit Information Section</b>	3
Municipal Waste Combustion Unit #3	

<b>Emissions</b>	Unit	Control	Equi	pment	4

1. Description:	
Activated Carbon Injection	
2. Control Device or Method Code :	48

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### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

<b>Emission</b> :	s Unit	Infor	mation	Section	
16	***	<u> </u>			_

Municipal Waste Combustion Unit #3

3

#### **Emissions Unit Details**

#### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate: 120 mmBtu/hr

2. Maximum Incinerator Rate: 23958.33 lb/hr 287.50 tons/day

3. Maximum Process or Throughput Rate:

4. Maximum Production Rate: 23858 lbs/hour steam

5. Operating Capacity Comment: See operating window in Section 6 of Volume 1.

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule:					
	24 hours/day	7 days/week			
	52 weeks/year	8,760 hours/year			

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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #3			
Rule Applicability Analysis			
Refer to Volume 1, Section 2			

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#### **Emissions Unit Information Section**

Municipal Waste Combustion Unit #3

#### **List of Applicable Regulations**

Refer to Volume 1, Section 2

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### E. EMISSION POINT (STACK/VENT) INFORMATION

3

Municipal Waste Combustion Unit #3		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram :	See Vol. 1 F	ig 6-4
2. Emission Point Type Code: 2		
3. Descriptions of Emission Points Comprising this Emission (limit to 100 characters per point) Not Applicable for sources with single emission points	ons Unit for VI	E Tracking:
4. ID Numbers or Descriptions of Emission Units with this	Emission Poin	t in Common :
Emission units 1-4 will have a dedicted flue within a commo	on stack.	
5. Discharge Type Code:	V	
6. Stack Height:	201	feet
7. Exit Diameter :	4.2	feet
8. Exit Temperature :	289	°F
9. Actual Volumetric Flow Rate :	60894	acfm
10. Percent Water Vapor :	14.77	%
11. Maximum Dry Standard Flow Rate:	36686	dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone: 17 East (km): 360.196	North (kı	m): 3092.208
14. Emission Point Comment :		

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**Emissions Unit Information Section** 

### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 3
Municipal Waste Combustion Unit #3
Segment Description and Rate: Segment 1
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):
The new municipal waste combustion units will have either a refractory, rotary waterwall, or a stoker waterwall furnace.
2. Source Classification Code (SCC): 5-01-999-99
3. SCC Units: Tons Burned (all solid fuels)
4. Maximum Hourly Rate: 11.98 5. Maximum Annual Rate: 104,937.50
6. Estimated Annual Activity Factor: 100.00
7. Maximum Percent Sulfur: 8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 10
10. Segment Comment:

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Information Section**

3

Municipal Waste Combustion Unit #3

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	Pollutant     Regulatory Code
1 - SO2	041	016	EL
2 - NOX	107		EL
3 - CO			EL
4 - VOC			EL
5 - H114	048	016	EL
6 - H027	016		EL
7 - H021	016		EL
8 - HCL	041	016	EL
9 - H107	041	016	EL
10 - DIOX	041	016	EL
11 - PB	016		EL

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

### Emissions Unit Information Section

Municipal Waste Combustion Unit #3

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
12 - PM	016		EL

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Municipal Waste Combustion Unit #3					
<u>Po</u>	llutant Potential/Estimated Emissions: Pollutant 1				
1.	Pollutant Emitted: SO2				
2.	Total Percent Efficiency of Control: 75.00 %				
3.	Potential Emissions:				
	40.85 lb/hour 178.95 tons/year				
4.	Synthetically Limited?				
	[ ] Yes [X ] No				
5.	Range of Estimated Fugitive/Other Emissions:				
	to tons/year				
6.	Emissions Factor : Reference : Emissions Guidelines				
7.	Emissions Method Code: 0				
8.	Calculations of Emissions:				
	See Volume 1, Appendix B				
9.	Pollutant Potential/Estimated Emissions Comment:				
	The Emission Guidelines specifies a 75% removal or a concentration of 29 ppmdv @ 7% O2, whichever is less stringent. Based on a 600 ppmdv maximum inlet, the percent removal basis is less stringent.				

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Emissions Unit Information Section Municipal Waste Combustion Unit #3							
Pollutant Information Section 1							
Allowable Emissions 1							
1. Basis for Allowable Emissions Code:	RULE						
2. Future Effective Date of Allowable Emission	ns:						
3. Requested Allowable Emissions and Units:	75.00	perc	cent removal				
4. Equivalent Allowable Emissions:							
40.87	lb/hour	179.00	tons/year				
5. Method of Compliance :							
Continuous Emission Monitors	,						
6. Pollutant Allowable Emissions Comment (D	Desc. of Related (	Operating Met	thod/Mode):				
Allowable emission is based on a 75% removal	of 600 ppmdv inle	et @ 7% O2.					

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Municipal Waste Combustion Unit #3		
Pollutant Potential/Estimated Emissions: Polluta	ant	
1. Pollutant Emitted: NOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions:		
40.10 lb/hour	175.65	tons/year
4. Synthetically Limited?		
[ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor :		
Reference: Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment	:	
Emissions Guidelines for large MWCs		

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Emissions Unit Information Section  Municipal Waste Combustion Unit #3						
ollutant Information Section 2						
Allowable Emissions 1						
. Basis for Allowable Emissions Code : RULE						
2. Future Effective Date of Allowable Emissions:						
3. Requested Allowable Emissions and Units: 205.00 ppmdv @ 7% O2						
Equivalent Allowable Emissions :						
40.11 lb/hour 175.69 tons/year						
5. Method of Compliance :						
Continuous Emissions Monitor						
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):						
Allowable emissions request is based on the Emissions Guidelines for MWCs.						

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Municipal Waste Combustion Unit #3			
Pollutant Potential/Estimated Emissions	Pollutant	3	
1. Pollutant Emitted: CO			
2. Total Percent Efficiency of Control:		%	
3. Potential Emissions:			
11.91	lb/hour	52.18	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other Emis	ssions:		
		to	tons/year
6. Emissions Factor:			
Reference: Emissions Guideli	ines		
7. Emissions Method Code: 0			
8. Calculations of Emissions:			
See Appendix B of Volume 1			
9. Pollutant Potential/Estimated Emissions	Comment:		
Based on Emissions Guidelines for large !	MWCs.		

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	nissions Unit Information Section unicipal Waste Combustion Unit #3	3				
Pollutant Information Section 3 Allowable Emissions 1						
2.	Future Effective Date of Allowable Emission	ons :				
3.	Requested Allowable Emissions and Units	: 100.00	pp	mdv @ 7% O2		
4.	Equivalent Allowable Emissions:					
	11.91	lb/hour	52.18	tons/year		
5.	Method of Compliance :					
	Continuous Emission Monitor					
6.	Pollutant Allowable Emissions Comment (	Desc. of Related (	Operating Me	ethod/Mode):		
	The allowable emissions is based on the Emiss	sions Guidelines for	MWCs.			

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3

•
/year

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**Emissions Unit Information Section** 

Emissions Unit Information Section  Municipal Waste Combustion Unit #3					
Po	llutant Information Section 4				
Al	lowable Emissions 1				
1.	Basis for Allowable Emissions Code : OTHER				
2.	Future Effective Date of Allowable Emissions:				
3.	Requested Allowable Emissions and Units:				
4.	Equivalent Allowable Emissions :				
	2.25 lb/hour 9.86 tons/year				
5.	Method of Compliance:				
	Methods 18A or 25A				
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):				
	Requested emission limit is based on the existing permit limit (AO 29-206279).				

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Emissions Unit Information Section Municipal Waste Combustion Unit #3
Pollutant Potential/Estimated Emissions: Pollutant 5
1. Pollutant Emitted: H114
2. Total Percent Efficiency of Control: 85.00 %
3. Potential Emissions : lb/hour tons/year
4. Synthetically Limited?  [ ] Yes [X ] No
5. Range of Estimated Fugitive/Other Emissions:  to tons/year
6. Emissions Factor : Reference : Emissions Guidelines
7. Emissions Method Code :
8. Calculations of Emissions :
See Appendix B of Volume 1
9. Pollutant Potential/Estimated Emissions Comment:
The combination of the State Mercury Rile and the Emissions Guidelines specify a 85% removal or a concentration of 70 ug/dscm, whichever is less stringent. Based on a 900 ug/dscm @ 7% O2 maximum inlet, the percent removal basis is less stringent.
Item No. 3, above: Potential Emissions: 0.014 lb/hour 0.061 tons/year (ELSA does not permit enough digits in this line.)

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Emissions Unit Information Section  Municipal Waste Combustion Unit #3						
Pollutant Information Section 5						
Allowable Emissions 1						
Basis for Allowable Emissions Code : RULE						
2. Future Effective Date of Allowable Emissions :						
3. Requested Allowable Emissions and Units: 85.00 percent removal						
4. Equivalent Allowable Emissions :						
lb/hour tons/year						
5. Method of Compliance :						
Method 29						
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):						
Allowable emission limit is based on the Emissions Guidelines for MWC, and 85% removal of a maximum inlet concentration of 900 ug/dscm @ 7% O2.						
Item No. 4, above:						
Equivalent Allowable Emissions: 0.0014 lb/hour 0.061 tons/year						
(ELSA does not allow enough digits in this line.)						

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Emissions Unit Information Section Municipal Waste Combustion Unit #3	3			
Pollutant Potential/Estimated Emissions	: Pollutant	6		
1. Pollutant Emitted: H027			_	
2. Total Percent Efficiency of Control:		%		
3. Potential Emissions:				
	lb/hour		tons/year	
4. Synthetically Limited?	•			
[ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Emi	ssions:			
		te	0	tons/year
6. Emissions Factor:				
Reference: Emissions Guidel	ines			
7. Emissions Method Code: 0				. / .
8. Calculations of Emissions :				
See Appendix B, Volume 1.				
9. Pollutant Potential/Estimated Emissions	s Comment:			
Item No. 3, above:				
Potential Emissions:				
0.00409 lb/hour 0.018 tons/year	!- !! \			
(ELSA does not allow enough digits in th	us une.)			

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Emissions Unit Information Section  Municipal Waste Combustion Unit #3					
Pollutant Information Section 6					
Allowable Emissions 1					
1. Basis for Allowable Emissions Code:	RULE				
2. Future Effective Date of Allowable Emissions	:				
3. Requested Allowable Emissions and Units:	40.00	ug/dscm @ 7% O2			
4. Equivalent Allowable Emissions :					
. 11	o/hour	tons/year			
5. Method of Compliance :					
Method 29					
6. Pollutant Allowable Emissions Comment (Des	sc. of Related Oper	rating Method/Mode):			
The allowable emission limit is based on the Emis	ssions Guidelines for	r large MWCs.			
Item No. 4, above: Equivalent Allowable Emissions: 0.00409 lb/hour 0.018 tons/year (ELSA does not allow enough digits in this line.)					

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Municipal Waste Combustion Unit #3			
Pollutant Potential/Estimated Emissions: Pollu	ıtant		
1. Pollutant Emitted: H021			
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions : lb/hour		tons/year	
4. Synthetically Limited?  [ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other Emissions:		to t	ons/year
6. Emissions Factor : Reference : Current permit limit			
7. Emissions Method Code: 0			
8. Calculations of Emissions:			
See Appendix B, Volume 1.			
9. Pollutant Potential/Estimated Emissions Comme	nt:		
Item No. 3, above:			
Potential Emissions: 0.000115 lb/hour 0.000504 tons/year			
(ELSA does not allow enough digits in this line.)			

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	Emissions Unit Information Section  Municipal Waste Combustion Unit #3						
Pol	Pollutant Information Section 7						
Alle	owable Emissions 1						
1.	Basis for Allowable Emissions Code: OTHER						
2.	Future Effective Date of Allowable Emissions:						
3.	Requested Allowable Emissions and Units: 1.15 10-4 lb/hour						
4.	Equivalent Allowable Emissions:						
	lb/hour tons/year						
5.	Method of Compliance :						
	Method 29						
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):						
	The allowable emission limit requested is based on the existing permit limit (AO 29-206279).						
	Item No. 4, above:						
	Equivalent Allowable Emissions:						
	0.000115 lb/hour						
	(ELSA does not allow enough digits in this line.)						

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	nissions Unit Info unicipal Waste Combu		n3			
Po	<u>llutant Potential/Es</u>	timated Emissio	ns: Pollutan	t <u>8</u>		
1.	Pollutant Emitted:	HCL				
2.	Total Percent Effici	ency of Control:	95.00	%		
3.	Potential Emissions	:				
		15.51	lb/hour	67.92	tons/year	
4.	Synthetically Limite	ed?				
	[ ] Yes [	[X ] No				
5.	Range of Estimated	Fugitive/Other E	missions:			
		_		to		tons/year
6.	Emissions Factor:					
	Reference:	Emissions Gui	delines			
7.	Emissions Method (	Code: 0				
8.	Calculations of Emi	ssions:				
	See Appendix B of	Volume 1.				
9.	Pollutant Potential/	Estimated Emissi	ons Comment :			
	The Emissions Guid whichever is less. I less stringent.	•				•

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Emissions Unit Information Section  Municipal Waste Combustion Unit #3	_		
Pollutant Information Section 8			
Allowable Emissions 1			
1. Basis for Allowable Emissions Code:	RULE		
2. Future Effective Date of Allowable Emission	ns:		
3. Requested Allowable Emissions and Units:	95.00	per	cent removal
4. Equivalent Allowable Emissions :			
15.51	lb/hour	67.92	tons/year
5. Method of Compliance :			
Methods 26 and 26A			
6. Pollutant Allowable Emissions Comment (D	esc. of Related	Operating Me	thod/Mode):
The emission limit requested is based on a 95%	removal of a 200	00 ppmdv inlet	@ 7% O2.

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	nissions Unit Information Section unicipal Waste Combustion Unit #3			
<u>Po</u>	llutant Potential/Estimated Emissions: Pollutant	9		
1.	Pollutant Emitted: H107			
2.	Total Percent Efficiency of Control:	%		
3.	Potential Emissions : 1.50 lb/hour	6.57	tons/year	
4.	Synthetically Limited? [ ] Yes [X ] No			
5.	Range of Estimated Fugitive/Other Emissions:		to	tons/year
6.	Emissions Factor: Reference: current permit limit			
7.	Emissions Method Code: 0			
8.	Calculations of Emissions:			
	See Appendix A of Volume 1			
9.	Pollutant Potential/Estimated Emissions Comment :		_	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #3
Pollutant Information Section 9
Allowable Emissions 1
Basis for Allowable Emissions Code : OTHER
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 1.50 lb/hr
4. Equivalent Allowable Emissions:

lb/hour

tons/year

6.57

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Emission limit is based on current permit limits (AO 29-206279).

1.50

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5. Method of Compliance:

3

Municipal Waste Combustion Unit #3		
Pollutant Potential/Estimated Emissions: Pollutant	10	
1. Pollutant Emitted: DIOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions:		
lb/hour		tons/year
4. Synthetically Limited?		
[ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:		
	to	tons/year
6. Emissions Factor: Reference: 40 CFR 60 Subpart Cb		
7. Emissions Method Code : 0		
8. Calculations of Emissions:		
See Appendix B of Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:		
Item No. 3 above:		
Potential emissions:		
3.07 x 10-6 lb/hour 1.34 x 10-5 tons/year		
(ELSA does not permit entry of this many digits in this lin	ie.)	

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**Emissions Unit Information Section** 

<b>Emissions Unit Information Section</b> Municipal Waste Combustion Unit #3	3	
Pollutant Information Section 10	_	
Allowable Emissions 1		
1. Basis for Allowable Emissions Code:	RULE	
2. Future Effective Date of Allowable Er	nissions :	
3. Requested Allowable Emissions and U	Jnits: 30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissions:		
	lb/hour	tons/year
5. Method of Compliance:	_	
Method 23		
6. Pollutant Allowable Emissions Comm	ent (Desc. of Related C	Operating Method/Mode):
The allowable emissions limit is based or	n the Emissions Guidelin	es for large MWCs.
Item No. 4., above:		
Equivalent Allowable Emissions:		
3.07 x 10 -6 lb/hour 1.34 x 10-5 tons/yea (ELSA does not permit this many digits i		
(ELSA does not allow entry of this many	•	

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3

M	unicipal Waste Combustion Unit #3			
Po	ollutant Potential/Estimated Emissions: Pollutant	11		
1.	. Pollutant Emitted: PB			
2.	. Total Percent Efficiency of Control:	%		
3.	Potential Emissions:			
	0.05 lb/hour	0.20		tons/year
4.	Synthetically Limited?			
	[ ] Yes [X ] No			
5.	Range of Estimated Fugitive/Other Emissions:			
	<u> </u>		to	tons/year
6.	. Emissions Factor :			
	Reference: Emissions Guidelines			
7.	Emissions Method Code: 0			
8.	. Calculations of Emissions :			
	See Appendix B of Volume 1.			
9.	. Pollutant Potential/Estimated Emissions Comment :			

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**Emissions Unit Information Section** 

	ions Unit Informa ipal Waste Combu		3			
Pollut	ant Information S	Section 11				
Allowa	able Emissions	1				
1. Ba	sis for Allowable l	Emissions Code :	RULE	3	_	
2. Fu	ture Effective Date	of Allowable Emission	ons:			
3. Re	quested Allowable	Emissions and Units	: 440.00	ug	/dscm @ 7% O2	•
4. Eq	uivalent Allowable	Emissions:				
		0.05	lb/hour	0.20	tons/year	
5. Me	ethod of Complian	ce:				
М	ethod 29					
6. Po	llutant Allowable	Emissions Comment (	Desc. of Related C	perating M	ethod/Mode):	
Th	e emission limit req	uested is based on the E	missions Guidelines	for large M	WCs.	

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M	funicipal Waste Combustion Unit #3		
<u>Po</u>	ollutant Potential/Estimated Emissions: Pollutant	12	
1.	. Pollutant Emitted: PM		
2.	. Total Percent Efficiency of Control:	%	
3.	Potential Emissions:		
	2.81 lb/hour	12.31	tons/year
4.	Synthetically Limited?		
	[ ] Yes [X ] No		
5.	. Range of Estimated Fugitive/Other Emissions:		
		to	tons/year
6.	. Emissions Factor :		
	Reference: Emissions Guidelines		
7.	Emissions Method Code: 0		
8.	. Calculations of Emissions :		
	See Appendix B of Volume 1.		
9.	. Pollutant Potential/Estimated Emissions Comment :		

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**Emissions Unit Information Section** 

	nissions Unit Information Section unicipal Waste Combustion Unit #3
Po	llutant Information Section 12
<u>Al</u>	lowable Emissions 1
1.	Basis for Allowable Emissions Code: RULE
2.	Future Effective Date of Allowable Emissions:
3.	Requested Allowable Emissions and Units: 0.01 gr/dscf @ 7% O2
4.	Equivalent Allowable Emissions:
	2.81 lb/hour 12.31 tons/year
5.	Method of Compliance :
	Method 5
6.	Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):
	The requested allowable limit is 0.12 gr/dscf @7% O2. This number does not fit in field # 3 above.

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## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Visible Emissions Limitation: Visible Emissions Limitation	11
1. Visible Emissions Subtype: 15	
2. Basis for Allowable Opacity: OTHER	
3. Requested Allowable Opacity:	<del>-</del>
Normal Conditions: 10 Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	% % min/hour
4. Method of Compliance:  Method 9 and Continuous Opacity Monitor	
5. Visible Emissions Comment :  The opacity limit is based on Emissions Guidelines for large MWC	units.

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**Emissions Unit Information Section**Municipal Waste Combustion Unit #3

Emissions Unit Information Section  Municipal Waste Combustion Unit #3  Continuous Monitoring System: Continuous	auous Monitor 1
1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement: RULE	
4. Monitor Information :	
Manufacturer : Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	
Information above to be provided. Two m	nonitors to be required for % control calculations.

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Municipal Waste Combustion Unit #3	<del></del>
Waste Compassion ont #5	
Continuous Monitoring System: Continuo	ous Monitor 2
1. Parameter Code: EM	2. Pollutant: CO
3. CMS Requirement: RULE	
3. Civis requirement. Roll	
4. Monitor Information :	
Manufacturer:	
Model Number:	
Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
,	
7. Continuous Monitor Comment:	
Information above to be provided.	

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Manufacturer : Model Number : Serial Number :	
Model Number : Serial Number :	
Manufacturer : Model Number : Serial Number :	
Model Number : Serial Number :	
Serial Number :	
Serial Number :  5. Installation Date :	
5. Installation Date :	
6. Performance Specification Test Date:	
7. Continuous Monitor Comment :	

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Emissions Unit Information Section3 Municipal Waste Combustion Unit #3		
Continuous Monitoring System: Continuous Monitor 4		
1. Parameter Code : EM	2. Pollutant: SO2	
3. CMS Requirement :		
4. Monitor Information :		
Manufacturer:		
Model Number :		
Serial Number:		
5. Installation Date :		
6. Performance Specification Test Date :		
7. Continuous Monitor Comment:		
Information above to be provided.		

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emi	Emissions Unit Information Section 3		
Mun	icipal Waste Combustion Unit #3		
<u>PSD</u>	Increment Consumption Determination		
1. I	ncrement Consuming for Particulate Matter or Sulfur Dioxide?		
[ ]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.		
[ ]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.		
[ ]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.		
[ ]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.		
[ X]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.		

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2	. In	crement Consuming for Nitrogen Dioxide?	
[	<b>X</b> ]	The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.	
[	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.	
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.	
[	]	For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.	
[	]	None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.	
	3. I	ncrement Consuming/Expanding Code:	
		PM: C SO2: C NO2: E	
	4. F	Baseline Emissions:	
		PM: 0.0000 lb/hour 0.0000 tons/year	

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0.0000 lb/hour

0.0000 tons/year

189.7000 tons/year

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SO2:

NO2:

5. PSD Comment:

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

3

Supplemental Requirements for All Applications	
1. Process Flow Diagram:	App. A, Fig. 3
2. Fuel Analysis or Specification :	Vol. 1, Sect. 6
3. Detailed Description of Control Equipment:	To be provided.
4. Description of Stack Sampling Facilities :	To be provided.
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan:	NA
8. Supplemental Information for Construction Permit Application:	NA
9. Other Information Required by Rule or Statue:	NA
Additional Supplemental Requirements for Category I Application	s Only
10. Alternative Methods of Operations:	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

Municipal Waste Combustion Unit #3

12. Identification of Additional Applicable Requirements:  NA		NA
13. Compliance Assurance Monitoring NA Plan:		NA
14. Acid Rain Applic	ation (Hard-copy Required):	
NA	Acid Rain Part - Phase II	(Form No. 62-210.900(1)(a))
NA	Repowering Extension Pl	lan (Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Fo	orm No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (	(Form No. 62-210.900(1)(a)3.)
		·

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#### III. EMISSIONS UNIT INFORMATION

## A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

4

	<del></del>
Municipa	al Waste Combustion Unit #4
Type of	Emissions Unit Addressed in This Section
1. Regu	alated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Sing	le Process, Group of Processes, or Fugitive Only? Check one :
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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**Emissions Unit Information Section** 

Emissions	Unit	Information	Section	4	

## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Description and Status**

1.	1. Description of Emissions Unit Addressed in This Section :				
	Municipal Waste Combustion Ur	nit #4			
2.	Emissions Unit Identification	Number: 10	4		
	[ ] No Corresponding ID [ ] Unknown				
3.	Emissions Unit Status	4. Acid Rain	Unit?	5. Emissions Unit Major	
	Code: A		[X] No	Group SIC Code :	49
6.	Emissions Unit Comment:				
	This combustion unit will have a	a dedicated flue	in a single four-flu	ue stack.	

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Emissions Unit Control Equipment 1

1. Description:	
Fabric Filter	
2. Control Device or Method Code :	16

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

#### **Emissions Unit Control Equipment** 2

1. Description:	
Spray Dryer Absorber	
·	
2. Control Device or Method Code :	41

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

#### **Emissions Unit Control Equipment** 3

1. Description:	Description:			
Selective Non-Catalytic Reduction System				
2. Control Device or Method Code :	107			

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

<b>Emissions</b>	Unit	<b>Control</b>	<b>Equipment</b>	4

1.	Description:		
	Activated Carbon Injection		
2.	Control Device or Method Code:	48	

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# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

#### **Emissions Unit Details**

1. Initial Startup Date:	22-Jan-2001	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		_
Manufacturer: To be provided once a v	endor is selected	Model Number: To be provided
4. Generator Nameplate Rating:	MW	
5. Incinerator Information:		
Dwell Temperature:		Degrees Fahrenheit
Dwell Time:		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit

#### **Emissions Unit Operating Capacity**

1. Maximum Heat Input Rate :	120	mmBtu/hr	
2. Maximum Incinerator Rate:	23958.33	lb/hr 287.50	tons/day
3. Maximum Process or Throughpu	it Rate:		
4. Maximum Production Rate:	23858	lbs/hour steam	
5. Operating Capacity Comment: See operating window in Section 6	of Volume 1.		

#### **Emissions Unit Operating Schedule**

Requested Maximum Operating Schedule :		
	24 hours/day	7 days/week
	52 weeks/year	8,760 hours/year

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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Municipal Waste Combustion Unit #4	4
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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#### **Emissions Unit Information Section**

Municipal Waste Combustion Unit #4

#### **List of Applicable Regulations**

Refer to Volume 1, Section 2

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#### E. EMISSION POINT (STACK/VENT) INFORMATION

Municipal Waste Combustion Unit #4		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram :	See Vol. 1 F	ig 6-4
2. Emission Point Type Code: 2		
3. Descriptions of Emission Points Comprising this Emissi (limit to 100 characters per point)  Not Applicable for sources with single emission points	ons Unit for VE	E Tracking:
4. ID Numbers or Descriptions of Emission Units with this	Emission Poin	t in Common :
Emission units 1-4 will have a dedicted flue within a commo	on stack.	
5. Discharge Type Code :	V	
6. Stack Height:	201	feet
7. Exit Diameter :	4.2	feet
8. Exit Temperature :	289	°F
9. Actual Volumetric Flow Rate :	60894	acfm
10. Percent Water Vapor:	14.77	%
11. Maximum Dry Standard Flow Rate:	36686	dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone: 17 East (km): 360.196	North (kı	m): 3092.208
14. Emission Point Comment :		

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Emissions Unit Information Section

#### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 4			
Municipal Waste Combustion Unit #4			
Segment Description and Rate: Segment 1			
1. Segment Description (Process/Fuel Type and Associated Operating Method/Mode):			
The new municipal waste combustion units will have either a refractory, rotary waterwall, or a stoker waterwall furnace.			
2. Source Classification Code (SCC): 5-01-999-99			
3. SCC Units: Tons Burned (all solid fuels)			
4. Maximum Hourly Rate: 11.98 5. Maximum Annual Rate: 104,937.50			
6. Estimated Annual Activity Factor: 100.00			
7. Maximum Percent Sulfur : 8. Maximum Percent Ash :			
9. Million Btu per SCC Unit: 10			
10. Segment Comment :			

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section
Municipal Waste Combustion Unit #4

1. Pollutant Emitted	2. Primary Control Device Code	3. Secondary Control Device Code	Pollutant     Regulatory Code
1 - SO2	041	016	EL
2 - NOX	107		EL
3 - CO			EL
4 - VOC			EL
5 - H114	048	016	EL
6 - H027	016		EL
7 - H021	016		EL
8 - HCL	041	016	EL
9 - H107	041	016	EL
10 - DIOX	041	016	EL
11 - PB	016		EL

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section

Municipal Waste Combustion Unit #4

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	Pollutant     Regulatory Code
12 - PM	016		EL

	unicipal Waste Combustion Unit #4
<u>Po</u>	Ilutant Potential/Estimated Emissions: Pollutant 1
1.	Pollutant Emitted: SO2
2.	Total Percent Efficiency of Control: 75.00 %
3.	Potential Emissions:
	40.85 lb/hour 178.95 tons/year
4.	Synthetically Limited?
	[ ] Yes [X ] No
5.	Range of Estimated Fugitive/Other Emissions:
	to tons/year
6.	Emissions Factor: Reference: Emissions Guidelines
7.	Emissions Method Code: 0
8.	Calculations of Emissions:
	See Volume 1, Appendix B
9.	Pollutant Potential/Estimated Emissions Comment:
	The Emission Guidelines specifies a 75% removal or a concentration of 29 ppmdv @ 7% O2, whichever is less stringent. Based on a 600 ppmdv maximum inlet, the percent removal basis is less stringent.

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Emissions Unit Information Sec Municipal Waste Combustion Un		<u> </u>		
Pollutant Information Section	1			
Allowable Emissions 1				
1. Basis for Allowable Emission	s Code :	RULE	_	
2. Future Effective Date of Allo	wable Emissio	ns:		
3. Requested Allowable Emission	ons and Units :	75.00	percer	nt removal
4. Equivalent Allowable Emission	ons :			
	40.87	lb/hour	179.00	tons/year

5. Method of Compliance:

Continuous Emission Monitors

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

Allowable emission is based on a 75% removal of 600 ppmdv inlet @ 7% O2.

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Emissions Unit Information Section Municipal Waste Combustion Unit #4		
Pollutant Potential/Estimated Emissions: Pollutant		
1. Pollutant Emitted: NOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 40.10 lb/hour	175.65	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor: Reference: Emissions Guidelines		
7. Emissions Method Code : 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment:		
Emissions Guidelines for large MWCs		

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Po	llutant Information Section					
Al	lowable Emissions 1					
1.	Basis for Allowable Emissions	Code:	RULE			
2.	Future Effective Date of Allow	able Emissio	ons :			
	Requested Allowable Emission		205.00	ppm	dv @ 7% O2	
4.	Equivalent Allowable Emission	ns:				
	. 4	0.11	lb/hour	175.69	tons/year	
5.	Method of Compliance :	-				
	Continuous Emissions Monitor					
6.	Pollutant Allowable Emissions	Comment (I	Desc. of Related O	perating Met	hod/Mode) :	
	Allowable emissions request is ba	ised on the Er	missions Guidelines	for MWCs.		

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Emissions Unit Information Section  Municipal Waste Combustion Unit #4		
Pollutant Potential/Estimated Emissions: Pollutant	3	
1. Pollutant Emitted: CO		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : 11.91 lb/hour	52.18	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor: Reference: Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1		
9. Pollutant Potential/Estimated Emissions Comment:		
Based on Emissions Guidelines for large MWCs.		·

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

**Pollutant Information Section** 

Al	lowable Emissions	1				
1.	Basis for Allowable Emis	ssions Code :	RULE			
2.	Future Effective Date of	Allowable Emi	ssions :			
3.	Requested Allowable Em	issions and Un	its: 100.00	) pp	mdv @ 7% O2	
4.	Equivalent Allowable En	nissions :				
		11.91	lb/hour	52.18	tons/year	
5.	Method of Compliance :					
	Continuous Emission Mon	itor				
6.	Pollutant Allowable Emi	ssions Commer	nt (Desc. of Related	l Operating Mo	ethod/Mode):	
	The allowable emissions is	based on the En	nissions Guidelines t	for MWCs.		

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	nicipal Waste Combustion Unit #4			
<u>Pol</u>	lutant Potential/Estimated Emissions: Pollutant	4		
1.	Pollutant Emitted: VOC			
2.	Total Percent Efficiency of Control:	%		
3.	Potential Emissions : 2.25 lb/hour	9.86	tons/year	
4.	Synthetically Limited? [ ] Yes [X ] No			
5.	Range of Estimated Fugitive/Other Emissions:		to	tons/year
6.	Emissions Factor: Reference: current permit limit			
7.	Emissions Method Code: 0			
8.	Calculations of Emissions:			
	See Appendix B of Volume 1.			
9.	Pollutant Potential/Estimated Emissions Comment:			

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Pollutant Info	rmation Section	on 4			
Allowable Em	<u>issions</u>	1			
1. Basis for A	llowable Emis	sions Code :	ОТН	ER	
2. Future Effe	ective Date of A	llowable Emis	ssions:		
3. Requested	Allowable Emi	ssions and Uni	its:		
4. Equivalent	Allowable Em	ssions:			
		2.25	lb/hour	9.86	tons/year
5. Method of	Compliance :				
Methods 18	A or 25A				
6. Pollutant A	Ilowable Emis	sions Commen	t (Desc. of Relate	ed Operating M	(ethod/Mode) :
				(AO 29-206279	

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4

Municipal Waste Combustion Unit #4				
Pollutant Potential/Estimated Emissions:	Pollutant	5		
1. Pollutant Emitted: H114				
2. Total Percent Efficiency of Control:	85.00	%		
3. Potential Emissions:	hour		tons/year	
4. Synthetically Limited?  [ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Emissic	ons:	to		tons/year
6. Emissions Factor : Reference : Emissions Guidelines	;			
7. Emissions Method Code :			·	
8. Calculations of Emissions :  See Appendix B of Volume 1				
9. Pollutant Potential/Estimated Emissions Co	omment :			
The combination of the State Mercury Rile as concentration of 70 ug/dscm, whichever is les maximum inlet, the percent removal basis is	ss stringent. I	Based on a 900		
Item No. 3, above: Potential Emissions: 0.014 lb/hour 0.061 tons/year (ELSA does not permit enough digits in this land)	line.)			

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**Emissions Unit Information Section** 

<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Pollutant Information Section	5		
Allowable Emissions 1			
1. Basis for Allowable Emissions Cod	le:	RULE	
2. Future Effective Date of Allowable	Emissions:		-
3. Requested Allowable Emissions and	d Units :	85.00	percent removal
4. Equivalent Allowable Emissions:			<del>-</del>
	1b/	hour	tons/year
5. Method of Compliance:			
Method 29			
6. Pollutant Allowable Emissions Con	nment (Desc	. of Related Ope	rating Method/Mode):
Allowable emission limit is based on t maximum inlet concentration of 900 u			IWC, and 85% removal of a
Item No. 4, above: Equivalent Allowable Emissions: 0.0014 lb/hour 0.061 tons/year (ELSA does not allow enough digits in	n this line.)		

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Municipal Waste Combustion Unit #4	<u>4</u>			
Pollutant Potential/Estimated Emissions :	Pollutant	6		
1. Pollutant Emitted: H027				
2. Total Percent Efficiency of Control:		%		
3. Potential Emissions:	b/hour			tons/year
4. Synthetically Limited? [ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Emiss	sions:		to	tons/year
6. Emissions Factor : Reference : Emissions Guidelin	nes			
7. Emissions Method Code: 0				
8. Calculations of Emissions:				
See Appendix B, Volume 1.				
9. Pollutant Potential/Estimated Emissions	Comment:			
Item No. 3, above:				
Potential Emissions: 0.00409 lb/hour 0.018 tons/year				
(ELSA does not allow enough digits in this	s line.)			

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Emissions Unit Information Section  Municipal Waste Combustion Unit #4	4	
Pollutant Information Section 6		
Allowable Emissions 1		
1. Basis for Allowable Emissions Code :	RULE	
2. Future Effective Date of Allowable Emiss	sions :	
3. Requested Allowable Emissions and Unit	s: 40.00	ug/dscm @ 7% O2
4. Equivalent Allowable Emissions :		
	lb/hour	tons/year
5. Method of Compliance :		
Method 29		
6. Pollutant Allowable Emissions Comment	(Desc. of Related Oper	rating Method/Mode):
The allowable emission limit is based on the	Emissions Guidelines fo	r large MWCs.
Item No. 4, above: Equivalent Allowable Emissions: 0.00409 lb/hour 0.018 tons/year (ELSA does not allow enough digits in this I	ine.)	

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Municipal Waste Combustion Unit #4			
Pollutant Potential/Estimated Emissions: Pollutant			
1. Pollutant Emitted: H021			
2. Total Percent Efficiency of Control:	%		
3. Potential Emissions : lb/hour		tons/year	
4. Synthetically Limited?  [ ] Yes [X ] No		-	_
5. Range of Estimated Fugitive/Other Emissions:	to	o	tons/year
6. Emissions Factor : Reference : Current permit limit			
7. Emissions Method Code: 0			
8. Calculations of Emissions :			
See Appendix B, Volume 1.			
9. Pollutant Potential/Estimated Emissions Comment :			
Item No. 3, above: Potential Emissions: 0.000115 lb/hour 0.000504 tons/year (ELSA does not allow enough digits in this line.)			

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	te Combustion Unit #4	4	
Pollutant Infor	mation Section 7		
Allowable Emi	ssions 1		
1. Basis for Al	lowable Emissions Code :	OTHER	
2. Future Effect	ctive Date of Allowable Emissi	ons:	
3. Requested A	Allowable Emissions and Units	: 1.15	10-4 lb/hour
4. Equivalent A	Allowable Emissions :		
		lb/hour	tons/year
5. Method of C	Compliance :		
Method 29			
6. Pollutant Al	lowable Emissions Comment (	Desc. of Related Opera	nting Method/Mode):
The allowab	le emission limit requested is base	ed on the existing permit	limit (AO 29-206279).
0.000115 lb/	above: Allowable Emissions: Thour 0.000504 tons/year not allow enough digits in this lin	ne.)	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #4	4			
Pollutant Potential/Estimated Emissions:	Pollutant	8		
1. Pollutant Emitted: HCL				
2. Total Percent Efficiency of Control:	95.00	%		
3. Potential Emissions :				
15.51	lb/hour	67.92	tons/year	
4. Synthetically Limited? [ ] Yes [X] No				
5. Range of Estimated Fugitive/Other Emiss	sions:	to		tons/year
6. Emissions Factor : Reference : Emissions Guidelin	nes			
7. Emissions Method Code: 0				
8. Calculations of Emissions :	<del>-</del>			
See Appendix B of Volume 1.				
9. Pollutant Potential/Estimated Emissions	Comment:			
The Emissions Guidelines specify a 95% rewhichever is less. Based on a 2000 ppmdv less stringent.			~	

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Pollutant Information Section	8			
Allowable Emissions 1				
1. Basis for Allowable Emissions	Code:	RULE		
2. Future Effective Date of Allow	able Emissio	ns:		
3. Requested Allowable Emission	s and Units :	95.00	perco	ent removal
4. Equivalent Allowable Emission	ns:			
1	5.51	lb/hour	67.92	tons/year
5. Method of Compliance:		<u> </u>		

Methods 26 and 26A

6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode) :

The emission limit requested is based on a 95% removal of a 2000 ppmdv inlet @ 7% O2.

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	unicipal Waste Combustion Unit #4
<u>Po</u>	llutant Potential/Estimated Emissions: Pollutant 9
1.	Pollutant Emitted: H107
2.	Total Percent Efficiency of Control: %
3.	Potential Emissions:
	1.50 lb/hour 6.57 tons/year
4.	Synthetically Limited? [ ] Yes [X ] No
5.	Range of Estimated Fugitive/Other Emissions:  to tons/year
6.	Emissions Factor: Reference: current permit limit
7.	Emissions Method Code: 0
8.	Calculations of Emissions:
	See Appendix A of Volume 1
9.	Pollutant Potential/Estimated Emissions Comment:

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Emissions Unit Information Section  Municipal Waste Combustion Unit #4
Pollutant Information Section 9
Allowable Emissions 1
1. Basis for Allowable Emissions Code : OTHER
2. Future Effective Date of Allowable Emissions :
3. Requested Allowable Emissions and Units: 1.50 lb/hr
4. Equivalent Allowable Emissions :
1.50 lb/hour 6.57 tons/year
5. Method of Compliance :
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):  Emission limit is based on current permit limits (AO 29-206279)

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Municipal Waste Combustion Unit #4		
Pollutant Potential/Estimated Emissions: Pollutant	10	
1. Pollutant Emitted: DIOX		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions : Ib/hour		tons/year
4. Synthetically Limited? [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:	to	tons/year
6. Emissions Factor : Reference : 40 CFR 60 Subpart Cb		
7. Emissions Method Code: 0		
8. Calculations of Emissions :		
See Appendix B of Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:  Item No. 3 above: Potential emissions: 3.07 x 10-6 lb/hour 1.34 x 10-5 tons/year (ELSA does not permit entry of this many digits in this line)	ne.)	

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Pollutant Information Section			
Allowable Emissions 1			
1. Basis for Allowable Emissions	s Code :	RULE	
2. Future Effective Date of Allow	vable Emissions :		
3. Requested Allowable Emission	ns and Units :	30.00	ng/dscm @ 7% O2
4. Equivalent Allowable Emissio	ens:		
	lb	/hour	tons/year
5. Method of Compliance:			
Method 23			
6. Pollutant Allowable Emissions	s Comment (Des	c. of Related Oper	rating Method/Mode):
The allowable emissions limit is	based on the Emis	ssions Guidelines fo	or large MWCs.
Item No. 4., above:			

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Equivalent Allowable Emissions:

3.07 x 10 -6 lb/hour 1.34 x 10-5 tons/year

(ELSA does not permit this many digits in this line.)

(ELSA does not allow entry of this many digits in that line.)

Municipal Waste Combustion Unit #4		
Pollutant Potential/Estimated Emissions: Pollutant	11	
1. Pollutant Emitted: PB		
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions:		
0.05 lb/hour	0.20	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor : Reference : Emissions Guidelines		
7. Emissions Method Code: 0		
8. Calculations of Emissions :	· ·	
See Appendix B of Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment:		
		<u> </u>

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

Pollutant Information Section	11

#### Allowable Emissions 1

1.	Basis for Allowable Emissions Code:	RUL	E		
2.	Future Effective Date of Allowable Emission	ns :			
3.	Requested Allowable Emissions and Units:	440.	00	ug/dscm @ 7% O2	
4.	Equivalent Allowable Emissions:				
	0.05	lb/hour	0.20	tons/year	
5.	Method of Compliance:				
	Method 29				
6.	Pollutant Allowable Emissions Comment (D	Desc. of Relat	ed Operating	Method/Mode):	
	The emission limit requested is based on the Er	nissions Guide	elines for large	MWCs.	

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Municipal Waste Combustion Unit #4		
Pollutant Potential/Estimated Emissions: Pollutant	12	
1. Pollutant Emitted: PM		<del>-</del>
2. Total Percent Efficiency of Control:	%	
3. Potential Emissions :		
2.81 lb/hour	12.31	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No		
5. Range of Estimated Fugitive/Other Emissions:		to tons/year
6. Emissions Factor: Reference: Emissions Guidelines		
7. Emissions Method Code : 0	•	
8. Calculations of Emissions :		
See Appendix B of Volume 1.		
9. Pollutant Potential/Estimated Emissions Comment :		

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<b>Emissions Unit Information Section</b>	4
Municipal Waste Combustion Unit #4	

<b>Pollutant Information Section</b>	1	12

#### Allowable Emissions 1

1	. Basis for Allowable Emissions Code :	RULE		
2	. Future Effective Date of Allowable Emissio	ons :		
3	. Requested Allowable Emissions and Units :	0.01	gr/dsc	f @ 7% O2
4	. Equivalent Allowable Emissions :			_
	2.81	lb/hour	12.31	tons/year
5	. Method of Compliance:			
	Method 5			
6	. Pollutant Allowable Emissions Comment (I	Desc. of Related Op	erating Metho	od/Mode):
	The requested allowable limit is 0.12 gr/dscf@	7% O2. This numb	er does not fit i	n field # 3 above.

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Municipal Waste Combustion Unit #4	
Visible Emissions Limitation: Visible Emissions Limitation	1
1. Visible Emissions Subtype: 15	
2. Basis for Allowable Opacity: OTHER	
3. Requested Allowable Opacity:	
Normal Conditions: 10	%
Exceptional Conditions:	%
Maximum Period of Excess Opacity Allowed:	min/hour
4. Method of Compliance :	
Method 9 and Continuous Opacity Monitor	
5. Visible Emissions Comment :	
The opacity limit is based on Emissions Guidelines for large MWC	C units.

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**Emissions Unit Information Section** 

Municipal Waste Combustion Unit #4  Continuous Monitoring System: Continuous Monitor 1		
1. Parameter Code: VE	2. Pollutant :	
3. CMS Requirement: RULE		
4. Monitor Information :	·	
Manufacturer : Model Number : Serial Number :		
5. Installation Date :		
6. Performance Specification Test I	Date :	
7. Continuous Monitor Comment :		
Information above to be provided.	Two monitors to be required for % control calculations.	

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Emissions Unit Information Section  Municipal Waste Combustion Unit #4		
Continuous Monitoring System: Continuo	ous Monitor 2	
1. Parameter Code : EM	2. Pollutant : CO	
3. CMS Requirement: RULE		
4. Monitor Information :		
Manufacturer : Model Number : Serial Number :	_	
5. Installation Date :		
6. Performance Specification Test Date :		
7. Continuous Monitor Comment :		
Information above to be provided.		

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Emissions Unit Information Section 4 Municipal Waste Combustion Unit #4		
Continuous Monitoring System: Continuous Monitor 3		
1. Parameter Code : EM	2. Pollutant : NOX	
3. CMS Requirement :		
4. Monitor Information :		
Manufacturer : Model Number :		
Serial Number :		
5. Installation Date :		
6. Performance Specification Test Date :		
7. Continuous Monitor Comment :		
Information above to be provided.		

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Municipal Waste Combustion Unit #4  Continuous Monitoring System: Continuous  1. Parameter Code: EM	uous Monitor 4  2. Pollutant : SO2
3. CMS Requirement :	
4. Monitor Information :  Manufacturer :	
Model Number : Serial Number :	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	·· <del>···</del>
Information above to be provided.	

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

E	Emissions Unit Information Section 4				
M	Municipal Waste Combustion Unit #4				
<u>P</u>	<u>SD</u>	Increment Consumption Determination			
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?			
[	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.			
[	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.			
[	}	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.			
]	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.			
[ ]	X]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.			

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2.	2. Increment Consuming for Nitrogen Dioxide?						
[X	[]		has undergone P			s undergoing PSD reversionsly, for nitrogen	iew as part of this dioxide. If so, emissions
[	]	paragraph (c) of and the emission	f the definition on the first the definition of the first the definition of the first	of "majo d in this	or sources s sectio	e of air pollution" in	ijor source pursuant to Chapter 62-213, F.A.C., I commence) construction sions unit consumes
[	]	emissions unit l	began initial ope	ration a	after Fe	assified as an EPA ma bruary 8, 1988, but be unit consumes incre	efore March 28, 1988. If
[	]			-		will begin) initial ope emissions unit consur	ration after March 28, mes increment.
[	]	case, additional	analysis, beyon	d the so	cope of	this application, is ne	s unit are nonzero. In such reded to determine whether he date that may consume
3.	3. Increment Consuming/Expanding Code:						
		PM :	С	SO2:	C	NO2:	Е
4.	В	aseline Emission	ns:				
		PM:	0.0000				tons/year
		SO2:	0.0000	lb/hour	•		tons/year
		NO2:				189.7000	tons/year

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5. PSD Comment:

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### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

4

Municipal Waste Combustion Unit #4	
Supplemental Requirements for All Applications	
1. Process Flow Diagram :	App. A, Fig. 3
2. Fuel Analysis or Specification:	Vol. 1, Sect. 6
3. Detailed Description of Control Equipment :	To be provided.
4. Description of Stack Sampling Facilities :	To be provided.
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan :	NA .
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA
Additional Supplemental Requirements for Category I Application	s Only
10. Alternative Methods of Operations:	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

12. Identification of	Additional Applicable Requirements :	NA
13. Compliance Assu Plan:	urance Monitoring	NA
14. Acid Rain Applic	cation (Hard-copy Required):	
NA	Acid Rain Part - Phase II (Fo	orm No. 62-210.900(1)(a))
NA	Repowering Extension Plan	(Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form	No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (For	rm No. 62-210.900(1)(a)3.)
	•	

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#### III. EMISSIONS UNIT INFORMATION

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissio	ons Unit Information Section 5
Flyash S	ilo/Ash Handling System
Type of	Emissions Unit Addressed in This Section
1. Regu	lated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Sing	le Process, Group of Processes, or Fugitive Only? Check one :
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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<b>Emissions Unit Information Section</b>	5
Emissions Unit Information Section	3

# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section:							
Flyash Silo/Ash Handling System							
2. Emissions Unit Identification	2. Emissions Unit Identification Number: 105						
[ ] No Corresponding	[ ] No Corresponding ID [ ] Unknown						
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major					
Code: A	[ ] Yes [X] No	Group SIC Code: 49					
6. Emissions Unit Comment:							
	nit. It is actually a cyclone with a faystem which is a source of fugitive						

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<b>Emissions Unit Information Section</b>	5
Flyash Silo/Ash Handling System	

<b>Emissions</b>	Unit	Control	<b>Equipment</b>	1

1. Description:	
Cyclone	
2. Control Device or Method Code: 75	

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Emissions Unit Information Section Flyash Silo/Ash Handling System	5
Emissions Unit Control Equipment	
1. Description:	
Water	
2. Control Device or Method Code:	61

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<b>Emissions Unit Information Section</b>	5
Flyash Silo/Ash Handling System	

### **Emissions Unit Control Equipment** 3

1.	Description:	
	Building for containment	
2.	Control Device or Method Code:	54

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# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

5

Emissions Unit Details				
1. Initial Startup Date :	09-Feb-2000			
2. Long-term Reserve Shutdown Date :				
3. Package Unit:				
Manufacturer: To be provided.		Model No	umber:	
4. Generator Nameplate Rating:	MW			
5. Incinerator Information:				
Dwell Temperature:		Degree	es Fahrenheit	
Dwell Time:		Second		
Incinerator Afterburner Temperature:		Degree	es Fahrenheit	
Emissions Unit Operating Capacity				
1. Maximum Heat Input Rate :	mmBtu/hr			
2. Maximum Incinerator Rate :	lb/hr		tons/day	
3. Maximum Process or Throughput Rate:	280	1	tons/day	
4. Maximum Production Rate:				
5. Operating Capacity Comment:				
Emissions Unit Operating Schedule				
Requested Maximum Operating Schedule:				
24 hours/da	ay	7 c	lays/week	
52 weeks/y	ear	8,760 l	nours/year	

orm

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**Emissions Unit Information Section** 

Flyash Silo/Ash Handling System

# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Flyash Silo/Ash Handling System	5
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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### **Emissions Unit Information Section**

Flyash Silo/Ash Handling System

### **List of Applicable Regulations**

Refer to Volume 1, Section 2.

### E. EMISSION POINT (STACK/VENT) INFORMATION

5

Flyash Silo/Ash Handling Sys	tem		
Emission Point Description	n and Type :		
1. Identification of Point of	on Plot Plan or Flow D	Diagram: See Vol. 1, Fi	g. 6-4
2. Emission Point Type C	ode: 3		
3. Descriptions of Emission	on Points Comprising	this Emissions Unit :	
fabric filter on roof vent a	nd enclosed conveyors		
4. ID Numbers or Descrip	tions of Emission Uni	ts with this Emission Poin	nt in Common :
Existing ash handling faci	lities to be enclosed as p	part of the Facility retrofit ar	nd upgrade.
5. Discharge Type Code:		V	
6. Stack Height:		50	feet
7. Exit Diameter:		1.30	feet
8. Exit Temperature :		120	°F
9. Actual Volumetric Flow	Rate:		acfm
10. Percent Water Vapor :		5.00	%
11. Maximum Dry Standar	rd Flow Rate:		dscfm
12. Nonstack Emission Po	int Height:		feet
13. Emission Point UTM (	Coordinates :		
Zone:	East (km):	North (kr	m):
14. Emission Point Comm A preliminary flow rate a later date.		stem is 25,000 cfm. Final nu	ımbers will be provided at

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**Emissions Unit Information Section** 

### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 5	
Flyash Silo/Ash Handling System	
Segment Description and Rate: Segment 1	
1. Segment Description (Process/Fuel Type and Assoc	iated Operating Method/Mode):
Handling of wet combined fly and bottom ash.	
2. Source Classification Code (SCC): 3-05-101-99	
3. SCC Units: Tons Transferred Or Handled	
4. Maximum Hourly Rate:  5. M	aximum Annual Rate: 280.00
6. Estimated Annual Activity Factor: 100.00	
7. Maximum Percent Sulfur: 8. N	Iaximum Percent Ash:
9. Million Btu per SCC Unit:	
10. Segment Comment :	

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>	5
Flyash Silo/Ash Handling System	

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	Pollutant     Regulatory Code
1 - PM	018		EL
2 - PM	054	061	NS

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5 Flyash Silo/Ash Handling System	
Pollutant Potential/Estimated Emissions: Pollutant	t <u>1</u>
1. Pollutant Emitted: PM	
2. Total Percent Efficiency of Control:	%
3. Potential Emissions : lb/hour	tons/year
4. Synthetically Limited?  [ ] Yes [X ] No	
5. Range of Estimated Fugitive/Other Emissions: 4	to tons/year
6. Emissions Factor : Reference :	
7. Emissions Method Code: 0	
8. Calculations of Emissions:	
9. Pollutant Potential/Estimated Emissions Comment :	
Fugitive emissions combined with point source emissions Visible emissions (5% opacity) will occur less than 5 per except during periods of maintenance and repair, in accordance	ercent of the time from ash transfer systems,

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Emissions Unit Information Section	5
Flyash Silo/Ash Handling System	

# Pollutant Information Section 1 Allowable Emissions 1

	•		
1. Bas	is for Allowable Emissions Code:	RULE	
2. Fut	re Effective Date of Allowable Emission	ns:	
3. Rec	uested Allowable Emissions and Units:		
4. Equ	ivalent Allowable Emissions:		
		lb/hour	tons/year
5. Me	hod of Compliance:		
6. Pol	utant Allowable Emissions Comment (I	Desc. of Related Oper	rating Method/Mode):
thai	emissions are below the 5 tpy reporting thrace 5 percent of the time from ash transfer system of the Emissions Guidelines.		· · · · · · · · · · · · · · · · · · ·

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section 5 Flyash Silo/Ash Handling System			
Pollutant Potential/Estimated Emissions: Pollutar	nt <u>2</u>		
1. Pollutant Emitted: PM			
2. Total Percent Efficiency of Control:	%		<del></del>
3. Potential Emissions : lb/hour		tons/year	
4. Synthetically Limited?  [ ] Yes [ ] No			
5. Range of Estimated Fugitive/Other Emissions:	to	•	tons/year
6. Emissions Factor : Reference :			
7. Emissions Method Code :			
8. Calculations of Emissions:			
9. Pollutant Potential/Estimated Emissions Comment :			·

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Flyash Silo/Ash Handling System					
Visible Emissions Limitation: Visible Emissions Limitation 1					
1. Visible Emissions Subtype:	05				
2. Basis for Allowable Opacity:	RULE			_	
3. Requested Allowable Opacity:					
	al Conditions:	5 3	% % min/hour		
Maximum Feriod of Excess Opac	ny Anowed :	3	mm/nour		
4. Method of Compliance :					
Method 22					
5. Visible Emissions Comment:			,		

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**Emissions Unit Information Section** 5

### K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Ŀп	nis	sions Unit Information Section 5
Fly	/asl	h Silo/Ash Handling System
<u>PS</u>	<u>SD</u>	Increment Consumption Determination
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?
[ X	[]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ,		The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	2. Increment Consuming for Nitrogen Dioxide?					
[	]	] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.				
[	] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.					
3.	Ir	ncrement Consu	ming/Expanding	g Code :		
		PM:	С	SO2:	NO2:	
4. Baseline Emissions :						
		PM : SO2 : NO2 :		lb/hour lb/hour	tons/year tons/year tons/year	
5.	5. PSD Comment :					

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

**Emissions Unit Information Section** 5

Flyash Silo/Ash Handling System				
Supplemental Requirements for All Applications				
1. Process Flow Diagram :	Append A, Fig 3			
2. Fuel Analysis or Specification :	NA .			
3. Detailed Description of Control Equipment :	To be provided.			
4. Description of Stack Sampling Facilities :	NA			
5. Compliance Test Report :	NA			
6. Procedures for Startup and Shutdown:	NA			
7. Operation and Maintenance Plan :	NA			
8. Supplemental Information for Construction Permit Application :	Volume 1			
9. Other Information Required by Rule or Statue :	NA			
Additional Supplemental Requirements for Category I Applications Only				
10. Alternative Methods of Operations :	NA			
11. Alterntive Modes of Operation (Emissions Trading):	NA			

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12. Identification of Additi	onal Applicable Requirements:	NA
13. Compliance Assurance Plan:	Monitoring	NA
14. Acid Rain Application	(Hard-copy Required):	
NA	Acid Rain Part - Phase II (Form	No. 62-210.900(1)(a))
NA	NA Repowering Extension Plan (For	
NA	New Unit Exemption (Form No	. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form	No. 62-210.900(1)(a)3.)

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### III. EMISSIONS UNIT INFORMATION

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissio	ns Unit Information Section 6
Lime Sto	orage Silos
Type of	Emissions Unit Addressed in This Section
1. Regu	lated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Singl	e Process, Group of Processes, or Fugitive Only? Check one:
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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# B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :					
Lime Storage Silos	Lime Storage Silos				
2. Emissions Unit Identification	Number: 106				
[ ] No Corresponding ID [ ] Unknown					
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major			
Code: A	[ ] Yes [X] No	Group SIC Code: 49			
6. Emissions Unit Comment :					
Two lime storage silos will be added to the Facility to handle lime needed for the new air pollution control equipment, the spray dryer absorber.					

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<b>Emissions Unit Information Section</b>	6
Lime Storage Silos	

### **Emissions Unit Control Equipment** 1

1. Description:	
Fabric filter on silo exhaust vent designerate of 1,200 scfm.	ed for an outlet grain loading of 0.015 gr/dscf and an air flow
2. Control Device or Method Code :	18

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# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

6

Lime Storage Silos	<del></del>	
Emissions Unit Details		
1. Initial Startup Date :	09-Feb-2000	
2. Long-term Reserve Shutdown Date :		
3. Package Unit:		
Manufacturer: To be provided.		Model Number:
4. Generator Nameplate Rating:	MW	
5. Incinerator Information:		
Dwell Temperature:		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit
Emissions Unit Operating Capacity  1. Maximum Heat Input Rate:	 mmBtu/hr	
-	11. /1	. (1
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate :		
4. Maximum Production Rate:		
5. Operating Capacity Comment:		
Emissions Unit Operating Schedule		
Emissions Unit Operating Schedule  Requested Maximum Operating Schedule:		-
	•	7 days/week

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**Emissions Unit Information Section** 

# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section Lime Storage Silos	6
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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Lime Storage Silos

### **List of Applicable Regulations**

Refer to Volume 1, Section 2.

### E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 6

<del></del>		
Lime Storage Silos		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram : See	Vol. 1 Fig	g. 6-4
2. Emission Point Type Code : 1		
3. Descriptions of Emission Points Comprising this Emissions Un (limit to 100 characters per point)	nit for VE	Tracking:
4. ID Numbers or Descriptions of Emission Units with this Emiss	sion Point	in Common :
Two identical lime storage silos each with its own vent and fabric f	ilter.	
5. Discharge Type Code :	P	
6. Stack Height:		feet
7. Exit Diameter :		feet
8. Exit Temperature :		°F
9. Actual Volumetric Flow Rate:	1200	acfm
10. Percent Water Vapor:		%
11. Maximum Dry Standard Flow Rate:		dscfm
12. Nonstack Emission Point Height:		feet
13. Emission Point UTM Coordinates:		
Zone: East (km):	North (kn	n):
14. Emission Point Comment : Information on emission height and precise location to be provide	ed.	

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>	6
Lime Storage Silos	 

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	Pollutant     Regulatory Code
1 - PM	018		EL

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Lime Storage Silos	<u> </u>		
Pollutant Potential/Estimated Emission	s: Pollutant	1	
1. Pollutant Emitted: PM			
2. Total Percent Efficiency of Control:		%	
3. Potential Emissions:	lb/hour	ton	s/year
4. Synthetically Limited?  [ ] Yes [X ] No			
5. Range of Estimated Fugitive/Other En	nissions:	to	tons/year
6. Emissions Factor : Reference :			
7. Emissions Method Code: 3			
8. Calculations of Emissions :			
9. Pollutant Potential/Estimated Emission PM emissions are below the 5 tpy repor			

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Emissions Unit Information Section 6 Lime Storage Silos	
Pollutant Information Section 1	
Allowable Emissions 1	
1. Basis for Allowable Emissions Code:	
2. Future Effective Date of Allowable Emissions :	
3. Requested Allowable Emissions and Units :	
4. Equivalent Allowable Emissions :	
lb/hour	tons/year
5. Method of Compliance :	
6. Pollutant Allowable Emissions Comment (Desc. of Related Operating Mo	ethod/Mode):
PM emissions are below the 5 tpy reporting threshold.	

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section Lime Storage Silos				
<u>Visible Emissions Limitation</u> : Visible Emissions Limitation 1				
1. Visible Emissions Subtype: 05				
2. Basis for Allowable Opacity: RULE				
3. Requested Allowable Opacity:				
Normal Conditions: 5 Exceptional Conditions: Maximum Period of Excess Opacity Allowed:	% % 0 min/hour			
4. Method of Compliance :				
Method 9				
5. Visible Emissions Comment :				
The City of Tampa is requesting that compliance with the PM emission rate limitation be determined using Method 9 VE tests indicating no visible emissions in lieu of PM stack tests pursuant to FAC 62-296.711(3)(c) and 62-297.260(4).				

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

٤ı	mis	sions Unit Information Section 6
Li	me	Storage Silos
<u>P\$</u>	<u>SD</u>	Increment Consumption Determination .
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?
[	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[ }	<b>K</b> ]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
I	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	. Increment Consuming for Nitrogen Dioxide?						
[	] The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.						
[	]	paragraph (c) of and the emission	of the definition ons unit address	of "major source ed in this section	sified as an EPA major source pursuant to of air pollution" in Chapter 62-213, F.A.C., commenced (or will commence) construction as are zero, and emissions unit consumes		
[	]	emissions unit	began initial op	peration after Febr	ssified as an EPA major source, and the ruary 8, 1988, but before March 28, 1988. If unit consumes increment.		
[	]	• •	• •	- `	rill begin) initial operation after March 28, missions unit consumes increment.		
[	] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.						
3.	Ir	ncrement Consur	ming/Expandin	g Code :			
		PM:	С	SO2:	NO2:		
4.	. В	Baseline Emissio	ons :				
	PM: lb/hour tons/year						
		SO2:		lb/hour	tons/year		
		NO2 :			tons/year		
5.	P	SD Comment:					
				III. Part 12 - 23			

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III. Part 12 - 24

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Emissions Unit Information Section 6

Lime Storage Silos					
Supplemental Requirements for All Applications					
1. Process Flow Diagram:	Append A Fig 3				
2. Fuel Analysis or Specification:	NA				
3. Detailed Description of Control Equipment :	To be provided.				
4. Description of Stack Sampling Facilities :	NA				
5. Compliance Test Report :	NA				
6. Procedures for Startup and Shutdown:	NA				
7. Operation and Maintenance Plan :	NA				
8. Supplemental Information for Construction Permit Application:	Volume 1				
9. Other Information Required by Rule or Statue :	NA				
Additional Supplemental Requirements for Category I Application	s Only				
10. Alternative Methods of Operations :	NA				
11. Alterntive Modes of Operation (Emissions Trading):	NA				

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12. Identification of Additional Applicable Requirements : NA						
13. Compliance Assurance Monitoring NA Plan:						
14. Acid Rain Application (Hard-copy Required):						
NA	Acid Rain Part - Phase II (l	Form No. 62-210.900(1)(a))				
NA	Repowering Extension Plan	n (Form No. 62-210.900(1)(a)1.)				
NA New Unit Exemption (Form No. 62-210.900(1)(a)2.)						
NA Retired Unit Exemption (Form		orm No. 62-210.900(1)(a)3.)				

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#### III. EMISSIONS UNIT INFORMATION

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Ŀn	Emissions Unit Information Section /				
Ac	tivate	d Carbon Storage Silo			
<u>Ty</u>	pe of	Emissions Unit Addressed in This Section			
1.	Regu	ulated or Unregulated Emissions Unit? Check one:			
	[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
	[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
2.	Sing	le Process, Group of Processes, or Fugitive Only? Check one :			
[	X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
[	]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
[	]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			

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<b>Emissions</b>	Unit	Information	Section	7
Emissions	Unit	Information	Section	7

## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

. Description of Emissions Unit Addressed in This Section :							
Activated Carbon Storage Silo	Activated Carbon Storage Silo						
2. Emissions Unit Identification	Number: 107						
[ ] No Corresponding II	D [ ] Ur	ıknown					
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major					
Code: C	[ ] Yes [X] No	Group SIC Code: 49					
6. Emissions Unit Comment:							
An activated carbon storage silo will be added to the Facility to handle powdered activated carbon needed for the new air pollution control equipment, the carbon injection system for mercury emissions control.							

III. Part 2 - 7

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<b>Emissions Unit Information Section</b>	7
Activated Carbon Storage Silo	

## Emissions Unit Control Equipment 1

1. Description:	
Fabric filter on silo exhaust vent designed f rate of 1,200 scfm.	For an outlet grain loading of 0.015 gr/dscf and an air flow
2. Control Device or Method Code :	18
2. Control Device of Method Code.	10

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# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section Activated Carbon Storage Silo	7	
Emissions Unit Details		
1. Initial Startup Date :	09-Feb-2000	
2. Long-term Reserve Shutdown Date:		
3. Package Unit:		
Manufacturer: To be provided.		Model Number :
4. Generator Nameplate Rating:	MW	
5. Incinerator Information :		
Dwell Temperature:		Degrees Fahrenheit
Dwell Time :		Seconds
Incinerator Afterburner Temperature :		Degrees Fahrenheit
<b>Emissions Unit Operating Capacity</b>		
1. Maximum Heat Input Rate:	mmBtu/hr	
2. Maximum Incinerator Rate:	lb/hr	tons/day
3. Maximum Process or Throughput Rate:	200	tons per year
4. Maximum Production Rate:		
5. Operating Capacity Comment:		
Emissions Unit Operating Schedule		
Requested Maximum Operating Schedule:		
24 hours/d	▼	7 days/week
52 weeks/	year	8,760 hours/year

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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Activated Carbon Storage Silo	
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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#### **Emissions Unit Information Section**

Activated Carbon Storage Silo

### **List of Applicable Regulations**

Refer to Volume 1, Section 2.

### E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Sec	tion	7		
Activated Carbon Storage Silo				
Emission Point Description and	Type:			
1. Identification of Point on Pl	ot Plan or Flow	Diagram :	See Vol. 1 Fi	g. 6-4
2. Emission Point Type Code		1		
3. Descriptions of Emission Po (limit to 100 characters per point	- '	g this Emissio	ns Unit for VI	E Tracking:
4. ID Numbers or Descriptions	of Emission U	nits with this l	Emission Poin	t in Common :
Activated carbon storage silo	vent and fabric f	ilter.		
5. Discharge Type Code:			P	
6. Stack Height:				feet
7. Exit Diameter:				feet
8. Exit Temperature :				°F
9. Actual Volumetric Flow Ra	te:		1200	acfm
10. Percent Water Vapor:				%
11. Maximum Dry Standard F	low Rate:		1200	dscfm
12. Nonstack Emission Point I	leight:			feet
13. Emission Point UTM Coor	dinates:			
Zone:	East (km):		North (ki	m):
14. Emission Point Comment Information on emission hei		ocation to be pr	ovided.	

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>	7
Activated Carbon Storage Silo	

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
1 - PM	018		EL

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# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Activated Carbon Storage Silo	ection		
Pollutant Potential/Estimated Em	issions: Pollutant	1	
1. Pollutant Emitted: PM			
2. Total Percent Efficiency of Con	trol :	%	
3. Potential Emissions :	lb/hour	t	ons/year
4. Synthetically Limited?  [ ] Yes [X ] No			
5. Range of Estimated Fugitive/Ot	her Emissions:	to	tons/year
6. Emissions Factor : Reference :			
7. Emissions Method Code: 5		. A Section	
8. Calculations of Emissions :			
9. Pollutant Potential/Estimated En			

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ated Carbon Storage Silo  7	
tant Information Section 1	
vable Emissions 1	
asis for Allowable Emissions Code :	
uture Effective Date of Allowable Emissions :	
equested Allowable Emissions and Units :	
quivalent Allowable Emissions :	
lb/hour tons/year	
ethod of Compliance:	
ollutant Allowable Emissions Comment (Desc. of Related Operating Method/Mode):	
M emissions are below the 5 tpy reporting threshold.	

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section Activated Carbon Storage Silo			
Visible Emissions Limitation: Visible	e Emissions Limit	ation	1
1. Visible Emissions Subtype :	05		
2. Basis for Allowable Opacity:	RULE		
3. Requested Allowable Opacity:			
Normal Exceptional Maximum Period of Excess Opacit	Conditions:	=	% % min/hour
4. Method of Compliance :			
Method 9			
5. Visible Emissions Comment:			
The City of Tampa is requesting that cousing Method 9 VE tests indicating not 62-296.711(3)(c) and 62-297.260(4).	-		

DEP Form No. 62-210.900(1) - Form

# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

ĽI	Emissions Unit Information Section 7			
Αc	ctiv	ated Carbon Storage Silo		
<u>P\$</u>	<u>SD</u>	Increment Consumption Determination		
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?		
	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.		
	]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.		
	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.		
[ }	<b>(</b> ]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.		
	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.		

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2.	In	crement Consum	ning for Nitrogo	en Dioxide?	
[	]		has undergone	in this section is undergoing PSD review previously, for n	PSD review as part of this nitrogen dioxide. If so, emissions
[	] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.				
[	]	emissions unit	began initial or	application is classified as an peration after February 8, 198 o, and emissions unit consum	88, but before March 28, 1988. If
[	]	•	•	s unit began (or will begin) in as are zero, and emissions un	nitial operation after March 28, it consumes increment.
[	]	case, additiona	al analysis, beyons issions have occ	ond the scope of this applicat	emissions unit are nonzero. In such ion, is needed to determine whether he baseline date that may consume
3	. Iı	ncrement Consu	ming/Expandin	g Code :	
		PM:	С	SO2:	NO2:
4	. E	Baseline Emissio	ons :		
		PM:		lb/hour	tons/year
		SO2:		lb/hour	tons/year
		NO2:			tons/year
5	. P	PSD Comment:			

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### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

Supplemental Requirements for All Applications	
1. Process Flow Diagram :	Append A Fig 3
2. Fuel Analysis or Specification :	NA
3. Detailed Description of Control Equipment:	To be provided.
4. Description of Stack Sampling Facilities :	NA
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	Volume 1
9. Other Information Required by Rule or Statue :	NA
Additional Supplemental Requirements for Category I Applicatio	ons Only
10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

Activated Carbon Storage Silo

12. Identification of	2. Identification of Additional Applicable Requirements:	
13. Compliance Ass Plan:	surance Monitoring	NA
14. Acid Rain Appli	ication (Hard-copy Required) :	
NA	Acid Rain Part - Phase II (Form	m No. 62-210.900(1)(a))
NA	Repowering Extension Plan (F	Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form N	To. 62-210.900(1)(a)2.)
NA Retired Unit Exemption (Form N		n No. 62-210.900(1)(a)3.)

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#### III. EMISSIONS UNIT INFORMATION

# A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8
MWC Auxiliary Burner - Unit #1
Type of Emissions Unit Addressed in This Section
1. Regulated or Unregulated Emissions Unit? Check one :
[X] The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ] The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Single Process, Group of Processes, or Fugitive Only? Check one :
[X] This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ] This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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Emissions	Unit Inf	ormation	Section	8

## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :				
MWC Auxiliary Burner - Unit #1				
2. Emissions Unit Identification	Number: 108			
[ ] No Corresponding II	D [ ] Un	known		
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major		
Code: C	[ ] Yes [X] No	Group SIC Code: 49		
6. Emissions Unit Comment:  The auxiliary burners will be used for firing the combustor during start up and shut downs and to maintain required furnace temperatures when sustained low Btu wastes are encountered. The City of Tampa is requesting permit limits which restrict annual use of natural gas to less than 10 percent of the total annual capacity for each unit so that the NSPS Subpart Db requirements for NOx do not apply. The size of the burners and their fuel consumption rate is to be determined. The burners will have emissions only emit NOx in amounts above the reporting thresholds. CO, SO2, PM10, and VOCs will be emitted in amounts less than 5 tpy.				

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<b>Emissions Unit Information Section</b>	8
MWC Auxiliary Burner - Unit #1	

### Emissions Unit Control Equipment 1

1.	Description:	
	Selective Non-catalytic Reduction System	
	•	
2.	Control Device or Method Code:	107

# C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Details	
·	
1. Initial Startup Date : 22-Jan-2	3001
2. Long-term Reserve Shutdown Date:	
3. Package Unit:	-
Manufacturer: To be provided once a vendor is sele	ected Model Number:
4. Generator Nameplate Rating: MW	V
5. Incinerator Information :	
Dwell Temperature:	Degrees Fahrenheit
Dwell Time:	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit
Emissions Unit Operating Capacity  1. Maximum Heat Input Rate: 12 r	mmBtu/hr
2. Maximum Incinerator Rate: 1	lb/hr tons/day
3. Maximum Process or Throughput Rate:	
<ul><li>3. Maximum Process or Throughput Rate :</li><li>4. Maximum Production Rate :</li></ul>	
	f the waste combuster's total annual capacit
<ul> <li>4. Maximum Production Rate :</li> <li>5. Operating Capacity Comment :     The unit will have a restricted use of less than 10% of</li> </ul>	f the waste combuster's total annual capacit
<ol> <li>Maximum Production Rate:</li> <li>Operating Capacity Comment:         The unit will have a restricted use of less than 10% of (11.98 mmBTU/hr or 28.75 tpd).     </li> <li>Emissions Unit Operating Schedule</li> </ol>	f the waste combuster's total annual capacit
<ul> <li>4. Maximum Production Rate:</li> <li>5. Operating Capacity Comment:     The unit will have a restricted use of less than 10% of (11.98 mmBTU/hr or 28.75 tpd).</li> </ul>	f the waste combuster's total annual capacit

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# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #1	8			
Rule Applicability Analysis				
Refer to Volume 1, Section 2				

III. Part 6a - 8

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### **Emissions Unit Information Section**

MWC Auxiliary Burner - Unit #1

### **List of Applicable Regulations**

Refer to Volume 1, Section2

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### E. EMISSION POINT (STACK/VENT) INFORMATION

8

MWC Auxiliary Burner - Unit #1		
Emission Point Description and Type:		
1. Identification of Point on Plot Plan or Flow Diagram:	See Vol. 1 Fig 6-4	
2. Emission Point Type Code: 2		
3. Descriptions of Emission Points Comprising this Emiss (limit to 100 characters per point) Not applicable for sources with single emission points	ssions Unit for VE Tracking:	
4. ID Numbers or Descriptions of Emission Units with this	is Emission Point in Common:	
Emission units 101-104 (combustion units) and emission units have four flues within a common stack. Combustion unit 1 common flue as will 102 and 109, 103 and 110, 104 and 11	101 and auxiliary burner 108 will share a	
5. Discharge Type Code :	V	
6. Stack Height:	201 feet	
7. Exit Diameter:	8.4 feet	
8. Exit Temperature :	°F	
9. Actual Volumetric Flow Rate:	acfm	
10. Percent Water Vapor:	%	
11. Maximum Dry Standard Flow Rate:	dscfm	
12. Nonstack Emission Point Height:	feet	
13. Emission Point UTM Coordinates:		
Zone: 17 East (km): 360.196	North (km): 3092.208	
14. Emission Point Comment: The auxiliary burner emissions will use the same stack as	s the combustor units.	

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**Emissions Unit Information Section** 

## F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 8	
MWC Auxiliary Burner - Unit #1	
Segment Description and Rate: Segment	1
1. Segment Description (Process/Fuel Type and A	Associated Operating Method/Mode):
during start up and shut down and to maintain the	required furnace temperatures. The anticipated time y eight hours. The size of the burners and their fuel
2. Source Classification Code (SCC): 1-02-0	06-02
3. SCC Units: Million Cubic Feet Burned (all ga	seous fuels)
4. Maximum Hourly Rate :	5. Maximum Annual Rate : 11.98
6. Estimated Annual Activity Factor: 100.00	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1,000	
10. Segment Comment :	
10. Segment Comment.	

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# G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 8
MWC Auxiliary Burner - Unit #1

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
1 - NOX	107		NS

# H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

	nissions Unit Information Section WC Auxiliary Burner - Unit #1	8			
<u>Po</u>	llutant Potential/Estimated Emissions	S: Pollutant	1		
1.	Pollutant Emitted: NOX		-	_	
2.	Total Percent Efficiency of Control:		%		
3.	Potential Emissions:	lb/hour	10.49	tons/year	r
4.	Synthetically Limited? [ ] Yes [X ] No				
5.	Range of Estimated Fugitive/Other Em	nissions:	to		tons/year
6.	Emissions Factor : Reference : NSPS				
7.	Emissions Method Code: 0				
8.	Calculations of Emissions:				
	119.8 MMBtu/hr X 8760 hr/yr = 1.05 E combustor) 1.05E6 MMBtu/yr X 10% = 1.05 E5 MM 1.05 E5 MMBtu/yr X 0.2 lb/MMBtu / 20	ЛВtu/yr (Subpart	Db exlusion the	•	the
9.	Pollutant Potential/Estimated Emission	ns Comment:	, •		
	The NOx emission factor for the auxiliar (0.2 lb/MMBtu).	ry burners has be	en taken from tl	ne 40 CFR 60 S	Subpart Db

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

MWC Auxiliary Burner - Unit #1			
Visible Emissions Limitation: Visib	le Emissions Limitati	ion 1	
1. Visible Emissions Subtype:	15		
2. Basis for Allowable Opacity:	OTHER		
3. Requested Allowable Opacity:			
Exceptiona Maximum Period of Excess Opac	l Conditions : 15 l Conditions : ity Allowed :	5 % % min/hour	
Method of Compliance :     Continuous Opacity Monitors			
5. Visible Emissions Comment:  Continuous Opacity Monitors are required periods when the auxiliary burners are AO 29-206279, Specific condition 3 a hour period.	operating. The combu	ustors have visbility require	ments in Permit

III. Part 10 - 8

DEP Form No. 62-210.900(1) - Form

**Emissions Unit Information Section** 

# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section  MWC Auxiliary Burner - Unit #1  Continuous Monitoring System: Continuous	nuous Monitor 1
1. Parameter Code : EM	2. Pollutant : NOX
3. CMS Requirement: OTHER	
4. Monitor Information :	
Manufacturer :	
Model Number:	
Serial Number:	
5. Installation Date :	
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	
CEMs will be installed for the combustors operating.	s and will operate during periods when the auxiliary burner is

III. Part 11 - 17

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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section 8  MWC Auxiliary Burner - Unit #1  Continuous Monitoring System: Continuous Monitor 2		
1. Parameter Code : VE	2. Pollutant :	
3. CMS Requirement: OTHER		
4. Monitor Information :  Manufacturer : To be determine  Model Number :  Serial Number :	d	
5. Installation Date :		
6. Performance Specification Test Date :		
7. Continuous Monitor Comment:  Continuous opacity monitors are required for the periods when the auxiliary burners are operation.	ne combustor units. The monitors will also run during ag.	

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

En	nis	sions Unit Information Section 8
М١	WC	Auxiliary Burner - Unit #1
<u>PS</u>	D	Increment Consumption Determination
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?
[	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[ X	[]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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[	]	The emissions unit addressed in this section is undergoing PSD review as part of this

2. Increment Consuming for Nitrogen Dioxide?

application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.

- [X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- ] For any facility, the emissions unit began (or will begin) initial operation after March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.
- None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

3. Incr	Increment Consuming/Expanding Code:							
	PM:	C	SO2: C	NO2:	С			
4. Bas	seline Emissio	ns:						
	PM : SO2 : NO2 :		lb/hour lb/hour		tons/year tons/year tons/year			
5. PSI	D Comment :		III. Part 12 - 29					

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

. Process Flow Diagram :	Append A Fig 3
. Flocess Flow Diagram .	Append A Fig 3
. Fuel Analysis or Specification :	Vol. 1, Sect. 6
. Detailed Description of Control Equipment :	To be provided.
Description of Stack Sampling Facilities :	To be provided.
5. Compliance Test Report :	NA
5. Procedures for Startup and Shutdown:	NA
. Operation and Maintenance Plan :	NA
3. Supplemental Information for Construction Permit Application	on: NA
O. Other Information Required by Rule or Statue :	NA
Additional Supplemental Requirements for Category I Appli	ications Only
10. Alternative Methods of Operations:	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

MWC Auxiliary Burner - Unit #1

NA
o. 62-210.900(1)(a))
No. 62-210.900(1)(a)1.)
2-210.900(1)(a)2.)
. 62-210.900(1)(a)3.)
_

DEP Form No. 62-210.900(1) - Form

#### III. EMISSIONS UNIT INFORMATION

## A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emission	s Unit Information Section 9			
MWC Au	xiliary Burner - Unit #2			
Type of l	Emissions Unit Addressed in This Section			
1. Regula	. Regulated or Unregulated Emissions Unit? Check one:			
	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.			
	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.			
2. Single	Process, Group of Processes, or Fugitive Only? Check one:			
	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).			
	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.			
	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.			

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<b>Emissions</b>	Unit l	Informat	tion Section
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9

### B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :				
MWC Auxiliary Burner - Unit #2				
2. Emissions Unit Identification	Number: 109			
[ ] No Corresponding II	[ ] No Corresponding ID [ ] Unknown			
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major		
Code: C	[ ] Yes [X] No	Group SIC Code: 49		
6. Emissions Unit Comment:				
The auxiliary burners will be used for firing the combustor during start up and shut downs and to maintain required furnace temperatures when sustained low Btu wastes are encountered. The City of Tampa is requesting permit limits which restrict annual use of natural gas to less than 10 percent of the total annual capacity for each unit so that the NSPS Subpart Db requirements for NOx do not apply. The size of the burners and their fuel consumption rate is to be determined. The burners will have emissions only emit NOx in amounts above the reporting thresholds. CO, SO2, PM10, and VOCs will be emitted in amounts less than 5 tpy.				

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<b>Emissions Unit Information Section</b>	9
MWC Auxiliary Burner - Unit #2	

### **Emissions Unit Control Equipment**

1	. Description :	
	Selective Non-ACatalytic Reduction System	1
	•	
2	. Control Device or Method Code:	107

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### C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

9

MWC Auxiliary Burner - Unit #2	
Emissions Unit Details	· ·
1. Initial Startup Date : 22-Jan-200	1
2. Long-term Reserve Shutdown Date :	
3. Package Unit:	
Manufacturer: To be provided once a vendor is selecte	d Model Number:
4. Generator Nameplate Rating: MW	
5. Incinerator Information:	
Dwell Temperature:	Degrees Fahrenheit
Dwell Time:	Seconds
Incinerator Afterburner Temperature:	Degrees Fahrenheit
Emissions Unit Operating Capacity	
1. Maximum Heat Input Rate: 12 mm	nBtu/hr
2. Maximum Incinerator Rate: lb/h	nr tons/day
3. Maximum Process or Throughput Rate:	
4. Maximum Production Rate:	
5. Operating Capacity Comment: The unit will have a restricted use of less than 10% of the (11.98 mmBTU/hr or 28.75 tpd).	e waste combuster's total annual capacity
Emissions Unit Operating Schedule	
Requested Maximum Operating Schedule:	
24 hours/day	7 days/week
52 weeks/year	8,760 hours/year

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**Emissions Unit Information Section** 

## D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #2	9
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

III. Part 6a - 9

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#### **Emissions Unit Information Section**

MWC Auxiliary Burner - Unit #2

#### **List of Applicable Regulations**

Refer to Volume 1, Section2

III. Part 6b - 9

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### E. EMISSION POINT (STACK/VENT) INFORMATION

Emissions Unit Information Section 9			
MWC Auxiliary Burner - Unit #2			
Emission Point Description and Type:			
1. Identification of Point on Plot Plan or Flow Diagram:	See Vol. 1 Fig 6-4		
2. Emission Point Type Code: 2			
3. Descriptions of Emission Points Comprising this Emissions (limit to 100 characters per point) Not applicable for sources with single emission points	Unit for VE Tracking:		
4. ID Numbers or Descriptions of Emission Units with this Em	ission Point in Common :		
Emission units 101-104 (combustion units) and emission units 108-111 (auxiliary burners) will be have four flues within a common stack. Combustion unit 101 and auxiliary burner 108 will share a common flue as will 102 and 109, 103 and 110, 104 and 111.			
5. Discharge Type Code :	V		
6. Stack Height:	201 feet		
7. Exit Diameter :	8.4 feet		
8. Exit Temperature :	°F		
9. Actual Volumetric Flow Rate :	acfm		
10. Percent Water Vapor:	%		
11. Maximum Dry Standard Flow Rate:	dscfm		
12. Nonstack Emission Point Height :	feet		
13. Emission Point UTM Coordinates:			
Zone: 17 East (km): 360.196	North (km): 3092.208		
14. Emission Point Comment:  The auxiliary burner emissions will use the same stack as the co	ombustor units.		

III. Part 7a - 9

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### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 9	_
MWC Auxiliary Burner - Unit #2	
Segment Description and Rate: Segment	1
1. Segment Description (Process/Fuel Type and	Associated Operating Method/Mode):
during start up and shut down and to maintain the	he waste combustor units. The burners will be used required furnace temperatures. The anticipated time ly eight hours. The size of the burners and their fuel
2. Source Classification Code (SCC): 1-02-0	006-02
3. SCC Units: Million Cubic Feet Burned (all ga	aseous fuels)
4. Maximum Hourly Rate :	5. Maximum Annual Rate: 11.98
6. Estimated Annual Activity Factor: 100.00	
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1,000	
10. Segment Comment :	

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## G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>	9
MWC Auxiliary Burner - Unit #2	

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	Pollutant     Regulatory Code
1 - NOX	107		NS

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## H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #2	9			
Pollutant Potential/Estimated Emission	ns: Pollutant	1		
1. Pollutant Emitted: NOX				
2. Total Percent Efficiency of Control:		%		
3. Potential Emissions :	lb/hour	10.49	tons/year	
4. Synthetically Limited? [ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other En	nissions:	to	tons/ye	ear
6. Emissions Factor : Reference : NSPS				
7. Emissions Method Code: 0				
8. Calculations of Emissions:				
119.8 MMBtu/hr X 8760 hr/yr = 1.05 l combustor) 1.05E6 MMBtu/yr X 10% = 1.05 E5 Ml 1.05 E5 MMBtu/yr X 0.2 lb/MMBtu / 2	MBtu/yr (Subpart	Db exlusion thr	•	
9. Pollutant Potential/Estimated Emissio	ons Comment:			•
The NOx emission factor for the auxilia (0.2 lb/MMBtu).	ary burners has be	en taken from th	e 40 CFR 60 Subpart D	<b>)</b> b

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## I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #2	9		
Visible Emissions Limitation: Visib	le Emissions Lin	nitation	1
1. Visible Emissions Subtype:	15		
2. Basis for Allowable Opacity:	OTHER		
3. Requested Allowable Opacity:			
	Conditions: Conditions: ty Allowed:	15	% % min/hour
Method of Compliance :      Continuous Opacity Monitors			
5. Visible Emissions Comment:  Continuous Opacity Monitors are requiperiods when the auxiliary burners are AO 29-206279, Specific condition 3 are hour period.	operating. The co	mbustors ha	ve visbility requirements in Permit

III. Part 10 - 9

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## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section 9 MWC Auxiliary Burner - Unit #2				
Continuous Monitoring System: Continuous Monitor				
2. Pollutant: NOX				
ill operate during periods when the auxiliary burner is				

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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section 9  MWC Auxiliary Burner - Unit #2  Continuous Monitoring System: Continuous Monitor 2				
1. Parameter Code : VE	2. Pollutant :			
3. CMS Requirement: OTHER				
4. Monitor Information :				
Manufacturer: To be determined Model Number: Serial Number:				
5. Installation Date :				
6. Performance Specification Test Date:				
7. Continuous Monitor Comment :				
Continuous opacity monitors are required for the combustor units. The monitors will also run during periods when the auxiliary burners are operating.				

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### K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

E	mis	sions Unit Information Section 9
M	(WC	C Auxiliary Burner - Unit #2
<u>P</u>	<u>SD</u>	Increment Consumption Determination
1.	In	crement Consuming for Particulate Matter or Sulfur Dioxide?
]	]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[ 2	X]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[	]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	2. Increment Consuming for Nitrogen Dioxide?						
[	]	The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.					
[2	<b>K</b> ]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	]	] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.					
[	]	•		_	•	ill begin) initial ope nissions unit consur	ration after March 28, nes increment.
	]	case, additional	l analysis, beyo ssions have occ	nd the sc	ope of tl	nis application, is ne	s unit are nonzero. In such eded to determine whether e date that may consume
3	. I:	ncrement Consu	ming/Expandin	g Code :			
		PM:	С	SO2:	C	NO2:	С
4	. E	Baseline Emissio	ns:				·
		PM : SO2 : NO2 :		lb/hour lb/hour		189.7000	tons/year tons/year tons/year
5	. F	PSD Comment:					

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### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

MWC Auxiliary Burner - Unit #2	
Supplemental Requirements for All Applications	
1. Process Flow Diagram:	Append A Fig 3
2. Fuel Analysis or Specification :	Vol. 1, Sect. 6
3. Detailed Description of Control Equipment :	To be provided.
4. Description of Stack Sampling Facilities:	To be provided.
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan :	NA
8. Supplemental Information for Construction Permit Application :	NA
9. Other Information Required by Rule or Statue :	NA
Additional Supplemental Requirements for Category I Application	ns Only
10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA

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**Emissions Unit Information Section** 

12. Identification of A	Additional Applicable Requirements :	NA
13. Compliance Assu Plan :	urance Monitoring	NA
14. Acid Rain Applic	cation (Hard-copy Required):	
NA	Acid Rain Part - Phase II (Form	n No. 62-210.900(1)(a))
NA	Repowering Extension Plan (Fo	orm No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No	o. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Form	No. 62-210.900(1)(a)3.)

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#### III. EMISSIONS UNIT INFORMATION

#### A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

Emissio	ons Unit Information Section 10
MWC A	uxiliary Burner - Unit #3
Type of	f Emissions Unit Addressed in This Section
1. Regu	ulated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Sing	le Process, Group of Processes, or Fugitive Only? Check one:
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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<b>Emissions U</b>	nit	Informa	tion	Section
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## B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

#### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :						
MWC Auxiliary Burner - Unit #3						
2. Emissions Unit Identification	Number: 110					
[ ] No Corresponding I	D [ ] Un	known				
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major				
Code: C	[ ] Yes [X] No	Group SIC Code: 49				
		•				
6. Emissions Unit Comment:						
The auxiliary burners will be used for firing the combustor during start up and shut downs and to maintain required furnace temperatures when sustained low Btu wastes are encountered. The City of Tampa is requesting permit limits which restrict annual use of natural gas to less than 10 percent of the total annual capacity for each unit so that the NSPS Subpart Db requirements for NOx do not apply. The size of the burners and their fuel consumption rate is to be determined. The burners will have emissions only emit NOx in amounts above the reporting thresholds. CO, SO2, PM10, and VOCs will be emitted in amounts less than 5 tpy.						

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MWC Auxiliary Burner - Unit #3
Emissions Unit Control Equipment 1
1. Description:
Selective Non-Catalytic Reduction System
2. Control Device or Method Code: 107

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**Emissions Unit Information Section** 10

## C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #3		
Emissions Unit Details		
1. Initial Startup Date:	09-Feb-2000	
2. Long-term Reserve Shutdown Date :		
3. Package Unit:  Manufacturer: To be provided once a vertex.	endor is selected	Model Number:
4. Generator Nameplate Rating:	MW	
5. Incinerator Information:  Dwell Temperature:  Dwell Time:  Incinerator Afterburner Temperature:  Emissions Unit Operating Capacity		Degrees Fahrenheit Seconds Degrees Fahrenheit
1. Maximum Heat Input Rate: 12	mmBtu/hr	•
2. Maximum Incinerator Rate :	lb/hr	tons/day
3. Maximum Process or Throughput Rate	<del>-</del> ::	
4. Maximum Production Rate:		
5. Operating Capacity Comment: The unit will have a restricted use of less (11.98 mmBTU/hr or 28.75 tpd).	than 10% of the waste	combuster's total annual capacity
Emissions Unit Operating Schedule		
Requested Maximum Operating Schedule		
24 hours 52 week	•	7 days/week 8,760 hours/year

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### D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #3			
Rule Applicability Analysis			
Refer to Volume 1, Section 2			

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### **Emissions Unit Information Section**

MWC Auxiliary Burner - Unit #3

#### **List of Applicable Regulations**

Refer to Volume 1, Section2

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#### E. EMISSION POINT (STACK/VENT) INFORMATION

10

MWC Auxiliary Burner - Unit #3	
Emission Point Description and Type:	
1. Identification of Point on Plot Plan or Flow Diagram : See Vo	ol. 1 Fig 6-4
2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emissions Unit (limit to 100 characters per point)  Not applicable for sources with single emission points	for VE Tracking :
4. ID Numbers or Descriptions of Emission Units with this Emission	n Point in Common:
Emission units 101-104 (combustion units) and emission units 108-11 have four flues within a common stack. Combustion unit 101 and aux common flue as will 102 and 109, 103 and 110, 104 and 111.	•
5. Discharge Type Code:	V
6. Stack Height:	201 feet
7. Exit Diameter:	8.4 feet
8. Exit Temperature :	°F
9. Actual Volumetric Flow Rate :	acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height :	feet
13. Emission Point UTM Coordinates :	
Zone: 17 East (km): 360.196 No.	orth (km): 3092.208
14. Emission Point Comment:  The auxiliary burner emissions will use the same stack as the combus	stor units.

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**Emissions Unit Information Section** 

#### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section	10
MWC Auxiliary Burner - Unit #3	
Segment Description and Rate: Segment	nt <u>1</u>
1. Segment Description (Process/Fuel Type	and Associated Operating Method/Mode):
during start up and shut down and to maintai	n of the waste combustor units. The burners will be used in the required furnace temperatures. The anticipated time mately eight hours. The size of the burners and their fuel
2. Source Classification Code (SCC): 1	-02-006-02
3. SCC Units: Million Cubic Feet Burned (	all gaseous fuels)
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 11.98
6. Estimated Annual Activity Factor: 10	00.00
7. Maximum Percent Sulfur :	8. Maximum Percent Ash:
9. Million Btu per SCC Unit: 1,000	
10. Segment Comment :	

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## G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

Emissions Unit Information Section 10
MWC Auxiliary Burner - Unit #3

1. Pollutant Emitted	Primary Control     Device Code	Secondary Control     Device Code	4. Pollutant Regulatory Code
1 - NOX	107		NS

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### H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #3	n <u>10</u>			
Pollutant Potential/Estimated Emission	ns: Pollutant	1		
1. Pollutant Emitted: NOX				
2. Total Percent Efficiency of Control:		%		-
3. Potential Emissions:	lb/hour	10.49	tons/year	
4. Synthetically Limited? [ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Er	missions:	to		tons/year
6. Emissions Factor : Reference : NSPS				
7. Emissions Method Code: 0				
8. Calculations of Emissions:				
119.8 MMBtu/hr X 8760 hr/yr = 1.05 combustor) 1.05E6 MMBtu/yr X 10% = 1.05 E5 M 1.05 E5 MMBtu/yr X 0.2 lb/MMBtu / 2	MBtu/yr (Subpar	t Db exlusion thr	•	the
9. Pollutant Potential/Estimated Emissio	ons Comment :			
The NOx emission factor for the auxilia (0.2 lb/MMBtu).	ary burners has be	een taken from th	ne 40 CFR 60 S	ubpart Db

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# I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

10

MWC Auxiliary Burner - Unit #3				
Visible Emissions Limitation: Visib	le Emissions Lim	itation	1	
1. Visible Emissions Subtype:	15			
2. Basis for Allowable Opacity:	OTHER			
3. Requested Allowable Opacity:	,			
Exceptiona Maximum Period of Excess Opaci  4. Method of Compliance:  Continuous Opacity Monitors	l Conditions : l Conditions : ity Allowed :	15	% % min/hour	
5. Visible Emissions Comment:  Continuous Opacity Monitors are required periods when the auxiliary burners are AO 29-206279, Specific condition 3 a hour period.	operating. The con	mbustors ha	nve visbility requirements in Per	mit

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**Emissions Unit Information Section** 

## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

MWC Auxiliary Burner - Unit #3					
Continuous Monitoring System: Continu  1. Parameter Code: EM	2. Pollutant: NOX				
3. CMS Requirement: OTHER					
4. Monitor Information :					
Manufacturer : Model Number :					
Serial Number:					
5. Installation Date :					
6. Performance Specification Test Date :					
7. Continuous Monitor Comment:					
CEMs will be installed for the combustors a operating.	and will operate during periods when the auxiliary burner is				
CEMs will be installed for the combustors a	and will operate during periods when the auxiliary burner is				

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# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

MWC Auxiliary Burner - Unit #3  Continuous Monitoring System: Continuous Monitor 2				
1. Parameter Code : VE	2. Pollutant :			
3. CMS Requirement: OTHER				
4. Monitor Information :				
Manufacturer: To be determi Model Number: Serial Number:	ned			
5. Installation Date :				
6. Performance Specification Test Date :				
7. Continuous Monitor Comment :				
Continuous opacity monitors are required for periods when the auxiliary burners are operated	r the combustor units. The monitors will also run during ting.			

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Em	issions Unit Information Section 10
MW	C Auxiliary Burner - Unit #3
<u>PSI</u>	O Increment Consumption Determination
1. I	ncrement Consuming for Particulate Matter or Sulfur Dioxide?
[ ]	The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[ X]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ]	For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[]	None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	2. Increment Consuming for Nitrogen Dioxide?							
]	]	The emissions unit addressed in this section is undergoing PSD review as part of this application, or has undergone PSD review previously, for nitrogen dioxide. If so, emissions unit consumes increment.						
[3	ζ]	The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after February 8, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.						
[	]	The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after February 8, 1988, but before March 28, 1988. If so, baseline emissions are zero, and emissions unit consumes increment.						
[	]	•	· ·	_	•	egin) initial oper	ration after March 28, nes increment.	
[	[ ] None of the above apply. If so, baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.							
3.	. Iı	ncrement Consu	ming/Expanding	g Code :				
		PM:	С	SO2:	С	NO2:	С	
4	. Е	Baseline Emissio	ns:					
		PM:		lb/hour			tons/year	
		SO2:		lb/hour			tons/year	
		NO2 :				189.7000	tons/year	
5	. P	SD Comment:						

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

10

**Emissions Unit Information Section** 

MWC Auxiliary Burner - Unit #3

Supplemental Requirements for All Applications			
1. Process Flow Diagram :	Append A Fig 3		
2. Fuel Analysis or Specification:	Vol. 1, Sect. 6		
3. Detailed Description of Control Equipment :	To be provided.		
4. Description of Stack Sampling Facilities :	To be provided.		
5. Compliance Test Report :	NA		
6. Procedures for Startup and Shutdown:	NA		
7. Operation and Maintenance Plan:	NA		
8. Supplemental Information for Construction Permit Application :	NA		
9. Other Information Required by Rule or Statue :	NA		
Additional Supplemental Requirements for Category I Applications Only			
10. Alternative Methods of Operations:	NA		
11. Alterntive Modes of Operation (Emissions Trading):	NA		

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12. Identification of A	Additional Applicable Requirements:	NA
13. Compliance Assu Plan :	rance Monitoring	NA
14. Acid Rain Application (Hard-copy Required):		
NA	Acid Rain Part - Phase II (Form No. 62	2-210.900(1)(a))
NA	Repowering Extension Plan (Form No.	62-210.900(1)(a)1.)
NA	New Unit Exemption (Form No. 62-21	0.900(1)(a)2.)
NA	Retired Unit Exemption (Form No. 62-	210.900(1)(a)3.)

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#### III. EMISSIONS UNIT INFORMATION

## A. TYPE OF EMISSIONS UNIT (Regulated and Unregulated Emissions Units)

MWC A	uxiliary Burner - Unit #4
Type of	Emissions Unit Addressed in This Section
1. Regu	ulated or Unregulated Emissions Unit? Check one:
[X]	The emissions unit addressed in this Emissions Unit Information Section is a regulated emissions unit.
[ ]	The emissions unit addressed in this Emissions Unit Information Section is an unregulated emissions unit.
2. Sing	le Process, Group of Processes, or Fugitive Only? Check one:
[ X]	This Emissions Unit Information Section addresses, as a single emissions unit, a single process or production unit, or activity, which produces one or more air pollutants and which has at least one definable emission point (stack or vent).
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, a group of process or production units and activities which has at least one definable emission point (stack or vent) but may also produce fugitive emissions.
[ ]	This Emissions Unit Information Section addresses, as a single emissions unit, one or more process or production units and activities which produce fugitive emissions only.

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**Emissions Unit Information Section** 11

### B. GENERAL EMISSIONS UNIT INFORMATION (Regulated and Unregulated Emissions Units)

### **Emissions Unit Description and Status**

1. Description of Emissions Unit Addressed in This Section :			
MWC Auxiliary Burner - Unit #4			
2. Emissions Unit Identification	Number: 111		
[ ] No Corresponding ID [ ] Unknown			
3. Emissions Unit Status	4. Acid Rain Unit?	5. Emissions Unit Major	
Code: C	[ ] Yes [X] No	Group SIC Code: 49	
		-	
6. Emissions Unit Comment:			
The auxiliary burners will be used for firing the combustor during start up and shut downs and to maintain required furnace temperatures when sustained low Btu wastes are encountered. The City of Tampa is requesting permit limits which restrict annual use of natural gas to less than 10 percent of the total annual capacity for each unit so that the NSPS Subpart Db requirements for NOx do not apply. The size of the burners and their fuel consumption rate is to be determined. The burners will have emissions only emit NOx in amounts above the reporting thresholds. CO, SO2, PM10, and VOCs will be emitted in amounts less than 5 tpy.			

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MWC Auxiliary Burner - Unit #4	
Emissions Unit Control Equipment _	1
1. Description:	-

**Emissions Unit Information Section** 11

1.	Description:	
	Selective Non-catalytic Reduction System	
2.	Control Device or Method Code:	107

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## C. EMISSIONS UNIT DETAIL INFORMATION (Regulated Emissions Units Only)

11

WWC Auxiliary Burner - Unit #4	
Emissions Unit Details	
1. Initial Startup Date : 09-Feb-2000	
2. Long-term Reserve Shutdown Date :	
3. Package Unit:	
Manufacturer: To be provided once a vendor is selected	Model Number:
4. Generator Nameplate Rating: MW	
5. Incinerator Information :	•
Dwell Temperature:	Degrees Fahrenheit
Dwell Time:	Seconds
Incinerator Afterburner Temperature :	Degrees Fahrenheit
Emissions Unit Operating Capacity	
1. Maximum Heat Input Rate: 12 mml	Btu/hr
2. Maximum Incinerator Rate : lb/hi	tons/day
3. Maximum Process or Throughput Rate :	
4. Maximum Production Rate :	
5. Operating Capacity Comment: The unit will have a restricted use of less than 10% of the (11.98 mmBTU/hr or 28.75 tpd).	waste combuster's total annual capacity
Emissions Unit Operating Schedule	
Dequested Maximum Operating Schedule	
Requested Maximum Operating Schedule:	7 days/west
24 hours/day 52 weeks/year	7 days/week
52 weeks/yeaf	8,760 hours/year

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**Emissions Unit Information Section** 

# D. EMISSIONS UNIT REGULATIONS (Regulated Emissions Units Only)

Emissions Unit Information Section MWC Auxiliary Burner - Unit #4	
Rule Applicability Analysis	
Refer to Volume 1, Section 2	

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#### **Emissions Unit Information Section**

MWC Auxiliary Burner - Unit #4

### **List of Applicable Regulations**

Refer to Volume 1, Section2

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11

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### E. EMISSION POINT (STACK/VENT) INFORMATION

11

MWC Auxiliary Burner - Unit #4	
·	
Emission Point Description and Type:	
1. Identification of Point on Plot Plan or Flow Diagram :	See Vol. 1 Fig 6-4
2. Emission Point Type Code: 2	
3. Descriptions of Emission Points Comprising this Emiss (limit to 100 characters per point) Not applicable for sources with single emission points	sions Unit for VE Tracking:
4. ID Numbers or Descriptions of Emission Units with thi	s Emission Point in Common:
Emission units 101-104 (combustion units) and emission us have four flues within a common stack. Combustion unit 1 common flue as will 102 and 109, 103 and 110, 104 and 11	01 and auxiliary burner 108 will share a
5. Discharge Type Code :	V
6. Stack Height:	201 feet
7. Exit Diameter :	8.4 feet
8. Exit Temperature :	°F
9. Actual Volumetric Flow Rate:	acfm
10. Percent Water Vapor:	%
11. Maximum Dry Standard Flow Rate:	dscfm
12. Nonstack Emission Point Height:	feet
13. Emission Point UTM Coordinates:	
Zone: 17 East (km): 360.196	North (km): 3092.208
14. Emission Point Comment:  The auxiliary burner emissions will use the same stack as	the combustor units.

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**Emissions Unit Information Section** 

### F. SEGMENT (PROCESS/FUEL) INFORMATION

Emissions Unit Information Section 11	_		
MWC Auxiliary Burner - Unit #4			
Segment Description and Rate: Segment	11		
1. Segment Description (Process/Fuel Type and A	Associated Operating Method/Mode):		
An auxiliary burner will be installed for each of the waste combustor units. The burners will be used during start up and shut down and to maintain the required furnace temperatures. The anticipated time for boiler warm up is expected to be approximately eight hours. The size of the burners and their fuel consumption rate is to be determined.			
2. Source Classification Code (SCC): 1-02-0	006-02		
3. SCC Units: Million Cubic Feet Burned (all gaseous fuels)			
4. Maximum Hourly Rate:	5. Maximum Annual Rate: 11.98		
6. Estimated Annual Activity Factor: 100.00			
7. Maximum Percent Sulfur:	8. Maximum Percent Ash:		
9. Million Btu per SCC Unit: 1,000			
10. Segment Comment :			

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## G. EMISSIONS UNIT POLLUTANTS (Regulated and Unregulated Emissions Units)

<b>Emissions Unit Information Section</b>		11
MWC Auxiliary Burner - Unit #4		

1. Pollutant Emitted	Primary Control     Device Code	3. Secondary Control Device Code	4. Pollutant Regulatory Code
1 - NOX	107		NS

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## H. EMISSIONS UNIT POLLUTANT DETAIL INFORMATION (Regulated Emissions Units Only - Emissions Limited Pollutants Only)

MWC Auxiliary Burner - Unit #4				
Pollutant Potential/Estimated Emissions	s: Pollutant	1		
1. Pollutant Emitted: NOX				
2. Total Percent Efficiency of Control:		%		
3. Potential Emissions :	lb/hour	10.49	tons/year	
4. Synthetically Limited? [ ] Yes [X ] No				
5. Range of Estimated Fugitive/Other Em	nissions:	to		tons/year
6. Emissions Factor: Reference: NSPS				
7. Emissions Method Code: 0				
8. Calculations of Emissions:				
119.8 MMBtu/hr X 8760 hr/yr = 1.05 E combustor) 1.05E6 MMBtu/yr X 10% = 1.05 E5 MM	MBtu/yr (Subpai	t Db exlusion th	•	the
9. Pollutant Potential/Estimated Emission	ns Comment:			
The NOx emission factor for the auxiliar (0.2 lb/MMBtu).	ry burners has b	een taken from t	he 40 CFR 60 S	Subpart Db

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### I. VISIBLE EMISSIONS INFORMATION (Regulated Emissions Units Only)

11

MWC Auxiliary Burner - Unit #4 Visible Emissions Limitation: Visible Emissions Limitation 1. Visible Emissions Subtype: 15 2. Basis for Allowable Opacity: OTHER 3. Requested Allowable Opacity: Normal Conditions: 15 % **Exceptional Conditions:** % Maximum Period of Excess Opacity Allowed: min/hour 4. Method of Compliance: Continuous Opacity Monitors 5. Visible Emissions Comment: Continuous Opacity Monitors are required for the combustors, opacity will also be monitored during periods when the auxiliary burners are operating. The combustors have visbility requirements in Permit AO 29-206279, Specific condition 3 and 4. Excess emissions are limited to a total of 2 hours in any 24 hour period.

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**Emissions Unit Information Section** 

# J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

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## J. CONTINUOUS MONITOR INFORMATION (Regulated Emissions Units Only)

MWC Auxiliary Burner - Unit #4  Continuous Monitoring System: Continuous	uous Monitor 2
1. Parameter Code : VE	2. Pollutant :
3. CMS Requirement: OTHER	
4. Monitor Information :  Manufacturer : To be determed to the second se	mined
5. Installation Date :	·
6. Performance Specification Test Date :	
7. Continuous Monitor Comment :	
Continuous opacity monitors are required to periods when the auxiliary burners are ope	for the combustor units. The monitors will also run during crating.

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# K. PREVENTION OF SIGNIFICANT DETERIORATION (PSD) INCREMENT TRACKING INFORMATION

Emissions Unit Information Section 11
MWC Auxiliary Burner - Unit #4
PSD Increment Consumption Determination
1. Increment Consuming for Particulate Matter or Sulfur Dioxide?
[ ] The emissions unit is undergoing PSD review as part of this application, or has undergone PSD review previously, for particulate matter or sulfur dioxide. If so, emissions unit consumes increment.
[X] The facility addressed in this application is classified as an EPA major source pursuant to paragraph (c) of the definition of "major source of air pollution" in Chapter 62-213, F.A.C., and the emissions unit addressed in this section commenced (or will commence) construction after January 6, 1975. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ] The facility addressed in this application is classified as an EPA major source, and the emissions unit began initial operation after January 6, 1975, but before December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ] For any facility, the emissions unit began (or will begin) initial operation after December 27, 1977. If so, baseline emissions are zero, and emissions unit consumes increment.
[ ] None of the above apply. If so, the baseline emissions of the emissions unit are nonzero. In such case, additional analysis, beyond the scope of this application, is needed to determine whether changes in emissions have occurred (or will occur) after the baseline date that may consume or expand increment.

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2.	In	crement Consun	ning for Nitroge	en Dioxid	le?		
[	]		has undergone			n is undergoing PSD reviously, for nitrogen o	lew as part of this dioxide. If so, emissions
[ X	]	paragraph (c) of and the emission	f the definition ons unit address	of "majo ed in this	r sou	_	Chapter 62-213, F.A.C., commence) construction
[	]	emissions unit	began initial op	eration a	fter	classified as an EPA ma February 8, 1988, but be ons unit consumes increr	efore March 28, 1988. If
[	]					or will begin) initial ope ad emissions unit consun	
	]	case, additional	l analysis, beyo ssions have occ	nd the sc	ope	of this application, is ne	s unit are nonzero. In such eded to determine whether e date that may consume
3.	Ir	ncrement Consur	ming/Expanding	g Code :			
		PM:	С	SO2:	С	NO2:	С
4.	В	aseline Emissio	ns:				
		PM:		lb/hour			tons/year
		SO2 : NO2 :		lb/hour		189.7000	tons/year tons/year
5.	P	SD Comment :					
					1-0	-14	
				III. Part	12 -	11	

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#### L. EMISSIONS UNIT SUPPLEMENTAL INFORMATION

11

**Emissions Unit Information Section** 

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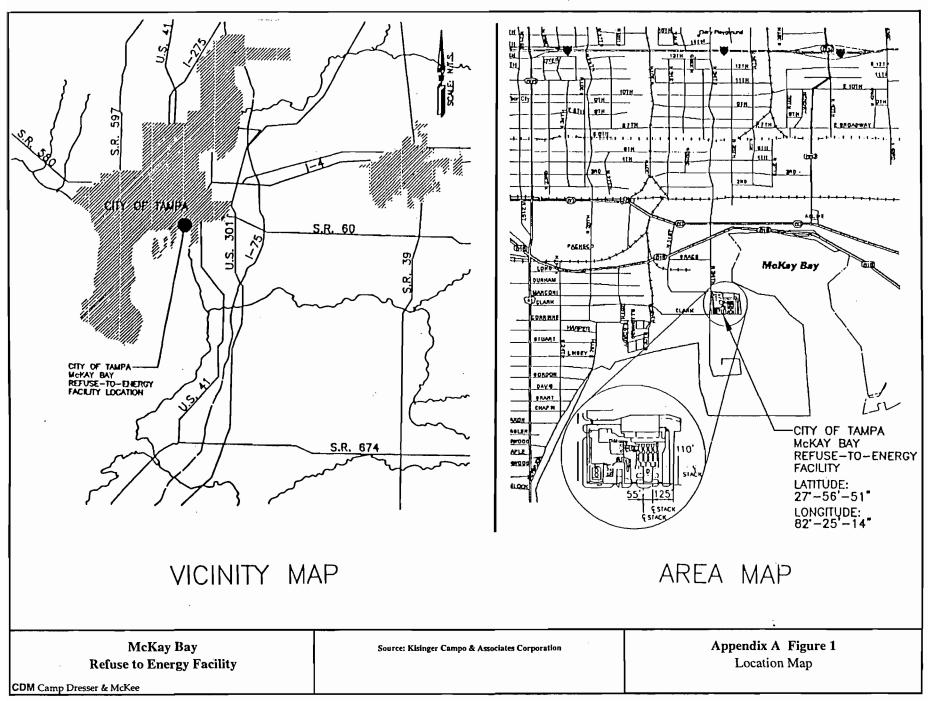
MWC Auxiliary Burner - Unit #4

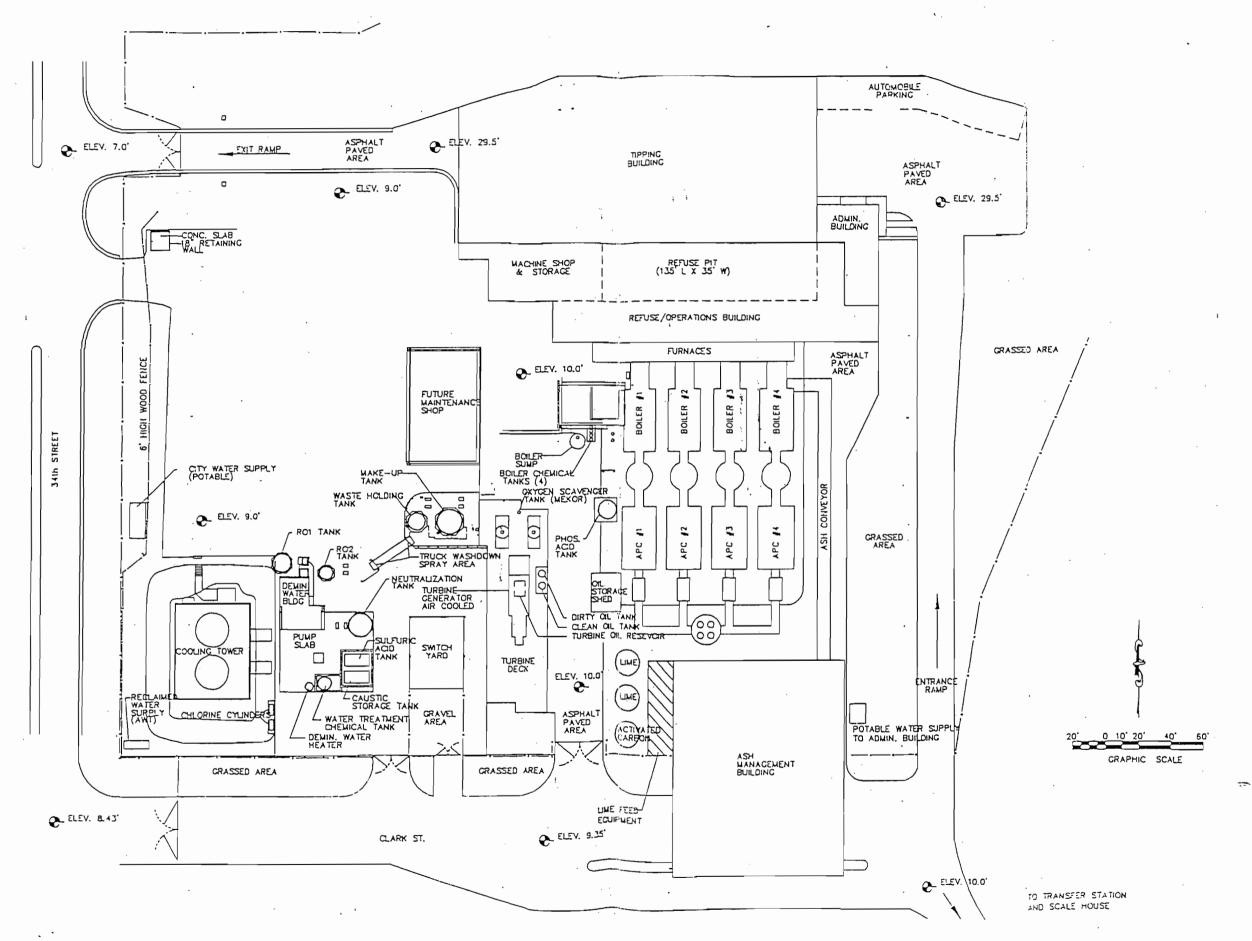
Supplemental Requirements for All Applications	
1. Process Flow Diagram:	Append A Fig 3
2. Fuel Analysis or Specification :	Vol. 1, Sect. 6
3. Detailed Description of Control Equipment :	To be provided.
4. Description of Stack Sampling Facilities :	To be provided.
5. Compliance Test Report :	NA
6. Procedures for Startup and Shutdown:	NA
7. Operation and Maintenance Plan :	· NA
8. Supplemental Information for Construction Permit Application:	NA
9. Other Information Required by Rule or Statue :	NA
Additional Supplemental Requirements for Category I Application	ns Only
10. Alternative Methods of Operations :	NA
11. Alterntive Modes of Operation (Emissions Trading):	NA
L	

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.3. Compliance Assu Plan:	rance Monitoring	NA
4. Acid Rain Applic	ation (Hard-copy Required):	· -
NA	Acid Rain Part - Phase II (F	orm No. 62-210.900(1)(a))
NA	Repowering Extension Plan	(Form No. 62-210.900(1)(a)1.)
NA	New Unit Exemption (Form	No. 62-210.900(1)(a)2.)
NA	Retired Unit Exemption (Fo	orm No. 62-210.900(1)(a)3.)

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Source: Malcolm Pirnie, Tampa, FL

Tampa McKay Bay Refuse to Energy Facility

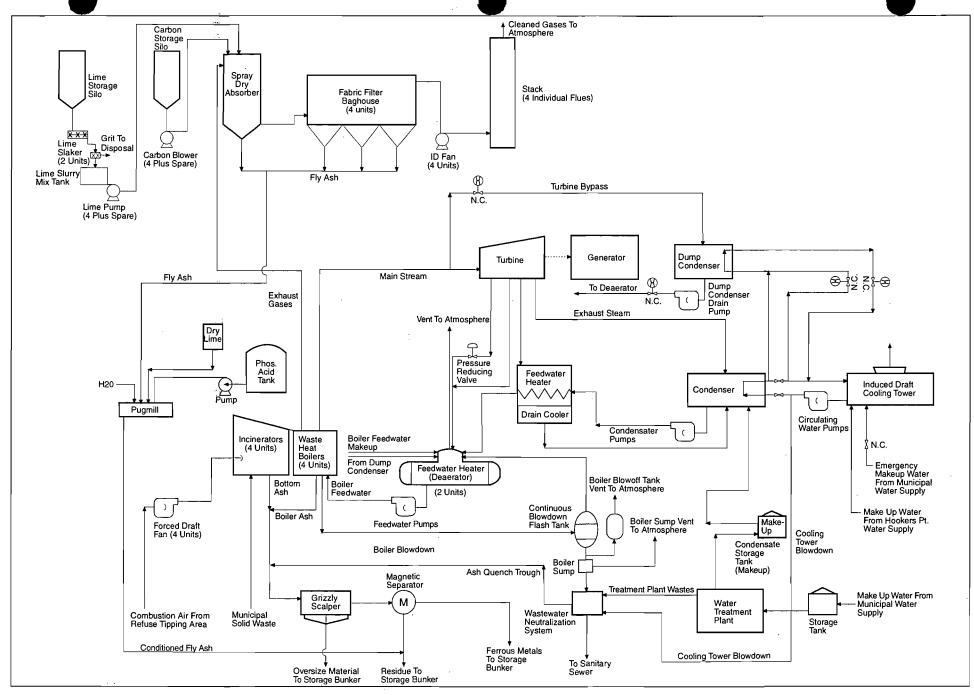


Figure 3
McKay Bay Refuse-To-Energy Facility
Overall Process Flow Diagram

# Appendix A Attachment 1

### **Operational Measures used to Prevent Emissions of Particulate Matter**

#### Precautions include the following:

- Tipping building is enclosed.
- Ash/metal storage and loadout buildings are enclosed.
- fly ash conveyors are enclosed.
- Outdoor ash conveyors are enclosed.
- Roads, parking area and yards are paved.
- A street sweeper equipped with a vacuum system is used to remove particulate matter from roads and other paved areas.
- The unpaved areas of the facility are maintained and either sodded or landscaped.
- The bottom ash is quenched and wetted.
- The fly ash is wetted in a pugmill ash conditioning system and then blended with the wet bottom ash.
- The wetted combined ash is processed for recyclable ferrous metals and the remaining ash and recovered metal fractions stored within an enclosed building prior to loading into a truck for disposal.
- The ash hauling trucks are equipped with tarps and subject to a wheel wash prior to leaving the site.

# Appendix A Attachment 2

#### **List of Potential Fugitive Emissions**

#### Refuse Delivery & Handling Area

- 1. Trucks delivering MSW to Tipping Building and exiting site
- 2. Trucks dumping MSW in Tipping Building
- 3. Front end loader operations in Tipping Building
- 4. Floor sweeper operations in Tipping Building
- 5. Crane grapple loading of MSW into charging hopper

#### Furnace/Boiler Area

- 1. Stoker/ grate siftings/ conveyor leakage
- 2. Maintenance and inspection ports on furnace/boiler
- 3. Maintenance activities (cleaners, overhauls, etc.)
- 4. Flue gas duct seals & expansion joints
- 5. Ash dischargers/ extractors
- 6. Bottom ash collection and transfer conveyors
- 7. Ash conveyor transfer points

#### APC Area

- 1. Flyash screw conveyor leakage
- 2. Maintenance and inspection ports on SDAS and FFs
- 3. Flue gas duct seals and expansion joints
- 4. Maintenance activities (cleaning, bag replacement, etc.)

#### Ash/Metal Storage and Loadout Building

- 1. Grizzly scalper operation
- 2. Drum magnet operation
- 3. Conveyor transfer points
- 1. Moistened ash loadout by front end loader into ash transfer trucks
- 2. Recovered ferrous metal loadout by front end loader into metal transfer trucks
- 3. Ash and metal transfer trucks entering and exiting site