

SEP 28 2006

STATE OF FLORIDA
SITING BOARD

SITING COORDINATION

IN RE: HILLSBOROUGH COUNTY)
RESOURCE RECOVERY FACILITY)
EXPANSION POWER PLANT SITING)
APPLICATION NO. PA 83-19A)

OGC CASE NO.: 05-2692
DOAH CASE NO.: 05-4347EPP

**CONSOLIDATED SITING BOARD FINAL ORDER
ON LAND USE AND SITE CERTIFICATION**

On August 2, 2006, an administrative law judge with the Division of Administrative Hearings ("DOAH") submitted to the State of Florida, Department of Environmental Protection ("DEP"), a Land Use Recommended Order and a Site Certification Recommended Order in this administrative proceeding. These Recommended Orders indicate that copies were served upon counsel for the Applicant, Hillsborough County (the "County"), DEP, and other designated agencies. Copies of the two Recommended Orders are attached hereto as Exhibits A and B. The matter is now before the Governor and Cabinet, sitting as the "Siting Board," for final agency action under the Florida Electrical Power Plant Siting Act ("PPSA") embodied in §§ 403.501-403.518, Florida Statutes.

BACKGROUND

The County owns the Hillsborough County Resource Recovery Facility (the "Facility"), an existing electrical power plant that burns municipal solid waste to generate electricity. The Facility is located in an unincorporated area of the County southeast of the City of Tampa, west of Interstate 75 ("I-75"), and north of the Crosstown Expressway and State Road 60. The Facility was built on a 50.4-acre site ("Site") in the southern portion of a 353-acre tract of land owned by the County. The Facility currently consists of three municipal waste combustor

("MWC") units, each having a nominal design capacity of 400 tons per day ("tpd") of municipal solid waste. The three existing MWC units have been in commercial operation since 1987.

The Project involves the construction and operation of a fourth MWC unit at the Facility ("Unit No. 4"). Unit No. 4 will be substantially the same as the three existing MWC units, but larger, and will have the capacity to process 600 tpd (nominal) of municipal solid waste. A new turbine generator will also be installed, which will increase the Facility's net electrical generating capacity by approximately 18 megawatts, thus increasing the Facility's total generating capacity to approximately 47 megawatts. The construction and operation of the Project will occur in disturbed upland areas that are already used for industrial operations, and only about 0.3 acres of open space will be used for a building or similar purpose. The Facility will process more solid waste and generate more electricity after the expansion Project is completed, but the basic operation of the Facility will not change.

LAND USE AND SITE CERTIFICATION PROCEEDINGS

DEP transmitted the County's Project application to DOAH for appropriate proceedings under the PPSA. On June 30, 2006, a "Prehearing Stipulation for Land Use and Certification Hearings" ("Prehearing Stipulation") was filed by the County, DEP, the Florida Department of Community Affairs, the Florida Department of Transportation, the Florida Public Service Commission, the Florida Fish and Wildlife Conservation Commission, the Southwest Florida Water Management District, and the Tampa Bay Regional Planning Council. In the Prehearing Stipulation, all of the signatories either agreed with, did not dispute, or took no position concerning the County's assertion that the site of the proposed Project is consistent and in compliance with existing land use plans and zoning ordinances. In addition, all of these signatories either recommended certification of the Project or took no position concerning

certification of the Project, provided the Project is built and operated in compliance with the Conditions of Certification.

In compliance with §§ 403.508(1) and 403.508(3), Florida Statutes, a land use hearing and a site certification hearing were held consecutively in this case before Administrative Law Judge, J. Lawrence Johnston (the "ALJ"), in Tampa on July 12, 2006. At the land use hearing and at the site certification hearing, the County and DEP presented the unopposed testimony of several expert witnesses, and in excess of 50 exhibits were admitted into evidence. The County and DEP were the only signatories to the Prehearing Stipulation who participated at this hearing; and no one from the public testified.

The ALJ entered his Land Use and Site Certification Recommended Orders on August 2, 2006. In the Land Use Recommended Order, the ALJ found that the uncontested evidence presented at the land use hearing demonstrated that the Site and Project are consistent and in compliance with the County's Comprehensive Plan and zoning ordinances. The ALJ also found that the Project is compatible with adjacent and surrounding land uses. The ALJ thus recommended that the Siting Board enter an order determining that "the Site and the proposed expansion of Hillsborough County's resource recovery facility are consistent and in compliance with the existing land use and zoning ordinances."

In his Site Certification Recommended Order, the ALJ concluded that the uncontested evidence presented by the County and DEP at the site certification hearing demonstrated that the Project has met all of the criteria required in order to obtain site certification under the PPSA. The ALJ also concluded that:

In the PPSA review process and the Conditions of Certification for the Project, the State of Florida has ensured through available and reasonable methods that the location, construction, and operation of the Project will produce minimal adverse effects on human

health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life. . . The Conditions of Certification establish safeguards that are technically sufficient for the protection and welfare of Florida's citizens, and . . . ensure that the potential adverse effects of the Project will be minimized.

The ALJ ultimately recommended that the Siting Board enter a Final Order granting a site certification for construction and operation of Unit No. 4 at the Facility, in accordance with the Conditions of Certification contained in DEP Exhibit 2.

CONCLUSION

The record in this proceeding does not contain any land use objections to the proposed Project by any governmental agencies or members of the general public or any requests from any agency or person that site certification of the Project be denied. Moreover, no Exceptions were filed by any party to this administrative proceeding objecting to any factual findings, legal conclusions, or recommendations of the ALJ in the two Recommended Orders now on review before the Siting Board.

Having reviewed the matters of record and being otherwise duly advised, the Siting Board concludes that, if constructed and operated in accordance with the evidence presented at the land use and site certification hearings and the Conditions of Certification, the Project will serve and protect the broad interests of the public and should be approved.

It is therefore ORDERED:

A. The two Recommended Orders attached hereto as Exhibits A and B are adopted in their entireties and incorporated by reference herein.

B. The site of the proposed Project, if constructed and operated in accordance with the evidence presented at the land use and site certification hearings and the Conditions of

Certification, is determined to be consistent and in compliance with existing land use plans and zoning ordinances of Hillsborough County.

C. Site Certification of Unit No. 4 at the Facility, as described in the County's Power Plant Site Certification Application and the evidence presented at the land use and site certification hearings, is hereby APPROVED, subject to the Conditions of Certification in DEP Exhibit 2 incorporated by reference herein.

D. Authority to assure and enforce compliance by Hillsborough County and its agents with all the Conditions of Certification imposed by this Final Order is hereby delegated to DEP.

DONE AND ORDERED this 19th day of September, 2006, in Tallahassee, Florida, pursuant to a vote of the Governor and Cabinet, sitting as the Siting Board, at a duly noticed and constituted Cabinet meeting held on September 19th, 2006.

THE GOVERNOR AND CABINET
SITTING AS THE SITING BOARD



THE HONORABLE JEB BUSH
GOVERNOR

FILING IS ACKNOWLEDGED ON THIS DATE,
PURSUANT TO § 120.52 FLORIDA STATUTES,
WITH THE DESIGNATED DEPARTMENT CLERK,
RECEIPT OF WHICH IS HEREBY ACKNOWLEDGED



CLERK

9/27/06

DATE

CERTIFICATE OF SERVICE

I HEREBY CERTIFY that a copy of the foregoing Consolidated Final Order has been sent by United States Postal Service to:

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Ann Cole, Clerk and
J. Lawrence Johnston, ALJ
Division of Administrative Hearings
The DeSoto Building
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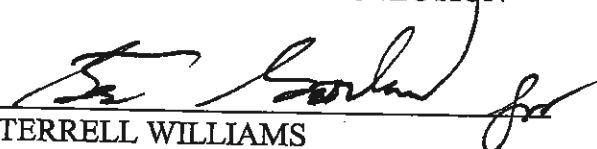
and by hand delivery to:

Scott A. Goorland, Esquire
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3900 Commonwealth Blvd.
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Tallahassee, FL 32399-3000

Steven Palmer
Siting Coordination Office
Department of Environmental Protection
2600 Blair Stone Road
Tallahassee, FL 32399-3000

this 27th day of September, 2006.

STATE OF FLORIDA DEPARTMENT
OF ENVIRONMENTAL PROTECTION


J. TERRELL WILLIAMS
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STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: HILLSBOROUGH COUNTY	)	
RESOURCE RECOVERY FACILITY	)	
EXPANSION POWER PLANT SITING	)	Case No. 05-4347EPP
APPLICATION NO. PA 83-19A	)	
	)	

LAND USE RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its Administrative Law Judge, J. Lawrence Johnston, held a land use hearing in the above-styled case on July 12, 2006, in Hillsborough County, Florida.

APPEARANCES

For Petitioner Hillsborough County (the "County"):

David S. Dee, Esquire
Young van Assenderp, P.A.
225 South Adams Street, Suite 200
Tallahassee, Florida 32301-1720

For the Florida Department of Environmental Protection ("Department" or "DEP"):

Scott A. Goorland, Esquire
Department of Environmental Protection
3900 Commonwealth Boulevard, M.S. 35
Tallahassee, Florida 32399-3000

STATEMENT OF THE ISSUE

Pursuant to Section 403.508(2), Florida Statutes, the sole issue for determination in this hearing is whether the proposed site for the expansion of the Hillsborough County Resource

Recovery Facility "is consistent and in compliance with existing land use plans and zoning ordinances."

PRELIMINARY STATEMENT

Hillsborough County owns the Hillsborough County Resource Recovery Facility ("Facility"), an existing electrical power plant that burns municipal solid waste ("MSW") to generate electricity. The Facility currently consists of three municipal waste combustor ("MWC") units. On November 21, 2005, the County filed an application with DEP for certification to authorize the construction and operation of an additional MWC unit at the Facility (the "Project").

The County's application is subject to review under the Florida Electrical Power Plant Siting Act ("PPSA"), Sections 403.501-.518, Florida Statutes.¹

The Department transmitted the County's application to the Division of Administrative Hearings (DOAH) for appropriate proceedings under the PPSA. In compliance with Section 403.508(1), Florida Statutes, see pp 10 and 11 e.g., the land use hearing (the "Land Use Hearing") in this case was scheduled for July 12, 2006.

On June 30, 2006, a "Prehearing Stipulation for Land Use and Certification Hearings" ("Prehearing Stipulation") was filed by the County, DEP, the Florida Department of Community Affairs

("DCA"), the Florida Department of Transportation, the Florida Public Service Commission ("PSC"), the Florida Fish and Wildlife Conservation Commission, the Southwest Florida Water Management District, and the Tampa Bay Regional Planning Council ("TBRPC"). In the Prehearing Stipulation, all of the signatories either agreed with, did not dispute, or took no position concerning the County's assertion that the site of the proposed Project is consistent and in compliance with existing land use plans and zoning ordinances.

At the Land Use Hearing, the County called two witnesses, Jason Gorrie (accepted as an expert concerning solid waste management systems and resource recovery facilities) and Paula Harvey (accepted as an expert concerning land use planning and zoning issues). The County introduced Exhibits 1 - 8 (A, B, C and D), 9, 10 (A and B), 11-50, and 52-60 into evidence, without objection.

By order dated July 6, 2006, the Administrative Law Judge granted the County's request to take official notice of various documents. These documents were included with the County's exhibits and were introduced into evidence at the Land Use Hearing.

No one contested the evidence presented by the County at the Land Use Hearing. None of the signatories to the Prehearing

Stipulation participated at the Land Use Hearing, except the County and DEP. No one from the public attended, testified or proffered any exhibits at the Land Use Hearing.

The Transcript of the Land Use Hearing was filed with DOAH on July 18, 2006, and the parties were allowed until July 21, 2006, to submit proposed recommended orders. The County and DEP timely filed a Joint Proposed Recommended Order on July 19, 2006. No other party filed a proposed recommended order.

Based on all of the evidence of record, the following findings of fact are determined:

FINDINGS OF FACT

The Applicant

1. The Applicant, Hillsborough County, is a political subdivision of the State of Florida. The County owns the existing Facility and will own the proposed Project. The Facility was designed, built, and is operated by a private company pursuant to a long-term contract with the County. It is anticipated that a private company will design, construct, and operate the Project for the County.

The Site

2. The Facility is located next to Falkenburg Road in an unincorporated area in the County. The Facility is southeast of

the City of Tampa, west of Interstate 75 ("I-75"), and north of the Crosstown Expressway and State Road 60.

3. The Facility was built on a 50.4-acre site ("Site"), which is in the southern portion of a 353-acre tract of land owned by the County.

The Surrounding Area

4. The Facility is surrounded by a variety of institutional and industrial land uses. The Facility is bounded: on the south by the County's Falkenburg Road Wastewater Treatment Plant and a railroad track that is owned by the CSX railroad company; on the west by a 230 kilovolt transmission line corridor and easement owned by Tampa Electric Company; on the north by vacant improved pasture land, the Falkenburg Road Jail, the Hillsborough County Department of Animal Services, and the Hillsborough County Sheriff's Office (District 2); and on the east by Falkenburg Road and vacant land.

5. The nearest residential area is approximately one mile away from the Facility. It is located on the opposite (east) side of I-75.

The Existing Facility

6. The Facility currently consists of three MWC units, which have been in commercial operation since 1987. Each MWC

unit has a nominal capacity of 400 tons per day ("tpd") of municipal solid waste (440 tpd when burning a reference fuel with a higher heating value of 4500 British thermal units ("Btu") per pound). The three MWC units are located inside a fully enclosed building, which also contains the air pollution control systems for the MWC units, the "tipping floor" (i.e., refuse unloading area), the refuse storage pit, and a turbine generator. In addition, the Facility includes an ash management building, cooling tower, stack, stormwater management system, water treatment system, transformer yard, electrical transmission lines, and ancillary equipment and facilities.

7. Municipal solid waste (e.g., household and commercial garbage) is delivered to the Site in trucks, which drive inside the refuse storage building to the tipping floor, where the trucks dump the MSW into the refuse storage pit. Two overhead cranes mix the waste in the refuse storage pit and then load the waste into the charging hoppers that feed the three MWC units. The combustion of the municipal solid waste produces heat, which is used to produce steam. The steam is used in a turbine generator to produce approximately 29.5 megawatts ("MW") of electricity.

The Project

8. The Project involves the construction and operation of

a fourth MWC unit at the Facility. The new unit will be substantially the same as the three existing MWC units, but larger. The new unit will have the capacity to process 600 tpd (nominal) of municipal solid waste (660 tpd @ 5000 Btu/lb). A new turbine generator will be installed, which will increase the Facility's net electrical generating capacity approximately 18 MW to a total of approximately 47 MW. The cooling tower will be expanded, the refuse and ash management buildings will be expanded, two lime silos and a carbon silo will be installed, a new settling basin will be installed, and other related improvements will be made.

9. The construction and operation of the Project will occur in disturbed upland areas that are adjacent to the Facility and already used for industrial operations. Only about 0.3 acres of open space will be used for a building or similar purpose.

10. The Facility will process more solid waste and generate more electricity after the expansion Project is completed, but the basic operation of the Facility will not change.

Historical Land Use Designations

11. In 1984, the County revised its land use plans and zoning designations for the Site to authorize the construction

and operation of the Facility. As revised, the comprehensive plan and zoning authorized the immediate construction of three MWC units and the subsequent expansion of the Facility with a fourth MWC unit, when needed. The County's plans for the Facility were reviewed under the PPSA and in 1984 the Siting Board concluded that the Site was consistent and in compliance with the existing land use plans and zoning ordinances. At all times since 1984, the County has ensured that the zoning and comprehensive plan designations for the Site are consistent with the County's long-term plan to construct the Project.

Current Land Use Designations and Zoning Ordinances

12. The Site currently is designated Public/Quasi-Public ("P-QP") under the County's comprehensive land use plan.

Typical land uses allowed in Public/Quasi-Public areas include:

major existing and programmed government-owned facilities, and other public uses. This category also accommodates quasi-public uses such as private establishments generally available to the public for use; for example, churches, hospitals, schools, clubs, major (regional, district or community) recreation services and related uses, tourist attractions, and utility and transportation facilities.

The Project is consistent with this land use category because the Facility is a major government-owned facility and the Project is part of a long-standing plan (i.e., the Project is "programmed") to expand the Facility, when needed.

13. The Site currently is zoned Planned Development ("PD") by Hillsborough County. Under the County's zoning code, all uses are potentially allowed in a PD district; however, the specific uses must be approved by the Board of County Commissioners. In 1984, the Board of County Commissioners specifically approved the use of the Site for the construction and operation of the Facility, including the fourth MWC unit. In 2005 the Board of County Commissioners decided to install Unit No. 4, consistent with the County's longstanding plan, and specifically authorized the Project to go forward. Accordingly, the Project is consistent and in compliance with the County's PD zoning designation.

Consistency With Land Use Plans and Zoning Ordinances

14. In the Prehearing Stipulation, the Florida Department of Community Affairs, DEP, the Florida Department of Transportation, the Florida Fish and Wildlife Conservation Commission and the Southwest Florida Water Management District either agreed with or did not dispute the County's assertion that the Site is consistent and in compliance with existing land use plans and zoning ordinances. The Florida Public Service Commission and the TBRPC took no position concerning the County's assertion that the Site is consistent and in compliance with existing land use plans and zoning ordinances.

15. The expert testimony and other evidence presented in the Land Use Hearing demonstrate that the Site and Project are consistent and in compliance with Hillsborough County's Comprehensive Plan and zoning ordinances. The Project also is compatible with adjacent and surrounding land uses. There is no evidence to suggest the Project is inconsistent with any applicable local, regional, or state plan.

Public Notice of the Land Use Hearing

16. On December 19, 2005, the County published a "Notice of Filing of Application for Electrical Power Plant Site Certification" in the Tampa Tribune, which is a newspaper of general circulation published in Hillsborough County, Florida.

17. On May 25, 2006, the County published notice of the Land Use Hearing in the Tampa Tribune.

18. On December 23 and December 30, 2005, the Department electronically published "Notice of Filing of Application for Power Plant Certification."

19. On May 26, 2006, the Department electronically published notice of the Land Use Hearing.

20. The public notices for the Land Use Hearing satisfy the informational and other requirements set forth in Section 403.5115, Florida Statutes, and Florida Administrative Code Rules 62-17.280 and 62-17.281(4).

CONCLUSIONS OF LAW

21. The Division of Administrative Hearings has jurisdiction over the parties to and subject matter of this proceeding pursuant to Sections 120.569, 120.57(1) and 403.508, Florida Statutes.

22. The County and DEP published timely public notice of the Land Use Hearing, in compliance with the requirements contained in the PPSA and Florida Administrative Code Rule Chapter 62-17.

23. Pursuant to Section 403.508(2), Florida Statutes, the sole issue for determination in this proceeding is whether the proposed Site of the County's Project is consistent and in compliance with existing land use plans and zoning ordinances.

24. The competent, substantial, and un rebutted evidence presented by the County at the Land Use Hearing demonstrates that the Site and the Project are consistent and in compliance with the applicable provisions of the existing land use plans and zoning ordinances.

RECOMMENDATION

Based on the foregoing Findings of Fact and Conclusions of Law, it is RECOMMENDED that the Governor and Cabinet, sitting as the Siting Board, enter a Final Land Use Order in this case finding that the Site and the proposed expansion of Hillsborough

County's resource recovery facility are consistent and in compliance with the existing land use plans and zoning ordinances.

DONE AND ENTERED this 2nd day of August, 2006, in Tallahassee, Leon County, Florida.



J. LAWRENCE JOHNSTON
Administrative Law Judge
Division of Administrative Hearings
The DeSoto Building
1230 Apalachee Parkway
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(850) 488-9675 SUNCOM 278-9675
Fax Filing (850) 921-6847
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Filed with the Clerk of the
Division of Administrative Hearings
this 2nd day of August, 2006.

ENDNOTE

^{1/} All of the citations herein refer to the 2005 Florida Statutes. The PPSA was amended during the 2006 Session of the Florida Legislature, but the 2006 amendments do not apply to the County's application. The 2006 PPSA amendments provide that any application filed under the PPSA "shall be processed under the provisions of the law applicable at the time the application was filed," subject to certain exceptions that are not relevant in this case. See Ch. 2006-230, Laws of Fla. (Fla. SB 888, § 42). Since the County's PPSA application was filed in 2005, the 2005 version of the PPSA governs this case.

COPIES FURNISHED:

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

STATE OF FLORIDA
DIVISION OF ADMINISTRATIVE HEARINGS

IN RE: HILLSBOROUGH COUNTY	)	
RESOURCE RECOVERY FACILITY	)	
EXPANSION POWER PLANT SITING	)	Case No. 05-4347EPP
APPLICATION NO. PA 83-19A	)	

SITE CERTIFICATION RECOMMENDED ORDER

Pursuant to notice, the Division of Administrative Hearings, by its Administrative Law Judge, J. Lawrence Johnston, held a certification hearing in the above-styled case on July 12, 2006, in Hillsborough County, Florida.

APPEARANCES

For Petitioner Hillsborough County (the "County")

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For the Florida Department of Environmental Protection
("Department" or "DEP")

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STATEMENT OF THE ISSUE

The issue to be determined in this case is whether a site certification should be issued to Hillsborough County for the construction and operation of a fourth municipal waste combustor unit ("Unit No. 4") at Hillsborough County's Resource Recovery

Facility, in accordance with the provisions of the Florida Electrical Power Plant Siting Act.

PRELIMINARY STATEMENT

Hillsborough County owns the Hillsborough County Resource Recovery Facility ("Facility"), an existing electrical power plant that burns municipal solid waste ("MSW") to generate electricity. The Facility currently consists of three municipal waste combustor ("MWC") units. On November 21, 2005, the County filed an application with DEP for certification to authorize the construction and operation of an additional MWC unit at the Facility (the "Project").

The County's application is subject to review under the Florida Electrical Power Plant Siting Act ("PPSA"), Sections 403.501-.518, Florida Statutes.¹ The Department transmitted the County's application to the Division of Administrative Hearings (DOAH) for appropriate proceedings under the PPSA.

On May 26, 2006, the DEP issued its written Staff Analysis Report ("Staff Analysis") concerning the Project, in compliance with Section 403.507(4), Florida Statutes (see p. 21, e.g.). The DEP's Staff Analysis included reports from other agencies and proposed conditions of certification ("Conditions of Certification") for the Project.

DEP subsequently issued a revised Staff Analysis and Conditions of Certification (dated July 7, 2006).²

On June 30, 2006, a "Prehearing Stipulation for Land Use and Certification Hearings" ("Prehearing Stipulation") was filed by the County, DEP, the Florida Department of Community Affairs ("DCA"), the Florida Department of Transportation ("DOT"), the Florida Public Service Commission ("PSC"), the Florida Fish and Wildlife Conservation Commission, the Southwest Florida Water Management District ("SWFWMD"), and the Tampa Bay Regional Planning Council ("TBRPC"). In the Prehearing Stipulation, all of the signatories either recommended certification of the Project or took no position concerning certification of the Project, provided the Project is built and operated in compliance with the Conditions of Certification.

On July 12, 2006, a certification hearing (the "Certification Hearing") was conducted in compliance with Section 403.508(3), Florida Statutes. At the Certification Hearing, the County called three witnesses: Jason M. Gorrie (accepted as an expert concerning solid waste management systems and resource recovery facilities); Donald F. Elias (accepted as an expert concerning air pollution and air pollution control systems); and Paul C. Chrostowski (accepted as an expert concerning environmental science and engineering, including the

health and ecological impacts resulting from the operation of resource recovery facilities). The County introduced Exhibits 1-8 (A, B, C, and D), 9, 10 (A and B), 11-50, and 52-60, into evidence, without objection.

By Order dated July 6, 2006, the Administrative Law Judge granted the County's request to take official notice of various documents. These documents were included with the County's exhibits and were introduced into evidence at the Certification Hearing.

No one contested the evidence presented by the County and DEP at the Certification Hearing. None of the signatories to the Prehearing Stipulation participated at the Certification Hearing, except the County and DEP. Except for the County and DEP, the parties to this proceeding did not call any witnesses or proffer any exhibits at the Certification Hearing. No one from the general public attended, testified, or proffered any exhibits during the Certification Hearing.

The transcript of the Certification Hearing was filed with DOAH on July 18, 2006, and the parties were allowed until July 21, 2006, to submit proposed recommended orders. The County and DEP timely filed a Joint Proposed Recommended Order on July 21, 2006. No other party filed a proposed recommended order.

Based on all of the evidence of record, the following findings of fact are determined:

FINDINGS OF FACT

The Applicant

1. The Applicant, Hillsborough County, is a political subdivision of the State of Florida. The County owns the existing Facility and will own the proposed Project. The Facility was designed, built, and is operated by a private company pursuant to a long-term contract with the County. It is anticipated that a private company will design, construct, and operate the Project for the County.

Hillsborough County's Existing Solid Waste System

2. The County has adopted a solid waste Comprehensive Master Plan (the "Master Plan") in conjunction with the Cities of Tampa, Temple Terrace, and Plant City. The Master Plan provides for state-of-the-art technology and innovative approaches to recycling, waste reduction, and waste disposal. In accordance with the Master Plan, the County has developed:

(a) an aggressive recycling program that significantly reduces the quantity of materials requiring disposal; (b) a resource recovery facility for waste reduction and energy recovery from those materials that are not recycled; and (c) a landfill for the disposal of ash and by-pass waste (i.e., materials that are

not recycled or processed in the Facility). Hillsborough County and the three cities have used a cooperative, regional approach to solid waste management issues, while providing environmentally protective, cost-efficient programs for local residents.

3. Despite the County's comprehensive recycling program, the amount of solid waste generated in the County has increased each year since the Facility began operation, primarily due to population growth. The amount of solid waste generated in the County now significantly exceeds the Facility's design capacity. Consequently, large quantities of solid waste currently are being diverted from the Facility to the County landfill.

4. In 2005, the Board of County Commissioners decided to expand the Facility, consistent with the County's long-standing Master Plan, rather than dispose of ever-increasing amounts of solid waste in a landfill. The Board's decision was based on a thorough evaluation of the County's solid waste disposal options.

5. For these reasons, on November 21, 2005, the County filed an application with DEP for the construction and operation of Unit No. 4.

The Site

6. The Facility is located next to Falkenburg Road in an

unincorporated area in the County. The Facility is southeast of the City of Tampa, west of Interstate 75 ("I-75"), and north of the Crosstown Expressway and State Road 60.

7. The Facility was built on a 50.4-acre site ("Site"), which is in the southern portion of a 353-acre tract of land owned by Hillsborough County.

The Surrounding Area

8. The Facility is surrounded by a variety of governmental and industrial land uses. The Facility is bounded: on the south by the County's Falkenburg Road Wastewater Treatment Plant and a railroad track that is owned by the CSX railroad company; on the west by a 230 kilovolt transmission line corridor and easement owned by Tampa Electric Company ("TECO"); on the north by vacant improved pasture land, the Falkenburg Road Jail, the Hillsborough County Department of Animal Services, and the Hillsborough County Sheriff's Office (District 2); and on the east by Falkenburg Road and vacant land. The Facility is compatible with the adjacent and surrounding land uses.

9. The nearest residential area is approximately 1 mile away from the Facility. It is located on the opposite (east) side of I-75.

Zoning and Land Use

10. In 1984, the Siting Board determined that the Site and

Facility were consistent and in compliance with the applicable land use plans and zoning ordinances. The Siting Board's determination was based on the County's plans for the construction and operation of four MWC units at the Facility. The Site is currently zoned "Planned Development", and is designated "Public/Quasi-Public" under the County's comprehensive land use plan, specifically to allow the Facility and the Project to be built and operated on the Site.

The Existing Facility

11. The Facility currently has three MWC units. Each MWC unit has a nominal design capacity of 400 tons per day ("tpd") of municipal solid waste (440 tpd when burning a reference fuel with a higher heating value of 4500 British thermal units ("Btu") per pound). The three MWC units are located inside a fully enclosed building, which also contains the air pollution control systems for the MWC units, the "tipping floor," the refuse storage pit, and a turbine generator. The Facility also includes an ash management building, cooling tower, stack, stormwater management ponds, water treatment system, transformer yard, electrical transmission lines, and ancillary equipment and facilities.

12. Municipal solid waste (e.g., household and commercial garbage) is delivered to the Site in trucks, which drive inside

the refuse storage building to the tipping floor, where the trucks dump the MSW into the refuse storage pit. Two overhead cranes mix the waste in the refuse storage pit and then load the waste into the charging hoppers that feed the three MWC units. The combustion of the municipal solid waste produces heat, which is used to produce steam. The steam is used in a turbine generator to produce approximately 29.5 megawatts ("MW") of electricity.

The Project

13. The Project involves the construction and operation of a fourth MWC unit at the Facility. The new unit will be substantially the same as the three existing MWC units, but larger. The new unit will be designed to process approximately 600 tpd of municipal solid waste (660 tpd @ 5000 Btu/lb). A new turbine generator also will be installed, which will increase the Facility's electrical generating capacity by approximately 18 MW, thus increasing the Facility's total net generating capacity to approximately 47 MW. In addition, the Facility's cooling tower will be expanded, the refuse and ash management buildings will be expanded, two lime silos and a carbon silo will be installed, a new settling basin will be installed, and other related improvements will be made.

Construction of Unit No. 4

14. The Facility was designed and built to accommodate the addition of a fourth MWC unit, thus making the construction of Unit No. 4 relatively simple, without disrupting large areas of the Site. Unit No. 4 will be located adjacent to the three existing MWC units. The construction of the other Facility improvements also will occur adjacent to the existing components of the Facility. Only about 0.3 acres of the Site will be converted from open space to a building or similar use.

15. Construction of Unit No. 4 will occur in previously disturbed upland areas on the Site that are already used for industrial operations. Construction of Unit No. 4 will not affect any wetlands or environmentally sensitive areas.

16. No new electrical transmission lines will need to be built to accommodate the additional electrical power generated by Unit No. 4. No new pipelines or other linear facilities will need to be built for the Project.

17. The construction of Unit No. 4 will not expand the Facility beyond the boundaries of the Site that was certified by the Siting Board in 1984.

Operation of Unit No. 4

18. The basic operation of the Facility will not change when Unit No. 4 becomes operational. Municipal solid waste will

be processed at the Facility in the same way it is currently processed.

19. The Facility has operated since 1987 and has an excellent track record for compliance with all applicable regulations, including regulations concerning noise, dust, and odors. All of the activities involving solid waste and ash occur inside enclosed buildings. The tipping floor and refuse storage pit are maintained under negative air pressure, thus ensuring that dust and odors are controlled within the building. Since the operations at the Facility will remain the same after Unit No. 4 becomes operational, no problems are anticipated in the future due to noise, dust, or odors.

20. The Facility's basic water supply and management system will remain the same after Unit No. 4 becomes operational. Treated wastewater from the County's co-located Falkenburg Road Wastewater Treatment Plant ("WWTP") will be provided via an existing pipeline to satisfy the Facility's need for cooling water. Potable water will be provided to the Facility via an existing pipeline from the City of Tampa's water supply plant. The Facility does not use groundwater or surface water for any of its operations.

21. The Facility will not discharge any industrial or domestic wastewater to any surface water or groundwater. Most

of the Facility's wastewater will be recycled and reused in the Facility. Any excess wastewater will be discharged to the Falkenburg Road WWTP.

22. Stormwater runoff from the Project will be collected and treated in the existing system of swales and ponds on the Site. The County will modify two existing outfall weirs to provide improved treatment of stormwater and to ensure compliance with water quality standards.

23. A traffic analysis was performed to evaluate the potential traffic impacts associated with the operation of the Facility, after the Project is completed. The analysis demonstrated the Facility will not have any significant impacts on the surrounding roadway network, even when Unit No. 4 is operational.

Air Quality Regulations

24. The County must comply with federal and state New Source Performance Standards ("NSPS") and Best Available Control Technology ("BACT") requirements, both of which impose strict limits on the Facility's airborne emissions. The County also must comply with Ambient Air Quality Standards ("AAQS") and Prevention of Significant Deterioration ("PSD") standards, which establish criteria for the protection of ambient air quality.

Best Available Control Technology

25. BACT is a pollutant-specific emission limit that provides the maximum degree of emission reduction, after taking into account the energy, environmental, and economic impacts and other costs. As part of the BACT determination, all available and feasible pollution control technologies being used worldwide are evaluated.

26. The Department performed a BACT determination for the Project. As part of its BACT analyses, DEP determined that (a) a flue gas recirculation system and a selective non-catalytic reduction system ("SNCR") will control NO_x; (b) a spray dryer with lime injection will control MWC acid gas; (c) an activated carbon injection system ("ACI") will control MWC organic compounds; (d) a fabric filter baghouse will control particulate matter and MWC metals; and (e) proper facility design and operating methods will control other pollutants.

27. These air pollution control technologies (except flue gas recirculation) and methods are currently used in the three existing MWC units and they have performed extremely well. Unit No. 4 will have better, more modern, and more sophisticated versions of these air pollution control systems, plus a flue gas recirculation system.

28. In its analysis of the Project, DEP determined the

emission limits for the Project that represent BACT. All of the emission limits determined by DEP for Unit No. 4 are as low as or lower than the emission limits established in 2006 by the U.S. Environmental Protection Agency ("EPA") in the NSPS (40 CFR 60, Subpart Eb) for new MWC units. The NSPS are based on the use of Maximum Achievable Control Technology ("MACT"). Unit No. 4 will be subject to the lowest NOx emission limits imposed on any MWC unit in the United States.

29. The Facility will use an array of continuous emissions monitors to help ensure that the Facility is continuously in compliance with the DEP's emission limits. Indeed, Unit No. 4 will be the first MWC unit in the United States to be equipped with a continuous emissions monitor for mercury.

Protection of Ambient Air Quality

30. The EPA has adopted "primary" and "secondary" National Ambient Air Quality Standards ("NAAQS"). The primary NAAQS were promulgated to protect the health of the general public, including the most susceptible groups (e.g., children, the elderly, and those with respiratory ailments), with an adequate margin of safety. The secondary NAAQS were promulgated to protect the public welfare, including vegetation, soils, visibility, and other factors, from any known or anticipated adverse effects associated with the presence of pollutants in

the ambient air. Florida has adopted EPA's primary and secondary NAAQS, and has adopted some Florida AAQS ("FAAQs") that are more stringent than EPA's NAAQS.

31. The County analyzed the Project's potential impacts on ambient air quality, using conservative assumptions that were intended to over-estimate the Project's impacts by a wide margin. These analyses demonstrate that the maximum impacts from Unit No. 4 will be less than one percent of the amount allowed by the ambient air quality standards. The maximum impact from the Facility (i.e., all four units) will be less than 2.5 percent of the amount allowed by the FAAQS and NAAQS. For these reasons, the emissions from Unit No. 4 and the Facility are not expected to cause adverse impacts on human health or the environment. The maximum impacts of Unit No. 4 and the Facility, when operating under worst case conditions, will be immeasurably small and will be indistinguishable from ambient background conditions.

Human Health and Ecological Risk Assessments

32. The County performed a human health and ecological impact assessment of the risks associated with the Facility's airborne emissions. The County's risk assessment evaluated the impacts of the entire Facility, with all four MWC units in

operation. The risk assessment was designed to over-estimate the potential impacts of the Facility.

33. The County's risk assessment was conducted in compliance with current EPA guidance. The risk assessment considered hypothetical human receptors (e.g., infants, children, and adults) that were engaged in different types of behavior (e.g., a typical resident; a beef farmer; a subsistence fisherman) and were exposed through multiple pathways (e.g., inhalation; ingestion of soil; ingestion of local produce, beef, and/or fish) to chronic long term impacts from the Facility. The risk assessment also considered the Facility's potential impacts on sensitive environmental receptors, including aquatic life (benthic dwelling aquatic organisms), wood storks, and river otters.

34. The County's risk assessment demonstrates that the potential risks associated with the Facility's emissions will not exceed, and in most cases will be much less than, the risks that are deemed acceptable by the EPA and DEP for the protection of human health and the environment.

35. The County's assessment is consistent with the findings in environmental monitoring studies, epidemiological studies, and risk assessments that have been performed for other modern waste-to-energy ("WTE") facilities in the United States.

The County's findings also are consistent with the determinations made by the EPA, which has concluded that WTE facilities equipped with modern pollution control systems are a "clean, reliable, renewable source of energy."

36. The evidence presented by the County in this case demonstrates that the Facility is not likely to have any adverse effect on human health or the environment, even when all four MWC units are operational, if the Facility is built and operated in compliance with the Conditions of Certification.

Potential Impacts on Water Quality

37. The Facility's emissions of nitrogen oxides (i.e., NOx) will not cause or contribute to violations of any water quality standards in any surface waterbody.

Environmental Benefits of the Project

38. The addition of Unit No. 4 will provide significant environmental benefits to the County. Unit No. 4 will reduce the volume of processible solid waste by approximately 90 percent. By reducing the volume of processible waste, Unit No. 4 and the Facility will greatly extend the useful life of the County's landfill, thus postponing the need to build a new landfill. The Facility also will convert putrescible waste into a relatively inert ash, which poses less threat to groundwater resources.

39. The Project will also provide environmental benefits to the State of Florida. For example, the Facility will produce electricity from discarded materials. In this manner, Unit No. 4 will reduce the need to use fossil fuels to generate electricity at traditional power plants. Unit No. 4 will eliminate the need to use approximately 4 million barrels of oil and thus will save approximately \$200 million in oil purchases over the next 20 years.

Socioeconomic Benefits of the Project

40. The local economy and labor market will benefit from approximately \$100 million that the County will spend to construct the Project. A significant amount of construction supplies, goods, and services are anticipated to be purchased from local businesses.

41. The Project will provide jobs for construction workers. The daily workforce is expected to average between 25 and 75 people over a period of approximately 21 months. The addition of Unit No. 4 will also provide approximately 8 new permanent jobs at the Facility.

WTE Criteria in Section 403.7061

42. Section 403.7061, Florida Statutes, establishes several criteria that must be satisfied before an existing waste-to-energy facility may be expanded. The County has

provided reasonable assurance that the Project will satisfy all of the standards and criteria in Section 403.7061, Florida Statutes. Among other things, the County has demonstrated that the County's waste reduction rate has consistently exceeded the State's 30 percent recycling goal.

Consistency With Land Use Plans and Zoning Ordinances

43. As required by Section 403.508(2), Florida Statutes, the County demonstrated that the Site is consistent and in compliance with the Hillsborough County comprehensive land use plan and Hillsborough County's applicable zoning ordinances.

Compliance with Environmental Standards

44. The Department has concluded and the evidence demonstrates that the County has provided reasonable assurance the Project will comply with all of the nonprocedural land use and environmental statutes, rules, policies, and requirements that apply to the Project, including but not limited to those requirements governing the Project's impacts on air quality, water consumption, stormwater, and wetlands. The County has used all reasonable and available methods to minimize the impacts associated with the construction and operation of the Facility. The location, construction, and operation of the Project will have minimal adverse effects on human health, the environment, the ecology of the State's lands and wildlife, and

the ecology of the State's waters and aquatic life. The Project will not unduly conflict with any of the goals or other provisions of any applicable local, regional, or state comprehensive plan. The Conditions of Certification establish operational safeguards for the Project that are technically sufficient for the protection of the public health and welfare, with a wide margin of safety.

Agency Positions Concerning Certification of the Project

45. On May 4, 2006, the PSC issued a report concluding that the Project was exempt from the PSC's need determination process, pursuant to Section 377.709(6), Florida Statutes.

46. The DEP, DOT, and SWFWMD recommend certification of the Project, subject to the Conditions of Certification. The other agencies involved in this proceeding did not object to the certification of the Project. The County has accepted, and has provided reasonable assurance that it will comply with, the Conditions of Certification.

Public Notice of the Certification Hearing

47. On December 19, 2005, the County published a "Notice of Filing of Application for Electrical Power Plant Site Certification" in the Tampa Tribune, which is a newspaper of general circulation published in Hillsborough County, Florida.

48. On May 25, 2006, the County published notice of the Certification Hearing in the Tampa Tribune.

49. On December 23 and December 30, 2005, the Department electronically published "Notice of Filing of Application for Power Plant Certification."

50. On May 26, 2006, the Department electronically published notice of the Certification Hearing.

51. The public notices for the Certification Hearing satisfy the informational and other requirements set forth in Section 403.5115, Florida Statutes, and Florida Administrative Code Rules 62-17.280 and 62-17.281(4).

CONCLUSIONS OF LAW

52. The Division of Administrative Hearings has jurisdiction over the parties to and subject matter of this proceeding pursuant to Sections 120.569, 120.57(1), 403.508, and 403.517, Florida Statutes.

53. The County and DEP provided timely public notices concerning the Project and the Certification Hearing, which satisfied the notice requirements contained in the PPSA, Chapter 120, Florida Statutes, and Florida Administrative Code Rule Chapter 62-17. All necessary and required governmental agencies participated in the certification process, and the required

reports and studies were issued by the DEP and the other agencies, in accordance with their statutory duties.

54. Pursuant to Section 377.709, Florida Statutes, the Project is a "solid waste facility" and is exempt from the requirement that the PSC issue a determination of need under Section 403.519, Florida Statutes.

55. The issue for determination in this case is whether site certification should be granted to the County to construct and operate Unit No. 4 at Hillsborough County's Resource Recovery Facility. Under Section 403.502, Florida Statutes, the following criteria are to be considered when determining whether an electrical power plant should be certified under the PPSA:

the state shall ensure through available and reasonable methods that the location and operation of electrical power plants will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of state waters and their aquatic life and will not unduly conflict with the goals established by the applicable local comprehensive plans. It is the intent to seek courses of action that will fully balance the increasing demands for electrical power plant location and operation with the broad interests of the public. Such action will be based on these premises:

(1) To assure the citizens of Florida that operation safeguards are technically sufficient for their welfare and protection.

(2) To effect a reasonable balance between the need for the facility and the environmental impact resulting from construction and operation of the facility, including air and water quality, fish and wildlife, and the water resources and other natural resources of the state.

(3) To meet the need for electrical energy as established pursuant to s. 403.519.

The competent, substantial, and uncontested evidence presented by the County and DEP at the Certification Hearing demonstrates that the Project has met all of the criteria required to obtain certification under the PPSA. The County has provided reasonable assurance that the Project, if constructed and operated in accordance with the Conditions of Certification, will comply with all of the non-procedural requirements that are applicable to the Project. The County has also provided reasonable assurance that the Project will satisfy all of the criteria and standards in Section 403.7061, Florida Statutes. Certification of the Project will serve and protect the broad interests of the public, and the benefits of the Project will outweigh the negative impacts. The County has accepted, and demonstrated that it will comply with, the Conditions of Certification.

56. In the PPSA review process and the Conditions of Certification for the Project, the State of Florida has ensured through available and reasonable methods that the location,

construction, and operation of the Project will produce minimal adverse effects on human health, the environment, the ecology of the land and its wildlife, and the ecology of State waters and their aquatic life. If the Project is built and operated in accordance with the Conditions of Certification, the Project will not unduly conflict with the goals in any applicable local, regional or state comprehensive plan. The Conditions of Certification establish safeguards that are technically sufficient for the protection and welfare of Florida's citizens, and the Conditions of Certification ensure that the potential adverse effects of the Project will be minimized.

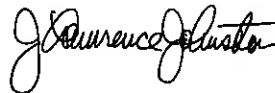
57. Certification of the Project is consistent with the legislative intent to balance the demand for electrical power with the broad interests of the public. Certification of the Project reasonably balances the need for the Project with the environmental and other impacts resulting from the construction and operation of the Project.

RECOMMENDATION

Based on the foregoing Findings of Facts and Conclusions of Law, it is RECOMMENDED that the Governor and Cabinet, sitting as the Siting Board, enter a Final Order granting a site certification for the construction and operation of Unit No. 4 at the Hillsborough County Resource Recovery Facility, in

accordance with the Conditions of Certification contained in DEP Exhibit 2.

DONE AND ENTERED this 2nd day of August, 2006, in
Tallahassee, Leon County, Florida.



J. LAWRENCE JOHNSTON
Administrative Law Judge
Division of Administrative Hearings
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Filed with the Clerk of the
Division of Administrative Hearings
this 2nd day of August, 2006.

ENDNOTES

¹/ All of the citations herein refer to the 2005 Florida Statutes. The PPSA was amended during the 2006 Session of the Florida Legislature, but the 2006 amendments do not apply to the County's application. The 2006 PPSA amendments provide that any application filed under the PPSA "shall be processed under the provisions of the law applicable at the time the application was filed", subject to certain exceptions that are not relevant in this case. See Ch. 2006-230, Laws of Fla. (Fla. SB 888, § 42). Since the County's PPSA application was filed in 2005, the 2005 version of the PPSA governs this case.

²/ Conditions of Certification were previously issued under the PPSA for Units No. 1, 2, and 3. The Conditions of Certification for Units No. 1, 2, and 3 were supplemented and updated by the Department to address Unit No. 4. The Department's proposed changes to the Conditions of Certification are indicated by

underlining (additions) and striking through (deletions) the existing text.

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NOTICE OF RIGHT TO SUBMIT EXCEPTIONS

All parties have the right to submit written exceptions within 15 days from the date of this Recommended Order. Any exceptions to this Recommended Order should be filed with the agency that will issue the Final Order in this case.

**State of Florida Department of Environmental Protection
Hillsborough County Resource Recovery Facility**

**PA 83-19A
DOAH Case No. 05-4347EPP
OGC Case No. 05-2692**

CONDITIONS OF CERTIFICATION

July 7, 2006

I. CONSTRUCTION: Unit 1, Unit 2, Unit 3 and Unit 4

The Unit 1, Unit 2 and Unit 3 facility shall be constructed, as a minimum, pursuant to the design standards presented in the Hillsborough County Resource Recovery Facility site certification application. The Unit 4 facility shall be constructed, as a minimum, pursuant to the design standards presented in the Hillsborough County Resource Recovery Facility Expansion site certification application.

A. CONTROL MEASURES

1. Storm water Runoff

To control runoff during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden Storm water to insure against spillage or discharge of excavated materials that may cause turbidity in excess of 50 Jackson Turbidity Units above backgrounds in Waters of the State and to comply with Hillsborough County and Southwest Florida Water Management District Storm water regulations. Control measures may consist of sediment traps, barriers beams, and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

2. Burning

Open burning in connection with land clearing shall be in accordance with Chapter 62-256, FAC, and applicable County regulations. No additional permits shall be required, but prior to each act of burning, the Division of Forestry shall be contacted to determine if satisfactory conditions exist for burning. Open burning shall not occur if the Division of Forestry has issued a ban on burning due to fire hazard conditions.

3. Sanitary Wastes

Disposal of sanitary wastes from construction toilet facilities shall be in accordance with applicable regulations of the appropriate local health agency.

4. Solid Wastes

Solid wastes resulting from construction shall be disposed of in accordance with the applicable regulations of Chapter 62-701, FAC.

5. Noise

Construction noise shall not exceed local noise ordinance

specifications, nor those standards imposed by zoning.

6. Dust

The Country shall employ proper dust-control techniques to minimize fugitive dust emissions.

7. Transmission Lines

The directly associated transmission lines from the Resource Recovery Facility electric generators to the existing Tampa Electric Company (TECO) substation shall be along the existing abutting TECO transmission line right-of-way.

B. ENVIRONMENTAL CONTROL PROGRAMS

1. An environmental control program shall be established under the supervision of a qualified person to assure that all construction activities conform to good environmental practices and the applicable conditions of certification.

2. If unexpected or harmful effects or evidence of irreversible environmental damages are detected during construction, the Licensee shall notify the DEP Southwest Florida District Office (SWD) by telephone, 813-632-7600, during the working day that the effect or damage occurs. If the occurrence is after normal business hours, the Licensee shall report any condition that poses a public health threat to the State Warning Point at telephone number (850) 413-9911 or (850) 413-9912. The Licensee shall confirm this in writing to the SWD, 13051 N. Telecom Parkway, Temple Terrace, FL 33637, within seventy-two (72) hours of becoming aware of such conditions, and shall provide in writing an analysis of the problem and a plan to eliminate or significantly reduce the harmful effects of damage.

C. REPORTING

1. Starting three (3) months after certification, a quarterly construction status report shall be submitted to the Southwest Florida District Office of the Department of Environmental Protection. The report shall be a short narrative describing the progress of construction.

2. Upon completion of construction, the DEP Southwest Florida District Office will be notified in order that an operational inspection can be performed.

II. OPERATION – Unit 1, Unit 2 and Unit 3

A. AIR

1. Administrative

a. All documents related to applications for permits to construct, operate or modify an emissions unit should be submitted to the Bureau of Air Regulation, MS 5500, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 488-1344, and the Siting Coordination Office, MS 48, Florida Department of Environmental Protection, 2600 Blair Stone Road, Tallahassee, Florida 32399-2400, telephone (850) 245-8001. All documents related to reports, tests, and notifications should be submitted to the Department's Southwest District office, at 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926, and the Environmental Protection Commission of Hillsborough County, 1900 Ninth Avenue, Tampa, Florida 33605 and telephone number (813) 272-5960.

b. The terms, conditions, requirements, limitations, and restrictions set forth in Permit Title V - 0570261-005-AV, which is attached as Appendix A to these Conditions, and any modification or amendment to such Title V permit, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The licensee is subject to and shall comply with the terms, conditions, requirements, limitations, restrictions set forth in Appendix A and any modification or amendment to such Title V permit. A violation of the terms conditions, requirements, limitations and restrictions in Appendix A or any modification or amendment to such Title V permit is a violation of these Conditions of Certification.

2. Emissions Units 001, 002 and 003:

Description: Each unit is a municipal waste combustor and auxiliary burner having a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The units are described as follows;

EMISSIONS UNIT NO.	EMISSIONS UNITS DESCRIPTION
001	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.1
002	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.2
003	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit No.3
xxx	Ash Building and Handling System

B. COOLING TOWER

1. Makeup Water Constituency

a. The Resource Recovery Facility shall utilize only treated sewage effluent or stormwater runoff from the stormwater holding pond as cooling tower makeup water. The effluent shall have received prior to use in the tower, as a minimum, secondary treatment, as well as treatment described in Condition II.B.2., below. Use of waters other than treated sewage effluent or site stormwater, i.e. higher quality potable waters or lower quality less than secondarily treated sewage effluent, will require a modification of these conditions of certification.

b. Notwithstanding the provisions of condition II. B.1.(a), Hillsborough County may use potable water as cooling tower makeup water: (i) on an interim basis for 24 months, (ii) on an emergency basis, after the Northwest Brandon Subregional Wastewater Treatment Plant is operational, whenever the wastewater treatment plant is unable to produce treated wastewater of suitable quality or quantities, if the County determines and the SWFWMD agrees that it is not feasible to use other sources of water; and (iii) under such other circumstances as may arise, if such use is approved in writing by the DEP and SWFWMD.

c. Hillsborough County may use treated effluent or potable water at any time as boiler makeup water.

d. Hillsborough County will report to the SWFWMD the daily quantities of potable or fresh water utilized as makeup water for the cooling tower. This data will be supplied on a monthly basis, with reports due by the 10th day of the month following data collection.

e. To implement condition II. B.1.(b)(ii), above, Hillsborough County shall submit reports to the SWFWMD concerning the feasibility of using other sources of water for emergency purposes. A progress report shall be submitted to SWFWMD on June 1, 1987, and a final report shall be submitted on June 1, 1988.

2. Chlorination

Chlorine levels in the cooling tower makeup water shall continuously be monitored, prior to insertion in the cooling towers. Sewage effluent from the Brandon Subregional Wastewater Treatment Plant or alternate used as makeup shall be treated if necessary to maintain a 1.0 mg/liter total chlorine residual after fifteen minutes contact time at average daily flow, whichever provides a higher level of public health protection.

C. WATER DISCHARGES

1. Any discharges from the site stormwater treatment system via the emergency overflow structure shall meet State Water Quality Standards, Chapters 62-302 and 62-520, FAC, shall comply with Hillsborough County and Southwest Florida Water Management District regulations, and shall comply with Chapter 62-25, FAC.
2. Cooling tower blowdown shall not be discharged to surface waters.

D. OPERATIONAL SAFEGARDS

The overall design and layout of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards will be complied with during construction and operation. The safety standards specified under Chapter 440, Florida Statutes, shall be complied with during operation.

E. TRANSMISSION LINES

The directly associated transmission lines from the Resource Recovery Facility electric generator to the TECO Substation shall be kept cleared without the use of herbicides.

F. NOISE

Operational noises shall not exceed local noise ordinance limitations nor those standards imposed by zoning.

III. CONSTRUCTION – Unit 4

A. WEIR MODIFICATION

Prior to start of construction of the Facility expansion project, Hillsborough County shall install the approved weir modifications on the outfall control structures of Ponds "B" and "C".

B. CONSTRUCTION OBSERVATION

Hillsborough County shall retain the design engineer, or other professional engineer registered in Florida, to conduct on-site observation of construction and assist

with the as-built certification requirements of this project. Hillsborough County shall inform the District in writing of the name, address and phone number of the professional engineer so employed. This information shall be submitted prior to construction.

C. STORMWATER RUNOFF

To control runoff during construction which may reach and thereby pollute Waters of the State, necessary measures shall be utilized to settle, filter, treat or absorb silt-containing or pollutant-laden stormwater to insure against spillage or discharge of excavated materials that may cause turbidity in excess of 29 Nephelometric Turbidity Units (NTU's) above background levels and to comply with Hillsborough County and Southwest Florida Water Management District stormwater regulations. Control measures may consist of sediment traps, silt screen, turbidity barriers and vegetation plantings. Exposed or disturbed soil shall be protected and stabilized as soon as possible to minimize silt and sediment-laden runoff. The pH shall be kept within the range of 6.0 to 8.5.

D. AS-BUILT CERTIFICATION

Within 30 days after completion of construction of the permitted activity, Hillsborough County shall submit to the SWFWMD's Tampa Service Office a written statement of completion and certification by a registered professional engineer or other appropriate individual as authorized by law, utilizing the required Statement of Completion and Request for Transfer to Operation Entity form identified in Chapter 40D-1.659, F.A.C., signed, dated and sealed as-built drawings. The as-built drawings shall identify any deviations from the approved construction drawings.

E. AIR

1. Unconfined Particulate Matter Emissions: Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter include the following requirements consistent with current practices by the Licensee: All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust. The unpaved areas of the facility will be maintained and either sodded or landscaped. Hoods, fans, filters, or similar equipment will be used to contain, capture, and/or vent particulate matter. The conveyor systems of the Facility will be enclosed or covered. The ash shall be wetted before being stored in the ash handling building. Speed limit signs shall be posted. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering or leaving) shall be under negative air pressure. [Rule 62-296.320(4)(c)2., F.A.C.; and, items proposed by the applicant.]

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

IV. OPERATION – Unit 4

A. AIR

1. The terms, conditions, requirements, limitations, and restrictions set forth in draft Permit PSD-FL-369, which is attached as Appendix B, and any final issuance, modification, or amendment to such PSD permit, are incorporated by reference herein, and are binding and enforceable Conditions of this Certification. The Licensee is subject to and shall comply with the terms, conditions, requirements, limitations, and restrictions set forth in Appendix B and any final issuance,, modification, or amendment to such PSD permit. A violation of the terms conditions, requirements, limitations, and restrictions in Appendix B is a violation of these Conditions of Certification.

2. General and Administrative

a. Permitting Authority: All documents related to applications for permits to construct, modify or operate this emissions unit shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. Copies of these documents shall be submitted to the Compliance Authority.

b. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications should be submitted to the compliance authority. The compliance authority is the Department's Southwest District Office at 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926.

c. General Conditions: The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of Appendix B and any final issuance, modification, or amendment to such PSD permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]

- d. The proposed new emissions units are:

E.U. ID No.	Emission Unit Description
-107	Nominal 288 MMBtu/hr Municipal Waste Combustor & Auxiliary Burners - Unit 4
-108	Pebble Lime Storage Silo - Unit 4
-109	Dolomitic Lime Storage Silo - Unit 4
-110	Activated Carbon Storage Silo - Unit 4
-111	Cooling Tower Cell

B. WATER MANAGEMENT

1. Inspection Reports

a. Hillsborough County shall submit to the Southwest Florida Water Management District (SWFWMD) inspection reports for the wet detention stormwater treatment systems on-site two years after operation and every two years thereafter.

b. The removal of littoral shelf vegetation (including cattails) from wet detention ponds is prohibited unless otherwise approved by the District. Removal includes dredging, the application of herbicide, cutting, and the introduction of grass carp. Any questions regarding authorized activities within the wet detention ponds shall be addressed to the SWFWMD Surface Water Regulation Manager, Tampa Service Office.

2. Cooling Tower

a. The Resource Recovery Facility shall utilize only treated sewage effluent as cooling tower makeup water. As a minimum, prior to use in the tower the effluent shall have received secondary treatment. Use of waters other than treated sewage effluent, i.e. higher quality potable waters or lower quality less than secondary treated sewage effluent, will require a modification of these conditions subject to agreement by the SWFWMD and the DEP.

b. Notwithstanding the provisions of condition IV.B.2. above, Hillsborough County may use potable water as cooling tower makeup water on a limited basis whenever

(1) Treated wastewater is unavailable in suitable quality or quantities and the County determines, with SWFWMD and DEP agreement, that it is not feasible to use other sources of water; or

(2) under such emergency circumstances that may arise, if such use is approved by the SWFWMD and the DEP.

3. Boiler Water

a. Hillsborough County may use treated effluent or potable water at any time as boiler makeup water.

b. Hillsborough County will report to the SWFWMD the daily quantities of potable or fresh water utilized as makeup water for the cooling tower. This data will be supplied within Hillsborough County's Public Supply per Capita Water Use Survey.

4. Water Discharges

a. Any discharges from the on-site stormwater treatment system shall meet State Water Quality Standards, Chapter 62-302, F.A.C., shall comply with Hillsborough County and Southwest Florida Water Management District regulations, and shall comply with Chapter 62-25, F.A.C.

b. Cooling tower blowdown shall not be discharged to surface waters.

C. TRANSPORTATION

A. Traffic control during plant construction and maintenance will be subject to the standards in the Manual on Uniform Traffic Control Devices; Statewide Minimum Level of Service Standards, Chapter 14-94, Florida Administrative Code; Florida Department of Transportation's Roadway and Traffic Design Standards; and Florida Department of Transportation Standard Specifications for Road and Bridge Construction, whichever is more stringent.

B. Operation of overweight or overdimensional loads by the applicant on State transportation facilities during the construction and operation of the Unit 4, shall be subject to safety and permitting requirements of Chapter 316, Florida Statutes, and Rule Chapter 14-26, Safety Regulations and Permit Fees for Overweight and Overdimensional Vehicles, F.A.C.

C. Any new access to the State Highway System shall follow the provisions of Chapter 14-96, State Highway System Connection Permits, Administrative

Process, and Chapter 14-97, State Highway Access Management Classification System and Standards, F.A.C.

D. Any use of State of Florida right of way and certain activities on State transportation facilities will be subject to the requirements of the Department of Transportation's Utility Accommodation Manual (Document 710-020-001) and Rule 14-46.001, F.A.C.

D. COMMUNITY AFFAIRS

1. Hillsborough County shall develop a Comprehensive Hurricane Preparation and Recovery Plan for the RRF Unit 4 project. The plan shall be submitted to the Department of Community Affairs as part of the Final Site Plan. In no case shall the plan be submitted later than commencement of construction of Unit 4.

2. Hillsborough County shall submit a formal update of the Comprehensive Hurricane Preparation and Recovery Plan to the Department of Community Affairs every five (5) years following commencement of commercial operation of Unit 4 and whenever an additional electrical generating unit is brought into service at the RRF Plant site.

E. OPERATIONAL SAFEGARDS

The overall design and layout of the facilities shall be such as to minimize hazards to humans and the environment. Security control measures shall be utilized to prevent exposure of the public to hazardous conditions. The Federal Occupational Safety and Health Standards and Chapter 440, Florida Statutes, shall be complied with during operation.

F. TRANSMISSION LINES

The directly associated transmission lines from the Resource Recovery Facility electric generator to the TECO Substation shall be kept cleared without the use of herbicides.

G. NOISE

Operational noises shall not exceed local noise ordinance limitations nor those standards imposed by zoning.

V. GENERAL: Unit 1, Unit 2, Unit 3 and Unit 4

A. CHANGE IN DISCHARGE

All discharge or emissions authorized herein shall be consistent with the terms and conditions of this certification. The discharge of any regulated pollutant not identified in the application, or more frequent than, or at a level in excess of that authorized herein, shall constitute a violation of the certification. Any anticipated facility expansions, production increases or process modifications which may result in new, different, or increases discharges or pollutants, change in fuel, or expansion in stream generating capacity must be reported by submission of a new or supplemental application pursuant to Chapter 403, Florida Statutes,

B. NONCOMPLIANCE NOTIFICATION

If, for any reason, the licensee does not comply with or will be unable to comply with any limitation specified in this certification, the licensee shall notify the Southwest Florida District Manager of the Department by telephone during the working day the said non-compliance occurs. If the occurrence is after normal business hours, the Licensee shall report any condition that poses a public health threat to the State Warning Point at telephone number (850) 413-9911 or (850) 413-9912. The Licensee shall confirm this in writing to the SWD, 13051 N. Telecom Parkway, Temple Terrace, FL 33637, within seventy-two (72) hours of becoming aware of such conditions and shall supply the following information:

1. A description of the discharge and cause of non-compliance; and
2. The period of non-compliance, including exact dates and times; or, if not corrected, the anticipated time the non-compliance is expected to continue, and steps being taken to reduce, eliminate and prevent recurrence of the non-complying event.

C. FACILITIES OPERATION

The licensee shall at all times maintain in good working order and operate as efficiently as possible any treatment or control facilities or systems installed or used by the licensee to achieve compliance with the terms and conditions of this certification. Such systems are not to be bypassed without prior Department approval.

D. ADVERSE IMPACT

The licensee shall take all reasonable steps to minimize any adverse impact resulting from non-compliance with any limitation specified in this certification, including such accelerated or additional monitoring as necessary to determine the nature and impact of the noncomplying discharge.

E. RIGHT OF ENTRY

The licensee shall allow the Secretary of the Florida Department of Environmental Protection and/or authorized representatives, upon the presentation of credentials:

1. To enter upon the licensee's premises where an effluent source is located or in which records are required to be kept under the terms and conditions of this certification, and
2. To have access to and copy any records required to be kept under the conditions of this certification, and
3. To inspect and test any monitoring equipment or monitoring method required in this certification and to sample any discharge or pollutants, and
4. To assess any damage to the environment or violation of ambient standards.

F. REVOCATION OR SUSPENSION

This certification may be suspended or revoked pursuant to Section 403.512, Florida Statutes, or for violations of any of its conditions.

G. CIVIL AND CRIMINAL LIABILITY

This certification does not relieve the licensee from civil; or criminal penalties for non-compliance with any conditions of this certification, applicable rules or regulations of the Department or Chapter 403, Florida Statutes, or regulations thereunder.

Subjects to Section 403.511, Florida Statutes this certification shall not preclude the institution of any legal action or relieve the licensee from any responsibilities, or penalties established pursuant to any other applicable State Statutes, or regulations.

H. PROPERTY RIGHTS

The issuance of the certification does not convey any property rights in either

real or personal property, nor any exclusive privileges, nor does it authorize any injury to public or private property or any invasion of personal rights nor any infringement of Federal, State or local laws or regulations.

I. SEVERABILITY

The provisions of this certification are severable, and if any provision of this certification or the application of any provision of this certification to any circumstances is held invalid, the application of such provision to other circumstances and the remainder of the certification shall not be affected thereby.

J. DEFINITIONS

The meaning of terms used herein shall be governed by the definitions contained in Chapter 403, Florida Statutes, and any regulations adopted pursuant thereto. In the event of any dispute over the meaning of a term in these general or special conditions which is not defined in such statutes or regulations, such dispute shall be resolved by reference to the most relevant definitions contained in any other state or federal statute or regulation or, in the alternative, by the use of the commonly accepted meaning as determined by the Department.

K. REVIEW OF SITE CERTIFICATION

The certification shall be final unless revised, revoked or suspended pursuant to law. At least every five years from the date of issuance of certification the Department will review all monitoring data that has been submitted to it during the preceding five-year period for the purpose of determining the extent of the licensee's compliance with the conditions of this certification and the environmental impact of this facility. The Department will submit the result of its review and recommendations to the licensee. Such review will be repeated at least every five years thereafter.

L. MODIFICATION OF CONDITIONS

1. Pursuant to Subsection 403.516(1), Florida Statutes, the Board hereby delegates the authority to the Secretary to modify any condition of this certification dealing with sampling, monitoring, reporting, specification of control equipment, related time schedules, emission limitations (subject to notice and opportunity for hearing), or any special studies conducted, as necessary to attain the objectives of Chapter 403, Florida Statutes.

2. This certification shall be automatically modified to conform to any subsequent amendments, modifications, or renewals made by the Department under a

federally delegated or approved program to any separately issued Prevention of Significant Deterioration (PSD) permit, Title V air permit, or National Pollutant Discharge Elimination System (NPDES) permit for the certified facility. The licensee shall send each party to the original certification proceedings (at the party's last known address as shown in the record of such proceeding) notice of requests for modifications or renewals of the above listed permits if the request involves a relief mechanism (e.g., mixing zone, variance, etc.) from standards, a relaxation of conditions included in the permit due to state permitting requirements, or the inclusion of less restrictive air emission limitations in the air permits. The Department shall notify all parties to the certification proceeding of any intent to modify conditions under this section prior to taking final agency action.

3. All other modifications to these conditions shall be made in accordance with section 403.516, Florida Statutes.

Appendix A – Final Title V Permit

Hillsborough County
Hillsborough County Resource Recovery Facility
Facility ID No.: 0570261
Hillsborough County

Title V Air Operation Permit Revision
Revision to Title V Air Operation Permit No.: 0570261-001-AV

FINAL Permit No.: 0570261-005-AV

Permitting Authority:
State of Florida
Department of Environmental Protection
Division of Air Resource Management
Bureau of Air Regulation
Title V Section

Mail Station #5505
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Telephone: 850/488-0114
Fax: 850/922-6979

Compliance Authority:
Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100
Fax: 813/744-6084

Title V Air Operation Permit Revision

FINAL Permit No.: 0570261-005-AV

Revision to Title V Air Operation Permit No.: 0570261-001-AV

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Permittee:
Hillsborough County
601 East Kennedy Boulevard
Tampa, Florida 33602

FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261
SIC Nos.: 4953
Project: Title V Air Operation Permit Revision

This permit revision is being issued for the purpose of incorporating the terms and conditions of the air construction permit, No. 0570261-004-AC, for a Dolomitic Lime Storage Silo; incorporating the terms and conditions of administrative permit correction, No. 0570261-003-AV, correcting the rule language previously cited in Facility-wide Condition 10; deleting obsolete specific conditions which address plant operation prior to the implementation of 40 CFR 60, Subparts Cb and Eb; and, incorporating changes to 40 CFR 60, Subparts Cb and Eb, allowing 15 hours of excess carbon monoxide emissions for specified malfunctions. The Hillsborough County Resource Recovery Facility is located at 350 Falkenburg Road, Tampa, Hillsborough County; UTM Coordinates: Zone 17, 368.2 km East and 3092.7 km North; Latitude: 27° 57' 14" North and Longitude: 82° 40' 22" West.

This Title V air operation permit revision is issued under the provisions of Chapter 403, Florida Statutes (F.S.), and Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210, and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

Referenced attachments made a part of this permit:

Appendix U-1, List of Unregulated Emissions Units and/or Activities

Appendix I-1, List of Insignificant Emissions Units and/or Activities

APPENDIX TV-4, TITLE V CONDITIONS version dated 02/12/02

APPENDIX SS-1, STACK SAMPLING FACILITIES version dated 10/07/96

TABLE 297.310-1, CALIBRATION SCHEDULE version dated 10/07/96

FIGURE 1 - SUMMARY REPORT-GASEOUS AND OPACITY EXCESS

EMISSION AND MONITORING SYSTEM PERFORMANCE REPORT version dated 07/96

Effective Date: October 24, 2000

Revision Effective Date: April 30, 2003

Renewal Application Due Date: April 29, 2005

Expiration Date: October 24, 2005

Howard L. Rhodes, Director
Division of Air Resource
Management

HLR/sms/ejs

Hillsborough County Resource Recovery Facility

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Section I. Facility Information.

Subsection A. Facility Description.

The facility consists of three municipal waste combustors (MWCs) having a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The "operating window" of 115 percent (%) over the nominal design rate of 150 MMBtu heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lbs steam/hour per each boiler. By letter dated March 17, 1998, D.B Riley, Inc. (boilers' manufacturer) indicated that it performed an evaluation of each boiler's ability to operate at the proposed increase steam flow of 102,000 lbs steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lbs steam/hr. Short-term capacity is limited by limiting steam production (102,000 lbs/hr), which effectively limits heat input. The facility has a design net steam energy of 1158 Btu/lb. Natural gas fired auxiliary burners and combustion control systems, with continuous monitoring devices for combustion and process parameters and SO₂, NO_x and CO, will be installed to improve combustion efficiency and control. The air pollution control equipment consists of a spray dryer absorber, a fabric filter, and activated carbon injection system. A selective non-catalytic reduction system (SNCR) and auxiliary gas burners are installed in the furnaces. The facility will also have an ash building and handling system; two lime storage silos; and, an activated carbon storage silo.

Also included in this permit are miscellaneous unregulated/insignificant emissions units and/or activities.

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

Hillsborough County Resource Recovery Facility**Page 3****Subsection B. Summary of Emissions Unit ID No(s). and Brief Description(s).**

The facility consists of the following regulated emissions units:

E.U.**ID No. Brief Description**

-001	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 1
-002	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 2
-003	150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 3
-100	Ash Building and Handling System
-101	Lime Storage Silo
-102	Activated Carbon Storage Silo
-106	Dolomitic Lime Storage Silo

Unregulated Emissions Units and/or Activities

-103	Cooling Tower
-104	Wastewater Treatment Facility
-105	NaOH Storage Tank

Please reference the Permit No., Facility ID No., and appropriate Emissions Unit(s) ID No(s). on all correspondence, test report submittals, applications, etc.

Subsection C. Relevant Documents.

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

These documents are provided to the permittee for information purposes only:

Table 1-1, Summary of Air Pollutant Standards and Terms

Table 2-1, Summary of Compliance Requirements

Appendix A-1, Abbreviations, Acronyms, Citations, and Identification Numbers

Appendix H-1: Permit History

Statement of Basis

Appendix BW, Biomedical Waste Definitions

These documents are on file with the permitting authority:

Initial Title V Air Operation Permit issued October 24, 2000

Application for a Title V Air Operation Permit Revision received October 1, 2002

Hillsborough County Resource Recovery Facility

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Section II. Facility-wide Conditions.

The following conditions apply facility-wide:

1. APPENDIX TV-4, TITLE V CONDITIONS, is a part of this permit.

{Permitting note: APPENDIX TV-4, TITLE V CONDITIONS, is distributed to the permittee only. Other persons requesting copies of these conditions shall be provided a copy when requested or otherwise appropriate.}

2. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. The truck access doors to the facility shall remain closed except during normal working shifts when MSW is being received at the storage pit area. To minimize odors at the facility, a negative pressure shall be maintained on the tipping floor and air from within the building will be used as combustion air.
[Rule 62-296.320(2), F.A.C.; and, PSD-FL-121(B)]

3. General Particulate Emission Limiting Standards. General Visible Emissions Standard. Except for emissions units that are subject to a particulate matter or opacity limit set forth or established by rule and reflected by conditions in this permit, no person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity, the density of which is equal to or greater than that designated as Number 1 on the Ringelmann Chart (20 percent opacity). EPA Method 9 is the method of compliance pursuant to Chapter 62-297, F.A.C.
[Rules 62-296.320(4)(b)1. & 4., F.A.C.]

4. Prevention of Accidental Releases (Section 112(r) of CAA).

a. The permittee shall submit its Risk Management Plan (RMP) to the Chemical Emergency Preparedness and Prevention Office (CEPPO) RMP Reporting Center when, and if, such requirement becomes applicable. Any Risk Management Plans, original submittals, revisions or updates to submittals, should be sent to:

RMP Reporting Center
Post Office Box 3346
Merrifield, VA 22116-3346
Telephone: 703/816-4434

and,

b. The permittee shall submit to the permitting authority Title V certification forms or a compliance schedule in accordance with Rule 62-213.440(2), F.A.C.

[40 CFR 68]

5. Unregulated Emissions Units and/or Activities. Appendix U-1, List of Unregulated Emissions Units and/or Activities, is a part of this permit.

[Rule 62-213.440(1), F.A.C.]

Hillsborough County Resource Recovery Facility

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6. Insignificant Emissions Units and/or Activities. Appendix I-1, List of Insignificant Emissions Units and/or Activities, is a part of this permit.

[Rules 62-213.440(1), 62-213.430(6) and 62-4.040(1)(b), F.A.C.]

7. General Pollutant Emission Limiting Standards. Volatile Organic Compounds Emissions or Organic Solvents Emissions. The permittee shall allow no person to store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. Nothing was deemed necessary and ordered at this time.

[Rule 62-296.320(1)(a), F.A.C.]

8. Emissions of Unconfined Particulate Matter. Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter at this facility include the following requirements (see Condition 57. of APPENDIX TV-4, TITLE V CONDITIONS): All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust. The unpaved areas of the facility are maintained and either sodded or landscaped. Hoods, fans, filters, or similar equipment is used to contain, capture, and/or vent particulate matter. The conveyor systems of the facility are enclosed or covered. The ash is wetted before being stored in the ash handling building. Speed limit signs shall be posted. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering or leaving) shall be under negative air pressure.

[Rule 62-296.320(4)(c)2., F.A.C.; PSD-FL-121(B); and, proposed in initial Title V permit application]

9. When appropriate, any recording, monitoring, or reporting requirements that are time-specific shall be in accordance with the effective date of the permit, which defines day one.

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

10. Statement of Compliance. The annual statement of compliance pursuant to Rule 62-213.440(3)(a)2., F.A.C., shall be submitted within 60 (sixty) days after the end of the calendar year using DEP Form number 62-213.900(7), F.A.C.

[Rule 62-213.440(3), F.A.C.]

11. The permittee shall submit all compliance related notifications and reports required of this permit to the Department's Southwest District office.

Department of Environmental Protection
Southwest District Office
3804 Coconut Palm Drive
Tampa, Florida 33619-8218
Telephone: 813/744-6100, Fax: 813/744-6084

Hillsborough County Resource Recovery Facility

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12. Any reports; data, notifications; certifications; and, requests, required to be sent to the United States Environmental Protection Agency, Region 4, should be sent to:

United States Environmental Protection Agency
Region 4
Air, Pesticides & Toxics Management Division
Air and EPCRA Enforcement Branch
Air Enforcement Section
61 Forsyth Street
Atlanta, Georgia 30303-8960
Telephone: 404/562-9155; Fax: 404/562-9163

13. Certification by Responsible Official (RO). In addition to the professional engineering certification required for applications by Rule 62-4.050(3), F.A.C., any application form, report, compliance statement, compliance plan and compliance schedule submitted pursuant to Chapter 62-213, F.A.C., shall contain a certification signed by a responsible official that, based on information and belief formed after reasonable inquiry, the statements and information in the document are true, accurate, and complete. Any responsible official who fails to submit any required information or who has submitted incorrect information shall, upon becoming aware of such failure or incorrect submittal, promptly submit such supplementary information or correct information.

[Rule 62-213.420(4), F.A.C.]

Hillsborough County Resource Recovery Facility

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Section III. Emissions Unit(s) and Conditions.

Subsection A. This section addresses the following emissions unit(s).

(RESERVED)

Hillsborough County Resource Recovery Facility

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Section III. Emissions Unit(s) and Conditions.

Subsection B. This section addresses the following emissions unit(s).

(RESERVED)

Hillsborough County Resource Recovery Facility

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Section III. Emissions Unit(s) and Conditions.**Subsection C. This section addresses the following emissions unit(s).****E.U.****ID No. Brief Description**

- | | |
|------|---|
| -001 | 150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 1 |
| -002 | 150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 2 |
| -003 | 150 MMBtu/hr (nominal) Municipal Waste Combustor & Auxiliary Burners - Unit 3 |

Each of the three municipal waste combustor (MWCs) shall have a nominal design rate capacity of 400 tons MSW per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound. The "operating window" of 115 percent (%) over the nominal design rate of 150 MMBtu heat input corresponds to 172.5 MMBtu/hr heat input and 102,000 lbs steam/hour per each boiler. By letter dated March 17, 1998, D.B Riley, Inc. (the boilers' manufacturer) indicated that it performed an evaluation of each boiler's ability to operate at the proposed increase steam flow of 102,000 lbs steam/hr and concluded that each boiler can safely operate at an increased continuous steam generation rate of 103,700 lbs steam/hr. Short-term capacity is limited by limiting steam production (102,000 lb/hr), which effectively limits heat input. The units have a designed net steam energy of 1,158 Btu/lb (1378.86 Btu/lb steam enthalpy – 220 Btu/lb feed water enthalpy). Natural gas fired auxiliary burners and combustion control systems, with continuous monitoring devices for combustion and process parameters and SO₂, NO_x and CO, will be installed to improve combustion efficiency and control.

The air pollution control equipment consists of a spray dryer absorber, a fabric filter, and activated carbon injection system. A selective non-catalytic reduction system (SNCR) and auxiliary gas burners are installed in the furnaces. Emissions exhaust through a 220 feet tall stack.

{Permitting note(s): These emissions units are regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions in Rule 62-204.800(8)(b), F.A.C.; NSPS - 40 CFR 60, Subpart E, Standards of Performance for Incinerators, adopted and incorporated by reference in Rule 62-204.800(7), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT); Rule 62-296.401(2), F.A.C., Incinerators; and, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. Note: This project is subject to the requirements of 40 CFR 60, Subpart Cb. This permit may refer to the requirements of 40 CFR 60, Subpart Eb, where these requirements are referenced by Subpart Cb.}

Hillsborough County Resource Recovery Facility

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

Essential Potential to Emit (PTE) Parameters

C.1. Capacity. The maximum individual MWC throughput shall not exceed 460 tons MSW per day (1380 tons per day entire facility), and, 102,000 pounds steam per hour (on a 4-hour block arithmetic average). The incinerators/boilers shall not be loaded in excess of their maximum operating capacity, equivalent to 1380 tons MSW per day total, but no more than 1200 tons MSW per day on an annual (52 week rolling average) average basis for the entire facility.

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.; and, PSD-FL-121(C)]

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

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

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

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

[40 CFR 60.31b and 40 CFR 60.58b(j)]

C.3. Emissions Unit Operating Rate Limitation After Testing. See specific condition **C.51**.

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

C.4. Maximum Demonstrated Municipal Waste Combustor Unit Load. Unit load means the steam load of the municipal waste combustor measured as specified in 40 CFR 60.58b(I)(6). Each unit shall not operate at a load level greater than 110 percent of the unit's "maximum demonstrated unit load." Maximum demonstrated municipal waste combustor unit load means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified in specific condition **C.25**. Higher loads are allowed for testing purposes as specified in 40 CFR 60.53b(b).

[40 CFR 60.34b(b) and 40 CFR 60.51b; and, PSD-FL-121(C)]

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C.5. Maximum Demonstrated Particulate Matter Control Device Temperature. Maximum demonstrated particulate matter control device temperature means the highest 4-hour arithmetic average flue gas temperature measured at the particulate matter control device inlet during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics specified in specific condition **C.25**.

[40 CFR 60.34b(b) and 40 CFR 60.51b]

C.6.0. Methods of Operation - Fuels. The primary fuel for the facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), Florida Statutes (1995).

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

- (a) those materials that are prohibited by state or federal law;
- (b) those materials that are prohibited by this permit;
- (c) lead acid batteries;
- (d) hazardous waste;
- (e) nuclear waste;
- (f) radioactive waste;
- (g) sewage sludge;
- (h) explosives;
- (i) beryllium-containing waste as defined in 40 CFR 61.31(g);
- (j) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources);
- (k) segregated loads of biological waste.

C.6.2. The fuel may be received either as a mixture or as a single-item stream (segregated load) of discarded materials. If the facility intends to use an authorized fuel that is segregated non-MSW material, the fuel shall be either:

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

C.6.3. The facility operator shall prepare and maintain records concerning the description and quantities of all segregated loads of non-MSW material which are received and used as fuel at the facility, and subject to a percentage weight limitation, below (C.6.6. and C.6.7.). For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual observation.

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

- (a) comply with good combustion operating practices in accordance with 40 CFR 60.53b;
- (b) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
- (c) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

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

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

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

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

C.6.6. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with specific condition C.86. below.

C.6.7. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with specific condition C.86. below.

- (a) Construction and demolition debris.
- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.

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(c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.

(d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.

(e) Waste materials that:

(i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or

(ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.

(f) Waste materials that contain oil from:

(i) the routine cleanup of industrial or commercial establishments and machinery; or

(ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.

(g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).

{Permitting note: Waste materials specifically authorized above do not require Department approval.}

(h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

C.6.8. Auxiliary Burners:

(a) Auxiliary burners for each unit shall be fired only by natural gas. The annual capacity factor for natural gas shall be 10 percent or less. Monthly records shall be maintained of the amount of natural gas used by the auxiliary burners in each unit; and, the equivalent gross heat input. On an annual basis (no later than 60 days after the end of the calendar year), a demonstration must be performed based on the monthly records showing that the capacity factor for natural gas in each unit was 10 percent or less. The annual capacity factor for natural gas is the ratio between the heat input to the unit from natural gas and the potential heat input to the unit had it been operated for 8760 hours during a calendar year at the maximum steady state design heat input capacity.

(b) During boiler startup, the auxiliary burners shall be operating at their maximum capacity prior to the introduction of municipal solid waste to the boilers, and shall remain in operation until the lime spray dryer and particulate control device are fully operational.

[Rules 62-4.160(2) and 62-213.440(1), F.A.C.; and, PSD-FL-121(C)]

C.7. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year.

[Rule 62-210.200(PTE), F.A.C.]

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Operating Practices and Requirements

C.8. No owner or operator of an affected facility shall cause such facility to operate at a load level greater than 110 percent of the maximum demonstrated municipal waste combustor unit load as defined in specific condition C.4., except as specified below. The averaging time is specified in specific condition C.10.

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

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

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

C.9. No owner or operator of an affected facility shall cause such facility to operate at a temperature, measured at the particulate matter control device inlet, exceeding 17°C above the maximum demonstrated particulate matter control device temperature as defined in specific condition C.5., except as specified below. The averaging time is specified in specific condition C.10. These requirements apply to each particulate matter control device utilized at the affected facility.

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

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

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

C.10. Operating Requirements. The procedures specified in paragraphs (1) through (12) shall be used for determining compliance with the operating requirements under 40 CFR 60.53b.

(1) Compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 4-hour block arithmetic average for all types of affected facilities except mass

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burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers.

(2) For affected mass burn rotary waterwall municipal waste combustors and refuse-derived fuel stokers, compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a) shall be determined using a 24-hour daily arithmetic average.

(3) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring carbon monoxide at the combustor outlet and record the output of the system and shall follow the procedures and methods specified in paragraphs(i) through(iii).

(i) The continuous emission monitoring system shall be operated according to Performance Specification 4A in appendix B of 40 CFR 60.

(ii) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 4A in appendix B of 40 CFR 60, carbon monoxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).

(A) For carbon monoxide, EPA Reference Method 10, 10A, or 10B shall be used.

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

(iii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential carbon monoxide emissions of the municipal waste combustor unit.

(4) The 4-hour block and 24-hour daily arithmetic averages specified in paragraphs (1) and (2) shall be calculated from 1-hour arithmetic averages expressed in parts per million by volume corrected to 7 percent oxygen (dry basis). The 1-hour arithmetic averages shall be calculated using the data points generated by the continuous emission monitoring system. At least two data points shall be used to calculate each 1-hour arithmetic average.

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

(6) The procedures specified in paragraphs (i) through (v) shall be used to determine compliance with load level requirements under 40 CFR 60.53b(b).

(i) The owner or operator of an affected facility with steam generation capability shall install, calibrate, maintain, and operate a steam flow meter or a feed water flow meter; measure steam (or feed water) flow in kilograms per hour (or pounds per hour) on a continuous basis; and record the output of the monitor. Steam (or feed water) flow shall be calculated in 4-hour block arithmetic averages.

(ii) The method included in the "American Society of Mechanical Engineers Power Test Codes: Test Code for Steam Generating Units, Power Test Code 4.1-1964 (R1991)" section 4 (incorporated by reference, see 40 CFR 60.17) shall be used for calculating the steam (or feed

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water) flow required under paragraph (6)(i). The recommendations in "American Society of Mechanical Engineers Interim Supplement 19.5 on Instruments and Apparatus: Application, Part II of Fluid Meters, 6th edition (1971)," chapter 4 (incorporated by reference-see 40 CFR 60.17) shall be followed for design, construction, installation, calibration, and use of nozzles and orifices except as specified in (iii).

(iii) Measurement devices such as flow nozzles and orifices are not required to be recalibrated after they are installed.

(iv) All signal conversion elements associated with steam (or feed water flow) measurements must be calibrated according to the manufacturer's instructions before each dioxin/furan performance test, and at least once per year.

(7) To determine compliance with the maximum particulate matter control device temperature requirements under 40 CFR 60.53b(c), the owner or operator of an affected facility shall install, calibrate, maintain, and operate a device for measuring on a continuous basis the temperature of the flue gas stream at the inlet to each particulate matter control device utilized by the affected facility. Temperature shall be calculated in 4-hour block arithmetic averages.

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

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

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

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

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

(11) All valid continuous emission monitoring system data must be used in calculating the parameters specified under 40 CFR 60.58b(i) even if the minimum data requirements of paragraph (10) are not met. When carbon monoxide continuous emission data are not obtained

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because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 10 to provide, as necessary, the minimum valid emission data.

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

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

Operator Training and Certification

C.11. Standards for municipal waste combustor operator training and certification.

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

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

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

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

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

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

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

- (1) A summary of the applicable standards;
- (2) A description of basic combustion theory applicable to a municipal waste combustor unit;
- (3) Procedures for receiving, handling, and feeding municipal solid waste;
- (4) Municipal waste combustor unit startup, shutdown, and malfunction procedures;
- (5) Procedures for maintaining proper combustion air supply levels;
- (6) Procedures for operating the municipal waste combustor unit within the standards established;
- (7) Procedures for responding to periodic upset or off-specification conditions;
- (8) Procedures for minimizing particulate matter carryover;
- (9) Procedures for handling ash;
- (10) Procedures for monitoring municipal waste combustor unit emissions; and
- (11) Reporting and recordkeeping procedures.

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

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

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

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

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

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

(g) The operating manual required by paragraph (e) shall be kept in a readily accessible location for all persons required to undergo training under paragraph (f). The operating manual and records of training shall be available for inspection by the EPA or its delegated enforcement agency upon request.

[40 CFR 60.35b, 40 CFR 60.39b(c)(4)(ii) & (iii), and 40 CFR 60.54b]

C.12. The requirement specified in 40 CFR 60.54b(d) does not apply to chief operators, shift supervisors, and control room operators who have obtained full certification from the American Society of Mechanical Engineers on or before the date of State plan approval.

[40 CFR 60.39b(c)(4)(iii)(A)]

C.13. The owner or operator of a designated facility may request that the EPA Administrator waive the requirement specified in 40 CFR 60.54b(d) for chief operators, shift supervisors, and control room operators who have obtained provisional certification from the American Society of Mechanical Engineers on or before the date of State plan approval.

[40 CFR 60.39b(c)(4)(iii)(B)]

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C.14. The initial training requirements specified in 40 CFR 60.54b(f)(1) shall be completed no later than the date specified in (1), (2), or (3), whichever is later.

(1) The date six (6) months after the date of startup of the affected facility;

(2) Twelve (12) months after State plan approval; or

(3) The date prior to the day when the person assumes responsibilities affecting municipal waste combustor unit operation.

[40 CFR 60.39b(c)(4)(iii)(C)]

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Emission Limitations and Standards

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions C.15. - C.18. and C.22. - C.31. are based on the specified averaging time of the applicable test method.}

{Permitting note: Equivalent emissions (pound per hour and pound per million Btu), where they appear, are listed for the purposes of providing information and to indicate the potential to emit and are not emission compliance standards.}

Particulate Matter

C.15. The emission limit for particulate matter contained in the gases discharged to the atmosphere from each MWC unit is 27 milligrams per dry standard cubic meter or 0.012 grain per dry standard cubic foot, corrected to 7 percent oxygen (equivalent to 0.024 lb/MMBtu, heat input and 4.1 lbs/hr) and 17.96 tons/yr. [40 CFR 60.33b(a)(1)(i) and PSD-FL-121(C)]

Visible Emissions

C.16. The emission limit for opacity exhibited by the gases discharged to the atmosphere from each MWC unit is 10 percent (6-minute block average). [40 CFR 60.33b(a)(1)(iii) and PSD-FL-121(C)]

Cadmium

C.17. The emission limit for cadmium contained in the gases discharged to the atmosphere from each MWC unit is 0.040 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 3.47E-05 lb/MMBtu, heat input and 6.00E-03 lb/hr) and 0.026 ton/yr. [40 CFR 60.33b(a)(2)(i) and PSD-FL-121(C)]

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Mercury

C.18. The emission limit for mercury contained in the gases discharged to the atmosphere from each MWC unit is 0.070 milligrams per dry standard cubic meter or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent (equivalent to $1.17\text{E-}04$ lb/MMBtu, heat input or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent and 0.020 lb/hr or 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, whichever is less stringent) and 0.087 ton/yr. [40 CFR 60.33b(a)(3); Rule 62-296.416(3)(a)1., F.A.C.; and, PSD-FL-121(C)]

C.19. Facilities subject to the mercury emissions limiting standard of Rule 62-296.416(3)(a)1., F.A.C., shall demonstrate individual emissions unit compliance by the compliance date specified in Rule 62-296.416(3)(a)2., F.A.C., and annually thereafter. [Rule 62-296.416(3)(a)3., F.A.C.]

C.20. [reserved]

C.21. [reserved]

Lead

C.22. The emission limit for lead contained in the gases discharged to the atmosphere from each MWC unit is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to $3.81\text{E-}04$ lb/MMBtu, heat input and 0.065 lb/hr) and 0.288 ton/yr. [40 CFR 60.33b(a)(4) and PSD-FL-121(C)]

Sulfur Dioxide

C.23. The emission limit for sulfur dioxide contained in the gases discharged to the atmosphere from each MWC unit is 29 parts per million by volume or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent (equivalent to 0.190 lb/MMBtu, heat input or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent and 32.86 lbs/hr or 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent) and 143.9 tons/yr. Compliance with this emission limit is based on a 24-hour daily geometric mean. [40 CFR 60.33b(b)(3)(i) and PSD-FL-121(C)]

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Hydrogen Chloride

C.24. The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere from each MWC unit is 29 parts per million by volume or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent (0.099 lb/MMBtu, heat input or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent and 17.00 lbs/hr or 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), whichever is less stringent) and 74.43 tons/yr. [40 CFR 60.33b(b)(3)(ii) and PSD-FL-121(C)]

Dioxins/Furans

C.25. The emission limit for dioxins/furans contained in the gases discharged to the atmosphere from each MWC unit that do not employ an electrostatic precipitator-based emission control system is 30 nanograms per dry standard cubic meter (total mass), corrected to 7 percent oxygen (equivalent to 2.60E-08 lb/MMBtu, heat input and 4.5E-06 lb/hr) and 1.96E-05 ton/yr. [40 CFR 60.33b(c)(1)(ii) and PSD-FL-121(C)]

Nitrogen Oxides

C.26. The emission limit for nitrogen oxides contained in the gases discharged to the atmosphere from each MWC unit is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis (equivalent to 0.34 lb/MMBtu, heat input and 58.63 lbs/hr) and 256 tons/yr. Compliance with this emission limit is based on a 24-hour daily arithmetic mean.

Nitrogen oxide emissions from the auxiliary burners are approximately 3.45 lbs/hr and 15.1 tons/yr per unit. These emissions are part of, and not in addition to, combustor emissions. Allowable emissions for MSW combustors include auxiliary burners. This facility is limited to a 10 percent (0.10) or less, total annual gross heat input for natural gas consumption. Auxiliary burners for each MWC unit shall be fired only by natural gas, and consumption of natural gas shall not exceed 104,937,500 cubic feet per MWC unit in any calendar year (i.e., annual capacity factor for natural gas of 10% or less as determined by 40 CFR 60.44b(d)). [40 CFR 60.33b(d) and PSD-FL-121(C)]

Carbon Monoxide

C.27. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere from each MWC unit is 100 parts per million by volume, measured at the combustor outlet in conjunction with a measurement of oxygen concentration, corrected to 7 percent oxygen, dry basis (equivalent to 0.101 lb/MMBtu, heat input and 17.4 lbs/hr) and 76.26 tons/yr. Calculated as an arithmetic average. Averaging time is a 4-hour block average. [40 CFR 60.34b(a); Rules 62-212.400(2)(g) and 62-212.400(5), F.A.C.; and, PSD-FL-121(C)]

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Fluoride

C.28. The emission limit for fluoride contained in the gases discharged to the atmosphere from each MWC unit is 6.74 milligrams per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 0.0059 lb/MMBtu, heat input and 1.00 lbs/hr) and 4.43 tons/yr.
[PSD-FL-121(C)]

Beryllium

C.29. The emission limit for beryllium contained in the gases discharged to the atmosphere from each MWC unit is 1.48 micrograms per dry standard cubic meter, corrected to 7 percent oxygen (equivalent to 1.27E-06 lb/MMBtu, heat input and 2.18E-04 lbs/hr) and 9.6E-04 ton/yr.
[Rules 62-212.400(2)(g) and 62-212.400(5), F.A.C.; and, PSD-FL-121(C)]

Volatile Organic Compounds

C.30. The emission limit for volatile organic compounds contained in the gases discharged to the atmosphere from each MWC unit shall not exceed 0.01 grain per dry standard cubic foot, corrected to 12 percent carbon dioxide or 0.2 lb/ton, whichever is more restrictive, to be demonstrated during the initial compliance test, only.
[PSD-FL-104 and PSD-FL-121(C)]

Sulfuric Acid Mist

C.31. The emission limit for sulfuric acid mist contained in the gases discharged to the atmosphere from each MWC unit shall not exceed 0.072 grain per dry standard cubic foot, corrected to 12 percent carbon dioxide, to be demonstrated during the initial compliance test, only.
[PSD-FL-121(C)]

Excess Emissions

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

C.32. The opacity standards set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard.
[40 CFR 60.11(c)]

C.33. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.

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[40 CFR 60.11(d)]

C.34.a. Startup, Shutdown and Malfunction. The standards under 40 CFR 60, Subpart Cb apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence.

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

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

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

C.34.b. For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.

[40 CFR 60.58b(a)(1)iii]

C.35. Excess emissions resulting from malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed three hours per occurrence. A malfunction means any sudden and unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner.

[Rule 62-210.700(1), F.A.C.; and, PSD-FL-121(C)]

C.36. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during malfunction shall be prohibited.

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

Test Methods and Procedures

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

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

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violation of the applicable emission limit unless otherwise specified in the applicable standard.
[40 CFR 60.8(c)]

Particulate Matter and Opacity

C.38. The procedures and test methods specified in paragraphs (1) through (11) shall be used to determine compliance with the emission limits for particulate matter and opacity.

- (1) The EPA Reference Method 1 shall be used to select sampling site and number of traverse points.
- (2) The EPA Reference Method 3, 3A, or 3B, as applicable shall be used for gas analysis.
- (3) The EPA Reference Method 5 shall be used for determining compliance with the particulate matter emission limit. The minimum sample volume shall be 1.7 cubic meters. The probe and filter holder heating systems in the sample train shall be set to provide a gas temperature no greater than 160 ± 14 °C. An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 5 run.
- (4) The owner or operator of an affected facility may request that compliance with the particulate matter emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph (6).
- (5) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the particulate matter emission concentrations from the three test runs is used to determine compliance.
- (6) In accordance with paragraphs (7) and (11), EPA Reference Method 9 shall be used for determining compliance with the opacity limit except as provided under 40 CFR 60.11(e) Hillsborough County
- (7) The owner or operator of an affected facility shall conduct an initial performance test for particulate matter emissions and opacity as required under 40 CFR 60.8.
- (8) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous opacity monitoring system for measuring opacity and shall follow the methods and procedures specified in paragraphs (8)(i) through (8)(iv).
 - (i) The output of the continuous opacity monitoring system shall be recorded on a 6-minute average basis.
 - (ii) The continuous opacity monitoring system shall be installed, evaluated, and operated in accordance with 40 CFR 60.13.
 - (iii) The continuous opacity monitoring system shall conform to Performance Specification 1 in appendix B of 40 CFR 60.
 - (iv) The initial performance evaluation shall be completed no later than 180 days after the date of the initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.
- (9) Following the date that the initial performance test for particulate matter is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for particulate matter on an annual basis (no more than 12 calendar months following the previous performance test).
- (10) [reserved]
- (11) Following the date that the initial performance test for opacity is completed or is required to be completed under 40 CFR 60.8 for an affected facility, the owner or operator shall conduct a performance test for opacity on an annual basis (no more than 12 calendar months following the previous performance test) using the test method specified in paragraph (6).
[40 CFR 60.38b and 40 CFR 60.58b(c)]

Cadmium, Lead and Mercury

C.39. The procedures and test methods specified in paragraphs (1) and (2) shall be used to determine compliance with the emission limits for cadmium, lead, and mercury.

(1) The procedures and test methods specified in paragraphs (1)(i) through (1)(ix) shall be used to determine compliance with the emission limits for cadmium and lead.

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

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

(iii) The EPA Reference Method 29 shall be used for determining compliance with the cadmium and lead emission limits.

(iv) An oxygen or carbon dioxide measurement shall be obtained simultaneously with each Method 29 test run for cadmium and lead required under paragraph (1)(iii).

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

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

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

(viii) [reserved]

(ix) [reserved]

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

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

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

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

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

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

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

where:

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

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

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

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

(vii) The owner or operator of an affected facility may request that compliance with the mercury emission limit be determined using carbon dioxide measurements corrected to an

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equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in paragraph 40 CFR 60.58b(b)(6).

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

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

(x) [reserved]

(xi) The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit shall follow the procedures specified in 40 CFR 60.58b(m) for measuring and calculating carbon usage. See specific condition C.81.

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

C.40. Mercury Emissions Test Method and Procedures. All mercury emissions tests performed pursuant to the requirements of this rule shall comply with the following provisions.

1. The test method for mercury shall be EPA Method 29 adopted in Chapter 62-297, F.A.C.

2. Test procedures shall meet all applicable requirements of Chapter 62-297, F.A.C.

(4) Flue Gas Temperature Standard. Waste-to-energy facilities choosing to control mercury emissions through the use of post-combustion control equipment designed to remove mercury from flue gases shall comply with the flue gas temperature standard of Rule 62-296.416(4)(a), F.A.C.

(a) Temperature Standard. The flue gas temperature standard set forth in 40 CFR 60.53b(c), incorporated by reference in Rule 62-04.800, F.A.C., shall apply.

(b) Temperature Monitoring. The temperature monitoring requirements set forth in 40 CFR 60.58b(i), incorporated by reference in Rule 62-204.800, F.A.C., shall apply.

(5) Carbon Usage Rate. The carbon injection rate operating standard and monitoring requirements set forth in 40 CFR 60.58b(m), incorporated by reference in Rule 62-204.800, F.A.C., shall apply. See specific condition C.81.

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

Sulfur Dioxide

C.41. The procedures and test methods specified in paragraphs (1) through (14) shall be used for determining compliance with the sulfur dioxide emission.

(1) The EPA Reference Method 19, section 4.3, shall be used to calculate the daily geometric average sulfur dioxide emission concentration.

(2) The EPA Reference Method 19, section 5.4, shall be used to determine the daily geometric average percent reduction in the potential sulfur dioxide emission concentration.

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

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- (4) The owner or operator of an affected facility shall conduct an initial performance test for sulfur dioxide emissions as required under 40 CFR 60.8. Compliance with the sulfur dioxide emission limit (concentration or percent reduction) shall be determined by using the continuous emission monitoring system specified in paragraph (5) to measure sulfur dioxide and calculating a 24-hour daily geometric average emission concentration or a 24-hour daily geometric average percent reduction using EPA Reference Method 19, sections 4.3 and 5.4, as applicable.
- (5) The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring sulfur dioxide emissions discharged to the atmosphere and record the output of the system.
- (6) Following the date that the initial performance test for sulfur dioxide is completed or is required to be completed under 40 CFR 60.8, compliance with the sulfur dioxide emission limit shall be determined based on the 24-hour daily geometric average of the hourly arithmetic average emission concentrations using continuous emission monitoring system outlet data if compliance is based on an emission concentration, or continuous emission monitoring system inlet and outlet data if compliance is based on a percent reduction.
- (7) At a minimum, valid continuous monitoring system hourly averages shall be obtained as specified in paragraphs (7)(i) and (7)(ii) for 75 percent of the operating hours per day for 90 percent of the operating days per calendar quarter that the affected facility is combusting municipal solid waste.
- (i) At least two data points per hour shall be used to calculate each 1-hour arithmetic average.
 - (ii) Each sulfur dioxide 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.
- (8) The 1-hour arithmetic averages required under paragraph (6) shall be expressed in parts per million corrected to 7 percent oxygen (dry basis) and used to calculate the 24-hour daily geometric average emission concentrations and daily geometric average emission percent reductions. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).
- (9) All valid continuous emission monitoring system data shall be used in calculating average emission concentrations and percent reductions even if the minimum continuous emission monitoring system data requirements of paragraph (7) are not met.
- (10) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system.
- (11) The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor as specified under 40 CFR 60.8.
- (12) The continuous emission monitoring system shall be operated according to Performance Specification 2 in 40 CFR 60 appendix B.
- (i) During each relative accuracy test run of the continuous emission monitoring system required by Performance Specification 2 in 40 CFR 60 appendix B, sulfur dioxide and oxygen (or carbon dioxide) data shall be collected concurrently (or within a 30- to 60-minute period) by both the continuous emission monitors and the test methods specified in paragraphs (A) and (B).
 - (A) For sulfur dioxide, EPA Reference Method 6, 6A, or 6C shall be used.

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

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

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

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

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

Hydrogen Chloride

C.42. The procedures and test methods specified in paragraphs (1) through (8) shall be used for determining compliance with the hydrogen chloride emission limit.

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

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

(3) The percent reduction in potential hydrogen chloride emissions (% PHCl) is computed using equation 2:

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

where:

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

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

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E_0 = controlled hydrogen chloride emission concentration measured at the control device outlet, corrected to 7 percent oxygen (dry basis).

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

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

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

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

(8) [reserved]

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

Dioxin/Furan

C.43. The procedures and test methods specified in paragraphs (1) through (9) shall be used to determine compliance with the limits for dioxin/furan emissions.

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

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

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

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

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

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

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

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

(ii) [reserved]

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- (iii) Where all performance tests over a 2-year period indicate that dioxin/furan emissions are less than or equal to 15 nanograms per dry standard cubic meter (total mass) for all affected facilities located within a municipal waste combustor plant, the owner or operator of the municipal waste combustor plant may elect to conduct annual performance tests for one affected facility (i.e., unit) per year at the municipal waste combustor plant. At a minimum, a performance test for dioxin/furan emissions shall be conducted annually (no more than 12 months following the previous performance test) for one affected facility at the municipal waste combustor plant. Each year a different affected facility at the municipal waste combustor plant shall be tested, and the affected facilities at the plant shall be tested in sequence (e.g., unit 1, unit 2, unit 3, unit 4, as applicable). If each annual performance test continues to indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass), the owner or operator may continue conducting a performance test on only one affected facility per year. If any annual performance test indicates a dioxin/furan emission level greater than 15 nanograms per dry standard cubic meter (total mass), performance tests thereafter shall be conducted annually on all affected facilities at the plant until and unless all annual performance tests for all affected facilities at the plant over a 2-year period indicate a dioxin/furan emission level less than or equal to 15 nanograms per dry standard cubic meter (total mass).
- (6) The owner or operator of an affected facility that selects to follow the performance testing schedule specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60.59b(g)(4) for reporting the selection of this schedule.
- (7) The owner or operator of an affected facility where activated carbon is used to comply with the dioxin/furan emission limits specified in 40 CFR 60.52b(c) or the dioxin/furan emission level specified in paragraph (5)(iii) shall follow the procedures specified in 40 CFR 60.58b(m) for measuring and calculating the carbon usage rate.
- (8) The owner or operator of an affected facility may request that compliance with the dioxin/furan emission limit be determined using carbon dioxide measurements corrected to an equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).
- (9) As specified under 40 CFR 60.8, all performance tests shall consist of three test runs. The average of the dioxin/furan emission concentrations from the three test runs is used to determine compliance. [40 CFR 60.38b and 40 CFR 60.58b(g)]

Nitrogen Oxides

C.44. The procedures and test methods specified in paragraphs (1) through (12) shall be used to determine compliance with the nitrogen oxides emission limit for affected facilities under Sec. 60.52b(d).

- (1) The EPA Reference Method 19, section 4.1, shall be used for determining the daily arithmetic average nitrogen oxides emission concentration.
- (2) The owner or operator of an affected facility may request that compliance with the nitrogen oxides emission limit be determined using carbon dioxide measurements corrected to an

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equivalent of 7 percent oxygen. The relationship between oxygen and carbon dioxide levels for the affected facility shall be established as specified in 40 CFR 60.58b(b)(6).

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

(4) The owner or operator of an affected facility subject to the nitrogen oxides emission shall install, calibrate, maintain, and operate a continuous emission monitoring system for measuring nitrogen oxides discharged to the atmosphere, and record the output of the system.

(5) Following the date that the initial performance test for nitrogen oxides is completed or is required to be completed under 40 CFR 60.8, compliance with the emission limit for nitrogen oxides shall be determined based on the 24-hour daily arithmetic average of the hourly emission concentrations using continuous emission monitoring system outlet data.

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

(i) At least 2 data points per hour shall be used to calculate each 1-hour arithmetic average.

(ii) Each nitrogen oxides 1-hour arithmetic average shall be corrected to 7 percent oxygen on an hourly basis using the 1-hour arithmetic average of the oxygen (or carbon dioxide) continuous emission monitoring system data.

(7) The 1-hour arithmetic averages required by paragraph (5) shall be expressed in parts per million by volume (dry basis) and used to calculate the 24-hour daily arithmetic average concentrations. The 1-hour arithmetic averages shall be calculated using the data points required under 40 CFR 60.13(e)(2).

(8) All valid continuous emission monitoring system data must be used in calculating emission averages even if the minimum continuous emission monitoring system data requirements of paragraph (6) are not met.

(9) The procedures under 40 CFR 60.13 shall be followed for installation, evaluation, and operation of the continuous emission monitoring system. The initial performance evaluation shall be completed no later than 180 days after the date of initial startup of the municipal waste combustor unit, as specified under 40 CFR 60.8.

(10) The owner or operator of an affected facility shall operate the continuous emission monitoring system according to Performance Specification 2 in appendix B of 40 CFR 60 and shall follow the procedures and methods specified in paragraphs (i) and (ii).

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

(A) For nitrogen oxides, EPA Reference Method 7, 7A, 7C, 7D, or 7E shall be used.

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

(ii) The span value of the continuous emission monitoring system shall be 125 percent of the maximum estimated hourly potential nitrogen oxide emissions of the municipal waste combustor unit.

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

(12) When nitrogen oxides continuous emissions data are not obtained because of continuous emission monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, emissions data shall be obtained using other monitoring systems as approved by the Administrator or EPA Reference Method 19 to provide, as necessary, valid emissions data for a minimum of 75 percent of the hours per day for 90 percent of the days per calendar quarter the unit is operated and combusting municipal solid waste. [40 CFR 60.38b and 40 CFR 60.58b(h)]

Fluoride

C.45. Compliance with the fluoride limits shall be demonstrated using EPA Method 13A or 13B during the initial compliance test and annually thereafter.

[PSD-FL-121(B)]

Beryllium

C.46. Compliance with the beryllium limits shall be demonstrated using EPA Method 29 during the initial compliance test and annually thereafter.

[PSD-FL-121(B)]

Carbon Monoxide

C.47. See Specific Condition C.10.

Volatile Organic Compounds

C.48. Compliance with the volatile organic compounds limits shall be demonstrated using EPA Method 18, 25 or 25A. This is an initial compliance test requirement and once satisfied, no further tests are required.

[PSD-FL-121(B)]

Sulfuric Acid Mist

C.49. Compliance with the sulfuric acid mist limits shall be demonstrated using EPA Method 8. This is an initial compliance test requirement and once satisfied, no further tests are required.

[PSD-FL-121(B)]

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C.50. Required Number of Test Runs. For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five day period allowed for the test, the Secretary or his or her designee may accept the results of the two complete runs as proof of compliance, provided that the arithmetic mean of the results of the two complete runs is at least 20 percent below the allowable emission limiting standards.
[Rule 62-297.310(1), F.A.C.]

C.51. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. Higher loads are allowed for testing purposes as specified at 40 CFR 60.53b(b).
[Rules 62-297.310(2) & (2)(b), F.A.C.; and, PSD-FL-121(B)]

C.52. Calculation of Emission Rate. The indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule.
[Rule 62-297.310(3), F.A.C.]

C.53. Applicable Test Procedures.**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. **Opacity Compliance Tests.** When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test

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observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:

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

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

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

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

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

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

C.54. Required Stack Sampling Facilities. When a mass emissions stack test is required, the permittee shall comply with the requirements contained in Appendix SS-1, Stack Sampling Facilities, attached to this permit.

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

C.55. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

3. The owner or operator of an emissions unit that is subject to any emission limiting standard shall conduct a compliance test that demonstrates compliance with the applicable emission limiting standard prior to obtaining a renewed operation permit. Emissions units

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

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

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

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

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

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

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

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

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Compliance With Standards and Maintenance Requirements

C.56. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.
[40 CFR 60.11(a)]

C.57. Compliance with opacity standards in 40 CFR 60 shall be determined by conducting observations in accordance with Reference Method 9 in Appendix A of 40 CFR 60, any alternative method that is approved by the Administrator, or as provided in 40 CFR 60.11(e)(5).
[40 CFR 60.11(b)]

C.58. The owner or operator of an affected facility subject to an opacity standard may submit, for compliance purposes, continuous opacity monitoring system (COMS) data results produced during any performance test required under 40 CFR 60.8 in lieu of EPA Method 9 observation data. If an owner or operator elects to submit COMS data for compliance with the opacity standard, he or she shall notify the Administrator of that decision, in writing, at least 30 days before any performance test required under 40 CFR 60.8 is conducted. Once the owner or operator of an affected facility has notified the Administrator to that effect, the COMS data results will be used to determine opacity compliance during subsequent tests required under 40 CFR 60.8 until the owner or operator notifies the Administrator, in writing, to the contrary. For the purpose of determining compliance with the opacity standard during a performance test required under 40 CFR 60.8 using COMS data, the minimum total time of COMS data collection shall be averages of all 6-minute continuous periods within the duration of the mass emission performance test. Results of the COMS opacity determinations shall be submitted along with the results of the performance test required under 60.8. The owner or operator of an affected facility using a COMS for compliance purposes is responsible for demonstrating that the COMS meets the requirements specified in 40 CFR 60.13(c), that the COMS has been properly maintained and operated, and that the resulting data have not been altered in any way. If COMS data results are submitted for compliance with the opacity standard for a period of time during which EPA Method 9 data indicates noncompliance, the EPA Method 9 data will be used to determine opacity compliance.
[40 CFR 60.11(e)(5)]

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Monitoring Requirements

C.59. For the purposes of 40 CFR 60.13, all continuous monitoring systems (CMS) required under applicable subparts shall be subject to the provisions of 40 CFR 60.13 upon promulgation of performance specifications for continuous monitoring systems under Appendix B of 40 CFR 60 and, if the continuous monitoring system is used to demonstrate compliance with emission limits on a continuous basis, Appendix F of 40 CFR 60, unless otherwise specified in an applicable subpart or by the Administrator. Appendix F is applicable December 4, 1987.

[40 CFR 60.13(a)]

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

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

[40 CFR 60.13(c)(1)]

C.61. (1) Owners and operators of all continuous emission monitoring systems (CEMS) installed in accordance with the provisions of this part shall check the zero (or low-level value between 0 and 20 percent of span value) and span (50 to 100 percent of span value) calibration drifts at least once daily in accordance with a written procedure. The zero and span shall, as a minimum, be adjusted whenever the 24-hour zero drift or 24-hour span drift exceeds two times the limits of the applicable performance specifications in Appendix B. The system must allow the amount of excess zero and span drift measured at the 24-hour interval checks to be recorded and quantified, whenever specified. For continuous monitoring systems measuring opacity of emissions, the optical surfaces exposed to the effluent gases shall be cleaned prior to performing the zero and span drift adjustments except that for systems using automatic zero adjustments. The optical surfaces shall be cleaned when the cumulative automatic zero compensation exceeds 4 percent opacity.

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

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

C.62. Except for system breakdowns, repairs, calibration checks, and zero and span adjustments required under 40 CFR 60.13(d), all continuous monitoring systems (CMS) shall be in continuous operation and shall meet minimum frequency of operation requirements as follows:

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

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

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

C.63. All continuous monitoring systems (CMS) or monitoring devices shall be installed such that representative measurements of emissions or process parameters from the affected facility are obtained. Additional procedures for location of continuous monitoring systems contained in the applicable Performance Specifications of Appendix B of 40 CFR 60 shall be used.

[40 CFR 60.13(f)]

C.64. [reserved]

C.65. Owners or operators of all continuous monitoring systems for measurement of opacity shall reduce all data to 6-minute averages and for continuous monitoring systems other than opacity to 1-hour averages for time periods as defined in 40 CFR 60.2. Six-minute opacity averages shall be calculated from 36 or more data points equally spaced over each 6-minute

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period. For continuous monitoring systems other than opacity, 1-hour averages shall be computed from four or more data points equally spaced over each 1-hour period. Data recorded during periods of continuous monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments shall not be included in the data averages computed under this paragraph. An arithmetic or integrated average of all data may be used. The data may be recorded in reduced or nonreduced form (e.g., ppm pollutant and percent O₂ or ng/J of pollutant). All excess emissions shall be converted into units of the standard using the applicable conversion procedures specified in subparts. After conversion into units of the standard, the data may be rounded to the same number of significant digits as used in the applicable subparts to specify the emission limit (e.g., rounded to the nearest 1 percent opacity).

[40 CFR 60.13(h)]

C.66. Determination of Process Variables.

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

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

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

CEMS for Oxygen or Carbon Dioxide

C.67. The owner or operator of an affected facility shall install, calibrate, maintain, and operate a continuous emission monitoring system and record the output of the system for measuring the oxygen or carbon dioxide content of the flue gas at each location where carbon monoxide, sulfur dioxide, or nitrogen oxides emissions are monitored and shall comply with the test procedures and test methods specified in paragraphs (1) through (7).

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

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

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

(4) The monitor shall conform to Performance Specification 3 in appendix B of 40 CFR 60 except for section 2.3 (relative accuracy requirement).

(5) The quality assurance procedures of appendix F of 40 CFR 60 except for section 5.1.1 (relative accuracy test audit) shall apply to the monitor.

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(6) If carbon dioxide is selected for use in diluent corrections, the relationship between oxygen and carbon dioxide levels shall be established during the initial performance test according to the procedures and methods specified in paragraphs (i) through (iv). This relationship may be reestablished during performance compliance tests.

(i) The fuel factor equation in Method 3B shall be used to determine the relationship between oxygen and carbon dioxide at a sampling location. Method 3, 3A, or 3B, as applicable, shall be used to determine the oxygen concentration at the same location as the carbon dioxide monitor.

(ii) Samples shall be taken for at least 30 minutes in each hour.

(iii) Each sample shall represent a 1-hour average.

(iv) A minimum of three runs shall be performed.

(7) The relationship between carbon dioxide and oxygen concentrations that is established in accordance with paragraph (6) shall be submitted to the EPA Administrator as part of the initial performance test report and, if applicable, as part of the annual test report if the relationship is reestablished during the annual performance test.

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

Recordkeeping and Reporting Requirements

C.68. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

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

[40 CFR 60.7(a)(4)]

C.69. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

C.70. Each owner or operator required to install a continuous monitoring system (CMS) or monitoring device shall submit an excess emissions and monitoring systems performance report (excess emissions are defined in applicable subparts) and/or a summary report form [see 40 CFR 60.7(d)] to the Administrator semiannually, except when: more frequent reporting is specifically required by an applicable subpart; or, the CMS data are to be used directly for compliance

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determination, in which case quarterly reports shall be submitted; or, the Administrator, on a case-by-case basis, determines that more frequent reporting is necessary to accurately assess the compliance status of the source. All reports shall be postmarked by the 30th day following the end of each calendar half (or quarter, as appropriate). Written reports of excess emissions shall include the following information:

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

C.71. The summary report form shall contain the information and be in the format shown in Figure 1 (attached) unless otherwise specified by the Administrator. One summary report form shall be submitted for each pollutant monitored at each affected facility.

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

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

C.72. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

- (i) For 1 full year (e.g., 4 quarterly or 12 monthly reporting periods) the affected facility's excess emissions and monitoring systems reports submitted to comply with a standard under this part continually demonstrate that the facility is in compliance with the applicable standard;

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(ii) The owner or operator continues to comply with all recordkeeping and monitoring requirements specified in 40 CFR 60, Subpart A, and the applicable standard; and

(iii) The Administrator does not object to a reduced frequency of reporting for the affected facility, as provided in 40 CFR 60.7(e)(2).

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

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

C.73. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least **five (5)** years following the date of such measurements, maintenance, reports, and records.

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

C.74. Notification of Construction or Reconstruction. The owner or operator of an affected facility with a capacity to combust greater than 250 tons per day shall submit a notification of construction, which includes the information specified in paragraphs (1) through (4).

(1) Intent to construct.

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- (2) Planned initial startup date.
- (3) The types of fuels that the owner or operator plans to combust in the affected facility.
- (4) The municipal waste combustor unit capacity and supporting capacity calculations prepared in accordance with 40 CFR 60.58b(j).
- [40 CFR 60.39b and 40 CFR 60.59b(b)]

C.75. The owner or operator of an affected facility subject to the standards under 40 CFR. 60.53b, 60.54b, and 60.55b shall maintain records of the information specified in paragraphs (1) through (15), as applicable, for each affected facility for a period of at least 5 years.

- (1) The calendar date of each record.
- (2) The emission concentrations and parameters measured using continuous monitoring systems as specified under paragraphs (i) and (ii).
 - (i) The measurements specified in paragraphs (A) through (D) shall be recorded and be available for submittal to the Administrator or review onsite by an inspector.
 - (A) All 6-minute average opacity levels as specified under 40 CFR 60.58b(c).
 - (B) All 1-hour average sulfur dioxide emission concentrations as specified under 40 CFR 60.58b(e).
 - (C) All 1-hour average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
 - (D) All 1-hour average carbon monoxide emission concentrations, municipal waste combustor unit load measurements, and particulate matter control device inlet temperatures as specified under 40 CFR 60.58b(i).
 - (ii) The average concentrations and percent reductions, as applicable, specified in paragraphs (2)(ii)(A) through (2)(ii)(D) shall be computed and recorded, and shall be available for submittal to the Administrator or review on-site by an inspector.
 - (A) All 24-hour daily geometric average sulfur dioxide emission concentrations and all 24-hour daily geometric average percent reductions in sulfur dioxide emissions as specified under 40 CFR 60.58b(e).
 - (B) All 24-hour daily arithmetic average nitrogen oxides emission concentrations as specified under 40 CFR 60.58b(h).
 - (C) All 4-hour block or 24-hour daily arithmetic average carbon monoxide emission concentrations, as applicable, as specified under 40 CFR 60.58b(i).
- (3) Identification of the calendar dates when any of the average emission concentrations, percent reductions, or operating parameters recorded under paragraphs (2)(ii)(A) through (2)(ii)(D), or the opacity levels recorded under paragraph (2)(i)(A) are above the applicable limits, with reasons for such exceedances and a description of corrective actions taken.
- (4) For affected facilities that apply activated carbon for mercury or dioxin/furan control, the records specified in paragraphs (i) through (v).
 - (i) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(i) during the initial mercury performance test and all subsequent annual performance tests, with supporting calculations.

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- (ii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated as required under 40 CFR 60.58b(m)(1)(ii) during the initial dioxin/furan performance test and all subsequent annual performance tests, with supporting calculations.
 - (iii) The average carbon mass feed rate (in kilograms per hour or pounds per hour) estimated for each hour of operation as required under 40 CFR 60.58b(m)(3)(ii), with supporting calculations.
 - (iv) The total carbon usage for each calendar quarter estimated as specified by 40 CFR 60.58b(m)(3), with supporting calculations.
 - (v) Carbon injection system operating parameter data for the parameter(s) that are the primary indicator(s) of carbon feed rate (e.g., screw feeder speed).
- (5) [reserved]
- (6) Identification of the calendar dates for which the minimum number of hours of any of the data specified in paragraphs (i) through (v) have not been obtained including reasons for not obtaining sufficient data and a description of corrective actions taken.
- (i) Sulfur dioxide emissions data;
 - (ii) Nitrogen oxides emissions data;
 - (iii) Carbon monoxide emissions data;
 - (iv) Municipal waste combustor unit load data; and
 - (v) Particulate matter control device temperature data.
- (7) Identification of each occurrence that sulfur dioxide emissions data, nitrogen oxides emissions data (large municipal waste combustors only), or operational data (i.e., carbon monoxide emissions, unit load, and particulate matter control device temperature) have been excluded from the calculation of average emission concentrations or parameters, and the reasons for excluding the data.
- (8) The results of daily drift tests and quarterly accuracy determinations for sulfur dioxide, nitrogen oxides, and carbon monoxide continuous emission monitoring systems, as required under appendix F of this part, procedure 1.
- (9) The test reports documenting the results of the initial performance test and all annual performance tests listed in paragraphs (i) and (ii) shall be recorded along with supporting calculations.
- (i) The results of the initial performance test and all annual performance tests conducted to determine compliance with the particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emission limits.
 - (ii) For the initial dioxin/furan performance test and all subsequent dioxin/furan performance tests recorded under paragraph (9)(i), the maximum demonstrated municipal waste combustor unit load and maximum demonstrated particulate matter control device temperature (for each particulate matter control device).
- (10) [reserved]
- (12) The records specified in paragraphs (i) through (iii).
- (i) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been provisionally certified by the American Society of Mechanical Engineers or an equivalent State-approved certification

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program as required by 40 CFR 60.54b(a) including the dates of initial and renewal certifications and documentation of current certification.

(ii) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have been fully certified by the American Society of Mechanical Engineers or an equivalent State-approved certification program as required by 40 CFR 60.54b(b) including the dates of initial and renewal certifications and documentation of current certification.

(iii) Records showing the names of the municipal waste combustor chief facility operator, shift supervisors, and control room operators who have completed the EPA municipal waste combustor operator training course or a State-approved equivalent course as required by 40 CFR 60.54b(d) including documentation of training completion.

(13) Records showing the names of persons who have completed a review of the operating manual as required by 40 CFR 60.54b(f) including the date of the initial review and subsequent annual reviews.

(14) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the average carbon mass feed rates recorded under (4)(iii) were less than either of the hourly carbon feed rates estimated during performance tests for mercury or dioxin/furan emissions and recorded under paragraphs (4)(i) and (4)(ii), respectively, with reasons for such feed rates and a description of corrective actions taken.

(15) For affected facilities that apply activated carbon for mercury or dioxin/furan control, identification of the calendar dates when the carbon injection system operating parameter(s) that are the primary indicator(s) of carbon mass feed rate (e.g., screw feeder speed) recorded under paragraph (4)(v) are below the level(s) estimated during the performance tests as specified in 40 CFR 60.58b(m)(1)(i) and 40 CFR 60.58b(m)(1)(ii), with reasons for such occurrences and a description of corrective actions taken.

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

C.76. The owner or operator of an affected facility shall submit the information specified in paragraphs (1) through (6) in the initial performance test report.

(1) The initial performance test data as recorded under 40 CFR 60.59b(d)(2)(ii)(A) through (d)(2)(ii)(D) for the initial performance test for sulfur dioxide, nitrogen oxides, carbon monoxide, municipal waste combustor unit load level, and particulate matter control device inlet temperature.

(2) The test report documenting the initial performance test recorded under 40 CFR 60.59b(d)(9) for particulate matter, opacity, cadmium, lead, mercury, dioxins/furans, hydrogen chloride, and fugitive ash emissions.

(3) The performance evaluation of the continuous emission monitoring system using the applicable performance specifications in appendix B of this part.

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

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

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(6) For those affected facilities that apply activated carbon injection for dioxin/furan control, the owner or operator shall submit the average carbon mass feed rate recorded under 40 CFR 60.59b(d)(4)(ii).
[40 CFR 60.39b and 40 CFR 60.59b(f)]

C.77. Following the first year of municipal combustor operation, the owner or operator of an affected facility shall submit an annual report including the information specified in paragraphs (1) through (4), as applicable, no later than February 1 of each year following the calendar year in which the data were collected (once the unit is subject to permitting requirements under Title V of the Act, the owner or operator of an affected facility must submit these reports semiannually).

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

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

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

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

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

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

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

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

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

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

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C.78. The owner or operator of an affected facility shall submit a semiannual report that includes the information specified in paragraphs (1) through (5) for any recorded pollutant or parameter that does not comply with the pollutant or parameter limit specified under this subpart, according to the schedule specified under paragraph (6).

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

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

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

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

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

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

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

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

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

C.79. All reports specified under 40 CFR 60.59b(a), (b), (c), (f), (g), (h), and (i) shall be submitted as a paper copy, postmarked on or before the submittal dates specified under these paragraphs, and maintained onsite as a paper copy for a period of 5 years.

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

C.80. All records specified under 40 CFR 60.59b(d) and (e) shall be maintained onsite in either paper copy or computer-readable format, unless an alternative format is approved by the Administrator.

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

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C.81. The Permittee shall maintain a central file containing all measurements, records, and other data that are required to be collected pursuant to the various specific conditions of this permit. This file shall include but not be limited to:

- (a) Data collected from monitoring instruments, including CEM/COM systems, steam or feed water flow measurements and PM control device temperatures;
- (b) Continuous steam flow or feed water flow records on 4-hour block average basis;
- (c) Records on daily solid waste charging rates and hours of operation derived from monthly truck scale data, refuse pit inventory, and operational records.
- (d) Amount of natural gas burned for each unit each month; the equivalent heat input from natural gas for each unit each month, calculated using the heat value for natural gas provided by the natural gas supplier; and the annual records of the natural gas capacity factor for each unit;
- (e) Results of all source tests or performance tests; and records of the maximum demonstrated unit load specified by this permit.
- (f) Amounts of activated carbon used for mercury control;
- (g) Calibration logs for all instruments subject to this permit;
- (h) Maintenance/repair logs for any work performed which is subject to this permit;
- (i) Records showing the names of facility personnel who have been provisionally or fully certified, and who have completed the MWC operator training course, and who have completed reviews of the operating manual, including the dates and documentation of certification/review.
- (j) Records demonstrating compliance with the percentage limitations on segregated solid wastes required by this permit.

[PSD-FL-121(B)]

C.82. If the owner or operator of an affected facility would prefer a different annual or semiannual date for submitting the periodic reports required by 40 CFR 60.59b(g), (h) and (i), then the dates may be changed by mutual agreement between the owner or operator and the Administrator according to the procedures specified in 40 CFR 60.19(c) of subpart A of this part.

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

C.83. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

C.84. Submit to the Department a written report of emissions in excess of emission limiting for each calendar quarter. The nature and cause of the excess emissions shall be explained. This report does not relieve the owner or operator of the legal liability for violations. All recorded data shall be maintained on file by the Source for a period of five years.

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

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C.85. Test Reports.

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

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

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

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

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19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

C.86. Segregated Solid Waste Record Keeping: The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of specific conditions C.6.6. and C.6.7.:

Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific conditions C.6.6. and C.6.7., which is received for processing shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.

Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[PSD-FL-121(C)]

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C.87. Charging Rate Monitoring: The average daily solid waste charging rate shall be determined on a monthly basis and recorded for each MWC unit. The daily charging rate shall be determined each month on an average daily basis for each MWC unit using the Facility's truck scale weight data, refuse pit inventory data and MWC operating data for the preceding calendar month. Monthly truck scale weight records of the weight of solid waste received and processed at the Facility, and refuse pit inventory data, shall be used to determine the amount of solid waste charged during the preceding calendar month on an average daily basis. The MWC load level measurements or other operating data shall be used to determine the number of operating hours per MWC unit for each day during the preceding calendar month.

[Rules 62-204.800(8) and 62-4.070(3), F.A.C.; 40 CFR 60.53(a); and, PSD-FL-121(B)]

Miscellaneous Requirements.

C.88. Definitions. For the purposes of Rules 62-204.800(7), (8), and (9), F.A.C., the definitions contained in the various provisions of 40 CFR Parts 60 and 61, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Parts 60 and 61, shall mean the Secretary or the Secretary's designee except as noted in 40 CFR 61.157.

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

C.89. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

C.90. Activated Carbon Injection The owner or operator of an affected facility where activated carbon injection is used to comply with the mercury emission limit, or the dioxin/furan emission limits, or the dioxin/furan emission level specified in 40 CFR 60.58b(g)(5)(iii) shall follow the procedures specified in paragraphs (1) through (3).

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

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

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

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

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

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

(ii) Estimate the average carbon mass feed rate in kilograms per hour or pounds per hour for each hour of operation for each affected facility based on the parameters specified under paragraph (1), and sum the results for all affected facilities at the plant for the total number of hours of operation during the calendar quarter.

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

C.91. General Applicability and Definitions. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., the Emission Guidelines for Existing Sources adopted by reference in Rule 62-204.800(8), F.A.C., and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(9), F.A.C., shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply.

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

C.92. The combustor boilers shall have a metal name plate affixed in a conspicuous place on the shell showing manufacturer, model number, type waste, and rated capacity.

[PSD-FL-121(B)]

C.93. Continuous Load Monitoring: The owner or operator shall install, calibrate, maintain, and operate a steam flow meter or a feed water flow meter, measure steam (or feed water) flow in kilograms (or pounds) per hour on a continuous basis, and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam (or feed water) flow shall be calculated in 4-hour block arithmetic averages. Higher loads are allowed for testing purposes pursuant to 40 CFR 60.53b(b).

[Rule 62-204.800(8), F.A.C.; 40 CFR 60.31b, 60.38b, 60.51b, 60.53b(b), and 60.58b(i)(6); and, PSD-FL-121(B)]

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C.94. Acid Rain Part Application. For any unit which was a solid waste incinerator, burning less than 20 percent fossil fuel as described in 40 CFR 72.6(b)(7), adopted and incorporated by reference at Rule 62-204.800, F.A.C. the designated representative of the source containing the unit shall submit a complete Acid Rain Part application governing such unit to the Department before the later of January 1, 1998, or March 1 of the year following the three calendar year period in which the incinerator consumed 20 percent or more fossil fuel on a British thermal unit (BTU) basis.
[Rule 62-214.320(1)(h), F.A.C.]

C.95. Continuous Emission Monitoring System (CEMS). CEMS with recorders shall be installed, calibrated, maintained and operated for each unit, subject to review by FDEP, for the following pollutants and operational parameters:

Carbon Monoxide

Nitrogen Oxides

Opacity

Sulfur Dioxide (monitors shall be located both upstream and downstream of the baghouse for percent removal efficiency calculations)

Oxygen

Total Steam Production (lbs/hr, pressure, and temperature) or Feed water Flow Rate (lbs/hr)

Flue Gas Temperature (at the fabric filter inlet)

Carbon Injection System Operating Parameters

Power Generation (in MW)

Unless required in 40 CFR 60, Subpart Cb, operational data monitoring systems (steam production, baghouse inlet temperature, carbon injection system parameters and power generation) shall be calibrated annually and operated in accordance with good engineering practice.

[PSD-FL-121(C)]

C.96. The monitoring devices shall meet the requirements of Rule 62-297.520, F.A.C., 40 CFR 60.45 and 40 CFR 60.13, including certification of each device in accordance with 40 CFR 60, Appendix B, Performance Specifications and 40 CFR 60.7(a)(5). Quality assurance procedures must conform to all applicable sections of 40 CFR 60, Appendix F. Data on CEM/COM equipment specifications, manufacturer, type, calibration and maintenance needs, and its location after the economizer or in the air pollution control equipment outlet duct shall be provided to the Department's Southwest District office and the Hillsborough County Environmental Protection Commission for review at least 90 days prior to installation. Initial performance evaluations must be completed within 180 days after initial startup of each retrofitted unit.

[PSD-FL-121(C)]

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Section III. Emissions Unit(s) and Conditions.**Subsection D. This section addresses the following emissions unit(s).****E.U.****ID No. Brief Description****-100 Ash Building and Handling System**

Flyash and bottom ash is collected and conveyed to the ash handling building. The ash handling system is completely enclosed or covered to decrease the potential for fugitive emissions. The ash is quenched and wetted before being temporarily stored in the ash handling facility and loaded onto a truck. A baghouse is located on the ash handling building as an added precaution for fugitive emissions.

{Permitting note(s): This emissions unit is regulated under NSPS - 40 CFR 60, Subpart Cb, Emissions Guidelines and Compliance Times for Large Municipal Waste Combustors That Are Constructed on or Before September 20, 1994, adopted and incorporated by reference, subject to provisions, in Rule 62-204.800(8)(b), F.A.C.; Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Note: This project is subject to the requirements of 40 CFR 60, Subpart Cb. This permit may refer to the requirements of 40 CFR 60, Subpart Eb, where these requirements are referenced by Subpart Cb.}

The following specific conditions apply to the emissions unit(s) listed above:**Essential Potential to Emit (PTE) Parameters**

D.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.; and, PSD-FL-121(B)]

Emission Limitations and Standards

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **D.2.**, **D.4.** and **D.5.** are based on the specified averaging time of the applicable test method.}

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Fugitive Ash Emissions

D.2. Fugitive Ash Emissions

(a) On and after the date on which the initial performance test is completed or is required to be completed under 40 CFR 60.8 of Subpart A, no owner or operator of an affected facility shall cause to be discharged to the atmosphere visible emissions of combustion ash from an ash conveying system (including conveyor transfer points) in excess of 5 percent of the observation period (i.e., 9 minutes per 3-hour period), as determined by EPA Reference Method 22 observations as specified in 40 CFR 60.58b(k), except as provided in paragraphs (b) and (c). See specific condition D.7.

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

(c) The provisions of paragraph (a) do not apply during maintenance and repair of ash conveying systems. [40 CFR 60.36b and 40 CFR 60.55b]

D.3. The potential for dust generation by ash handling activities will be mitigated by quenching the ash prior to loading in ash transport trucks. The ash handling facilities shall be enclosed. Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor of the refuse bunker while trucks are entering and leaving) will be under negative air pressure. Residue from the grates, grate siftings, and ash from the combustor/boiler and fabric filter hoppers during normal operations shall be discharged into the ash quenching system, or otherwise handled in a manner to minimize visible dust. The ash/residue in the ash handling building shall remain sufficiently moist to prevent dust during storage and handling operations.

[PSD-FL-121(B)]

D.4. PM emissions from the ash handling facility baghouse shall not exceed 1.63 pounds per hour.

[PSD-FL-121(B)]

D.5. Visible emissions from the ash handling facility baghouse shall not exceed 5 percent opacity.

[PSD-FL-121(B)]

Excess Emissions

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

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D.6. At all times, including periods of startup, shutdown, and malfunction, owners and operators shall, to the extent practicable, maintain and operate any affected facility including associated air pollution control equipment in a manner consistent with good air pollution control practice for minimizing emissions. Determination of whether acceptable operating and maintenance procedures are being used will be based on information available to the Administrator which may include, but is not limited to, monitoring results, opacity observations, review of operating and maintenance procedures, and inspection of the source.
[40 CFR 60.11(d)]

D.7. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.
[Rule 62-210.700(1), F.A.C.]

D.8. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.
[Rule 62-210.700(4), F.A.C.]

Test Methods and Procedures

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

Fugitive Ash

D.9. The procedures specified in paragraphs (1) through (4) shall be used for determining compliance with the fugitive ash emission limit under 40 CFR 60.55b.

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

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

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

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

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

D.10. Performance tests shall be conducted under such conditions as the Administrator shall specify to the plant operator based on representative performance of the affected facility. The owner or operator shall make available to the Administrator such records as may be necessary to determine the conditions of the performance tests. Operations during periods of startup, shutdown, and malfunction shall not constitute representative conditions for the purpose of a performance test nor shall emissions in excess of the level of the applicable emission limit during periods of startup, shutdown, and malfunction be considered a violation of the applicable emission limit unless otherwise specified in the applicable standard.

[40 CFR 60.8(c)]

D.11. Particulate Matter. The test methods for particulate emissions shall be EPA Method 5 incorporated by reference in Chapter 62-297, F.A.C. **The permittee has elected to accept an alternate standard of five (5) percent opacity to waive the particulate matter compliance test requirement. See specific condition D.5.**

[Rules 62-213.440 and 62-297.620(4), F.A.C.]

D.12. Visible Emissions. EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.]

D.13. In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

[Rule 62-297.620(4), F.A.C.]

D.14. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited,

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operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

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

D.15. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

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

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

c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

D.16. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

a Did not operate; or

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

a. Visible emissions, if there is an applicable standard;

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

c. Each NESHAP pollutant, if there is an applicable emission standard.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

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

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

D.17. Compliance with standards in 40 CFR 60, other than opacity standards, shall be determined by performance tests established by 40 CFR 60.8, unless otherwise specified in the applicable standard.

[40 CFR 60.11(a)]

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Monitoring of Operations

D.18. Determination of Process Variables.

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

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

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

Recordkeeping and Reporting Requirements

D.19. The owner or operator subject to the provisions of 40 CFR 60 shall furnish the Administrator written notification as follows:

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

[40 CFR 60.7(a)(4)]

D.20. The owner or operator subject to the provisions of 40 CFR 60 shall maintain records of the occurrence and duration of any startup, shutdown, or malfunction in the operation of an affected facility; any malfunction of the air pollution control equipment; or, any periods during which a continuous monitoring system or monitoring device is inoperative.

[40 CFR 60.7(b)]

D.21. (1) Notwithstanding the frequency of reporting requirements specified in 40 CFR 60.7(c), an owner or operator who is required by an applicable subpart to submit excess emissions and monitoring systems performance reports (and summary reports) on a quarterly (or more frequent) basis may reduce the frequency of reporting for that standard to semiannual if the following conditions are met:

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

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

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

[40 CFR 60.7(e)(1)]

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

D.22. Any owner or operator subject to the provisions of 40 CFR 60 shall maintain a file of all measurements, including continuous monitoring system, monitoring device, and performance testing measurements; all continuous monitoring system performance evaluations; all continuous monitoring system or monitoring device calibration checks; adjustments and maintenance performed on these systems or devices; and, all other information required by 40 CFR 60 recorded in a permanent form suitable for inspection. The file shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

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

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D.23. Test Reports.

- (a) The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test.
- (b) The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed.
- (c) The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:
 - 1. The type, location, and designation of the emissions unit tested.
 - 2. The facility at which the emissions unit is located.
 - 3. The owner or operator of the emissions unit.
 - 4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
 - 5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
 - 6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.
 - 7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
 - 8. The date, starting time and duration of each sampling run.
 - 9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
 - 10. The number of points sampled and configuration and location of the sampling plane.
 - 11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
 - 12. The type, manufacturer and configuration of the sampling equipment used.
 - 13. Data related to the required calibration of the test equipment.
 - 14. Data on the identification, processing and weights of all filters used.
 - 15. Data on the types and amounts of any chemical solutions used.
 - 16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
 - 17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
 - 18. All measured and calculated data required to be determined by each applicable test procedure for each run.
 - 19. The detailed calculations for one run that relate the collected data to the calculated emission rate.

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20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.

21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

D.24. Malfunction Reporting. In the case of excess emissions resulting from malfunctions, each owner or operator shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department.

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

Miscellaneous Requirements

D.25. Definitions. For the purposes of Rules 62-204.800(7), (8), and (9), F.A.C., the definitions contained in the various provisions of 40 CFR Parts 60 and 61, adopted herein shall apply except that the term "Administrator" when used in 40 CFR Parts 60 and 61, shall mean the Secretary or the Secretary's designee except as noted in 40 CFR 61.157.

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

D.26. Circumvention. No owner or operator subject to the provisions of 40 CFR 60 shall build, erect, install, or use any article, machine, equipment or process, the use of which conceals an emission which would otherwise constitute a violation of an applicable standard. Such concealment includes, but is not limited to, the use of gaseous diluents to achieve compliance with an opacity standard or with a standard which is based on the concentration of a pollutant in the gases discharged to the atmosphere.

[40 CFR 60.12]

D.27. General Applicability and Definitions. The Standards of Performance for New Stationary Sources adopted by reference in Rule 62-204.800(7), F.A.C., the Emission Guidelines for Existing Sources adopted by reference in Rule 62-204.800(8), F.A.C., and the National Emissions Standards for Hazardous Air Pollutants adopted by reference in Rule 62-204.800(9), F.A.C., shall be controlling over other standards in the air pollution rules of the Department except that any emissions limiting standard contained in or determined pursuant to the air pollution rules of the Department which is more stringent than one contained in a Standard of Performance, an Emission Guideline, or a National Emission Standard, or which regulates emissions of pollutants or emissions units not regulated by an applicable Standard of Performance, Emission Guideline, or National Emission Standard, shall apply.

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

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Section III. Emissions Unit(s) and Conditions.

Subsection E. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-101 Lime Storage Silo

-106 Dolomitic Lime Storage Silo

Lime used in the spray dryer absorbers for each municipal waste combustor is stored in silos. Emissions from each silo are controlled by bag house filters.

{Permitting note(s): Emissions unit -101 is regulated under Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT). Emissions unit -104 is regulated under Rule 62-296.320(4)(b), F.A.C., General Visible Emissions Standard.}

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

Essential Potential to Emit (PTE) Parameters

E.1. Hours of Operation. This emissions unit is allowed to operate continuously, i.e., 8,760 hours/year. [Rule 62-210.200(PTE), F.A.C.]

Emission Limitations and Standards

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **E.2.** and **E.3.** are based on the specified averaging time of the applicable test method.}

E.2. Particulate Matter. Particulate matter emissions shall not exceed:
Emissions unit -101: 0.015 grains per dry standard cubic foot, front-half catch.
Emissions unit -106: 6.32 pounds per hour and 0.39 tons per year.
[PSD-FL-121(B) and 0570261-004-AC]

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E.3. Visible Emissions.

Emissions unit -101: Visible emissions shall not exceed five (5) percent opacity.

Emissions unit -106: Visible emissions shall not be equal to or greater than 20 percent opacity.

[PSD-FL-121(B); 0570261-004-AC; and, Rule 62-296.320(4)(b)1., F.A.C.]

Excess Emissions

E.4. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

E.5. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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

Test Methods and Procedures

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

E.6. Particulate Matter. The test methods for particulate emissions shall be EPA Method 5 incorporated by reference in Chapter 62-297, F.A.C. **The permittee has elected to accept an alternate standard of five (5) percent opacity to waive the particulate matter compliance test requirement. See specific condition E.3.**

[Rules 62-213.440 and 62-297.620(4), F.A.C.]

E.7. Visible Emissions. EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.]

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E.8. In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

[Rule 62-297.620(4), F.A.C.]

E.9. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted.

Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.

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

E.10. Applicable Test Procedures.

(a) Required Sampling Time.

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

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

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

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

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- c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

E.11. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

a. Did not operate;

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

a. Visible emissions, if there is an applicable standard;

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

c. Each NESHAP pollutant, if there is an applicable emission standard.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

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

Monitoring of Operations

E.12. Determination of Process Variables.

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

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

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

Recordkeeping and Reporting Requirements

E.13. Any measurements, maintenance, reports, and records shall be retained for at least **5 (five)** years following the date of such measurements, maintenance, reports, and records.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

E.14. Test Reports.

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

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

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

1. The type, location, and designation of the emissions unit tested.

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

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

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Section III. Emissions Unit(s) and Conditions.

Subsection F. This section addresses the following emissions unit(s).

E.U.

ID No. Brief Description

-102 Activated Carbon Storage Silo

Activated carbon used in the carbon injection system for each municipal waste combustor is stored in a silo. The activated carbon will be utilized for the control of mercury and dioxin/furans. Emissions from the silo are controlled by a baghouse.

{Permitting note(s): This emissions unit is regulated under Rule 62-212.400(5), F.A.C., Prevention of Significant Deterioration (PSD); and, Rule 62-212.400(6), F.A.C., Best Available Control Technology (BACT)}

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

Essential Potential to Emit (PTE) Parameters

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

Emission Limitations and Standards

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

{Permitting Note: Unless otherwise specified, the averaging times for Specific Conditions **F.2.** and **F.3.** are based on the specified averaging time of the applicable test method.}

F.2. Particulate Matter. Particulate matter emissions shall not exceed 0.015 grains per dry standard cubic foot, front-half catch. [PSD-FL-121(B)]

F.3. Visible Emissions. Visible emissions shall not exceed five (5) percent opacity. [PSD-FL-121(B)]

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Excess Emissions

F.4. Excess emissions from these emissions units resulting from startup, shutdown or malfunction shall be permitted provided that best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration.

[Rule 62-210.700(1), F.A.C.]

F.5. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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

Test Methods and Procedures

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

F.6. Particulate Matter. The test methods for particulate emissions shall be EPA Method 5 incorporated by reference in Chapter 62-297, F.A.C. **The permittee has elected to accept an alternate standard of five (5) percent opacity to waive the particulate matter compliance test requirement.** See specific condition F.3.

[Rules 62-213.440 and 62-297.620(4), F.A.C.]

F.7. Visible Emissions. EPA Method 9 shall be used to determine opacity compliance pursuant to Chapter 62-297, F.A.C.

[Rule 62-297.401, F.A.C.]

F.8. In the case of an emissions unit which has the potential to emit less than 100 tons per year of particulate matter and is equipped with a baghouse, the Secretary or the appropriate Director of District Management may waive any particulate matter compliance test requirements for such emissions unit specified in any otherwise applicable rule, and specify an alternative standard of 5% opacity. The waiver of compliance test requirements for a particulate emissions unit equipped with a baghouse, and the substitution of the visible emissions standard, shall be specified in the permit issued to the emissions unit.

If the Department has reason to believe that the particulate weight emission standard applicable to such an emissions unit is not being met, it shall require that compliance be demonstrated by the test method specified in the applicable rule.

[Rule 62-297.620(4), F.A.C.]

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F.9. Operating Rate During Testing. Testing of emissions shall be conducted with the emissions unit operation at permitted capacity, which is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impracticable to test at permitted capacity, an emissions unit may be tested at less than the minimum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emissions unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity.
[Rules 62-297.310(2) & (2)(b), F.A.C.]

F.10. Applicable Test Procedures.**(a) Required Sampling Time.**

1. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least two minutes.
2. Opacity Compliance Tests. When either EPA Method 9 or DEP Method 9 is specified as the applicable opacity test method, the required minimum period of observation for a compliance test shall be sixty (60) minutes for emissions units which emit or have the potential to emit 100 tons per year or more of particulate matter, and thirty (30) minutes for emissions units which have potential emissions less than 100 tons per year of particulate matter and are not subject to a multiple-valued opacity standard. The opacity test observation period shall include the period during which the highest opacity emissions can reasonably be expected to occur. Exceptions to these requirements are as follows:
 - a. For batch, cyclical processes, or other operations which are normally completed within less than the minimum observation period and do not recur within that time, the period of observation shall be equal to the duration of the batch cycle or operation completion time.
 - b. The observation period for special opacity tests that are conducted to provide data to establish a surrogate standard pursuant to Rule 62-297.310(5)(k), F.A.C., Waiver of Compliance Test Requirements, shall be established as necessary to properly establish the relationship between a proposed surrogate standard and an existing mass emission limiting standard.
 - c. The minimum observation period for opacity tests conducted by employees or agents of the Department to verify the day-to-day continuing compliance of a unit or activity with an applicable opacity standard shall be twelve minutes.

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

F.11. Frequency of Compliance Tests. The following provisions apply only to those emissions units that are subject to an emissions limiting standard for which compliance testing is required.

(a) General Compliance Testing.

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

a. Did not operate;

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

a. Visible emissions, if there is an applicable standard;

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

c. Each NESHAP pollutant, if there is an applicable emission standard.

9. The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator.

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

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

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

Hillsborough County Resource Recovery Facility

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Monitoring of Operations

F.12. Determination of Process Variables.

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

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

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

Recordkeeping and Reporting Requirements

F.13. Any measurements, maintenance, reports, and records shall be retained for at least 5 (five) years following the date of such measurements, maintenance, reports, and records.

[Rule 62-213.440(1)(b)2.b., F.A.C.]

F.14. Test Reports.

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

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

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

1. The type, location, and designation of the emissions unit tested.
2. The facility at which the emissions unit is located.
3. The owner or operator of the emissions unit.
4. The normal type and amount of fuels used and materials processed, and the types and amounts of fuels used and material processed during each test run.
5. The means, raw data and computations used to determine the amount of fuels used and materials processed, if necessary to determine compliance with an applicable emission limiting standard.
6. The type of air pollution control devices installed on the emissions unit, their general condition, their normal operating parameters (pressure drops, total operating current and GPM scrubber water), and their operating parameters during each test run.

Hillsborough County Resource Recovery Facility

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7. A sketch of the duct within 8 stack diameters upstream and 2 stack diameters downstream of the sampling ports, including the distance to any upstream and downstream bends or other flow disturbances.
8. The date, starting time and duration of each sampling run.
9. The test procedures used, including any alternative procedures authorized pursuant to Rule 62-297.620, F.A.C. Where optional procedures are authorized in this chapter, indicate which option was used.
10. The number of points sampled and configuration and location of the sampling plane.
11. For each sampling point for each run, the dry gas meter reading, velocity head, pressure drop across the stack, temperatures, average meter temperatures and sample time per point.
12. The type, manufacturer and configuration of the sampling equipment used.
13. Data related to the required calibration of the test equipment.
14. Data on the identification, processing and weights of all filters used.
15. Data on the types and amounts of any chemical solutions used.
16. Data on the amount of pollutant collected from each sampling probe, the filters, and the impingers, are reported separately for the compliance test.
17. The names of individuals who furnished the process variable data, conducted the test, analyzed the samples and prepared the report.
18. All measured and calculated data required to be determined by each applicable test procedure for each run.
19. The detailed calculations for one run that relate the collected data to the calculated emission rate.
20. The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
21. A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

Appendix U-1, List of Unregulated Emissions Units and/or Activities.

Hillsborough County	FINAL Permit No.: 0570261-005-AV
Hillsborough County Resource	Facility ID No.: 0570261
Recovery Facility	

Unregulated Emissions Units and/or Activities. An emissions unit which emits no “emissions-limited pollutant” and which is subject to no unit-specific work practice standard, though it may be subject to regulations applied on a facility-wide basis (e.g., unconfined emissions, odor, general opacity) or to regulations that require only that it be able to prove exemption from unit-specific emissions or work practice standards.

The below listed emissions units and/or activities are neither ‘regulated emissions units’ nor ‘insignificant emissions units’.

E.U.

ID No.	Brief Description of Emissions Units and/or Activity
-103	Cooling Tower
-104	Waste Water Treatment Plant
-105	NaOH Storage Tank

[electronic file name: 0570261u.doc]

Appendix I-1, List of Insignificant Emissions Units and/or Activities.

Hillsborough County

FINAL Permit No.: 0570261-005-AV

Hillsborough County Resource

Facility ID No.: 0570261

Recovery Facility

The facilities, emissions units, or pollutant-emitting activities listed in Rule 62-210.300(3)(a), F.A.C., Categorical Exemptions, are exempt from the permitting requirements of Chapters 62-210 and 62-4, F.A.C.; provided, however, that exempt emissions units shall be subject to any applicable emission limiting standards and the emissions from exempt emissions units or activities shall be considered in determining the potential emissions of the facility containing such emissions units. Emissions units and pollutant-emitting activities exempt from permitting under Rule 62-210.300(3)(a), F.A.C., shall not be exempt from the permitting requirements of Chapter 62-213, F.A.C., if they are contained within a Title V source; however, such emissions units and activities shall be considered insignificant for Title V purposes provided they also meet the criteria of Rule 62-213.430(6)(b), F.A.C. No emissions unit shall be entitled to an exemption from permitting under Rule 62.210.300(3)(a), F.A.C., if its emissions, in combination with the emissions of other units and activities at the facility, would cause the facility to emit or have the potential to emit any pollutant in such amount as to make the facility a Title V source.

The below listed emissions units and/or activities are considered insignificant pursuant to Rule 62-213.430(6), F.A.C.

Brief Description of Emissions Units and/or Activities

1. Fire and safety equipment
2. Paint usage of less than 6 gallons per day
3. Emergency generator
4. Mineral spirits drums
5. Bulk drum of cooling water treatment
6. Flanges and valves
7. 55 gallon oil storage drums
8. 300 and 449 gallon fuel storage tanks
9. Laboratory vent
10. Yard waste mulching operation
11. Emergency generator at Falkenburg Wastewater Treatment Plant
12. Sulfuric acid tank
13. Chlorine cylinders
14. Aqueous Ammonia (19%) Storage Tank

Appendix H-1: Permit History

Hillsborough County
Hillsborough County Resource Recovery Facility

FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

E.U. ID No.	Description	Permit No.	Effective Date	Expiration Date	Project Type ¹
All	Facility	0570261-001-AV	10/24/2000	10/24/2005	Initial
-001	Unit #1	0570261-002-AC	07/20/2000	12/19/2000	Construction (mod.)
-002	Unit #2				
-003	Unit #3				
-100	Ash Handling				
All	Facility	0570261-003-AV	04/23/2001	10/24/2005	Admin. Correction
-106	Dolomitic Lime Storage Silo	0570261-004-AC	03/27/2002	12/31/2002	Construction (new)
All	Facility	0570261-005-AV	04/30/2003	10/24/2005	Revision

¹ Project Type (select one): Title V: Initial, Revision, Renewal, or Admin. Correction; Construction (new or mod.); or, Extension (AC only).

² Change to an actual date, which is day 55 from the date of posting the PROPOSED Permit for EPA review (see confirmation e-mail from Tallahassee) or the date that EPA confirms resolution of any objections.

Table 1-1, Summary of Air Pollutant Standards and Terms

Hillsborough County
Hillsborough County Resource Recovery Facility

FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

- [-001] 150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 1
- [-002] 150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 2
- [-003] 150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 3

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions		Equivalent Emissions*			Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lb/MMBtu	lb./hour	TPY	lb/MMBtu		
Particulate Matter	all	8,760	27 mg/DSCM or 0.012 gr/DSCF, corrected to 7% O ₂			17.96	0.024	40 CFR 60.335(a)(1)(i); PSD-FL-121(C)	C.15.
Sulfur Dioxide	all	8,760	28 ppm, or 75% reduction corrected to 7% O ₂			143.9	0.190	40 CFR 60.335(b)(3)(i); PSD-FL-121(C)	C.23.
Nitrogen Oxides	all	8,760	205 ppm, corrected to 7% O ₂			256	0.34	40 CFR 60.335(d); PSD-FL-121(C)	C.26.
Lead	all	8,760	0.44 mg/DSCM, corrected to 7% O ₂			0.288	3.81E-04	40 CFR 60.335(a)(4); PSD-FL-121(C)	C.22.
Fluoride	all	8,760	6.74 mg/DSCM, corrected to 7% O ₂			4.43	0.0058	PSD-FL-121(C)	C.28.
Mercury	all	8,760	0.070 mg/DSCM, corrected to 7% O ₂ or 85% reduction			0.087	1.17E-04	40 CFR 60.335(a)(3); 62-298.416(3)(a)	C.18.
Beryllium	all	8,760	1.48 micrograms/DSCM, corrected to 7% O ₂			9.8E-04	1.27E-06	40 CFR 60.345(a); PSD-FL-121(C)	C.29.
Cadmium	all	8,760	0.040 mg/DSCM, corrected to 7% O ₂			0.028	3.47E-05	40 CFR 60.335(a)(2)(i)	C.17.
Hydrogen Chloride	all	8,760	28 ppm, corrected to 7% O ₂ or 85% reduction			74.43	0.099	40 CFR 60.335(b)(3)(ii)	C.24.
Dioxins/Furans	all	8,760	30 nanograms/DSCM, corrected to 7% O ₂			1.8E-05	2.69E-08	40 CFR 60.335(c)(1)(ii)	C.25.
Carbon Monoxide	all	8,760	100 ppm, corrected to 7% O ₂			76.28	0.101	40 CFR 60.345(a); PSD-FL-121(C)	C.27.
Volatile Organic Compounds	all	8,760	0.01 gr/DSCF, corrected to 12% CO ₂ or 0.2 lb/ton				3.83	PSD-FL-104 & PSD-FL-121(C)	C.30.
Sulfuric Acid Mist	all	8,760	0.072 gr/DSCF, corrected to 12% CO ₂ or 0.2 lb/ton				24.6	PSD-FL-121(C)	C.31.
Visible Emissions	all	8,760	10% opacity (6-min block average)	N/A	N/A	N/A	107.7	40 CFR 60.335(a)(1)(iii)	C.16.

Notes:

* The "Equivalent Emissions" listed are for informational purposes only.

The emissions limits in pounds per hour and tons per year are for Units 1 through 4, combined.

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Table 1-1, Summary of Air Pollutant Standards and Terms

Hillsborough County
Hillsborough County Resource Recovery Facility
FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description
[-100] Ash Building and Handling System

Allowable Emissions			Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)		
Pollutant Name	Fuel(s)	Hours/Year	Standard(s)	lbs./hour			TPY	
Particulate Matter	N/A	8760	No visible emissions in excess of 5% of the observation period 5% opacity	1.63	N/A	7.1		
Visible Emissions	N/A	8760		N/A			N/A	
Visible Emissions	N/A	8760		N/A			N/A	
							PSD-FL-121(B) 40CFR60.36b & 60.56 PSD-FL-121(B)	D.4. D.2. D.5.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

[electronic file name: 05702611.xls]

Table 1-1, Summary of Air Pollutant Standards and Terms

Hillsborough County
Hillsborough County Resource Recovery Facility

FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. Brief Description

[-101] Lime Storage Silo
[-106] Dolomitic Lime Storage Silo

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions		Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour		
E.U. [-101]								
Particulate Matter	N/A	8760	0.015 gr/DSCF				PSD-FL-121(B)	E.2.
Visible Emissions	N/A	8760	5% opacity	N/A	N/A		PSD-FL-121(B)	E.3.
E.U. [-106]								
Particulate Matter	N/A	8760		6.32	0.39		0570261-004-AC	E.2.
Visible Emissions	N/A	8760	20% opacity				0570261-004-AC	E.3.

Notes:
* The "Equivalent Emissions" listed are for informational purposes only.

[electronic file name: 05702611.xls]

Table 1-1, Summary of Air Pollutant Standards and Terms

Hillsborough County
Hillsborough County Resource Recovery Facility

FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No. [-102] **Brief Description**
Activated Carbon Storage Silo

Pollutant Name	Fuel(s)	Hours/Year	Allowable Emissions		Equivalent Emissions*		Regulatory Citation(s)	See permit condition(s)
			Standard(s)	lbs./hour	TPY	lbs./hour	TPY	
Particulate Matter	N/A	8760	0.015 gr/DSCF					F.2.
Visible Emissions	N/A	8760	5% opacity	N/A	N/A			F.3.
Notes: * The "Equivalent Emissions" listed are for informational purposes only.								

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Table 2-1, Summary of Compliance Requirements

Hillsborough County
Hillsborough County Resource Recovery Facility
FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS** See permit condition(s)
[-001]	150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 1	all	Method 5	Annual	TBE	60 min.	C.38.
[-002]	150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 2	all	Method 19 & 6, 6A or 6C	Annual	TBE	60 min.	Yes C.41.
[-003]	150 MMBtu/hr (nom) Municipal Waste Combustor & Auxiliary Burner - Unit 3	all	Method 19 & 7, 7A, 7C, 7D or 7E	Annual	TBE	60 min.	Yes C.44.
		all	Method 29	Annual	TBE	60 min.	C.39.
		all	Method 13 or 13A	Annual	TBE	60 min.	C.45.
		all	Method 29	Annual	TBE	60 min.	C.39. & C.40.
		all	Method 29	Annual	TBE	60 min.	C.46.
		all	Method 29	Annual	TBE	60 min.	C.39.
		all	Method 26 or 26A	Annual	TBE	60 min.	C.42.
		all	Method 23	Annual	TBE	60 min.	C.43.
		all	Method 10, 10A or 10B	Annual	TBE	60 min.	Yes C.47.
		all	Method 9	Annual	TBE	30 min.	Yes C.38.
		all	Method 18, 25 or 25A	Initial	TBE	60 min.	C.48.
		all	Method 8	Initial	TBE	60 min.	C.49.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C., this date is to be established (TBE) by the initial compliance test.

**CMS [=] continuous monitoring system

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Table 2-1, Summary of Compliance Requirements

Hillsborough County
Hillsborough County Resource Recovery Facility
FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
2006-2007	...
2008-2009	...
2010-2011	...
2012-2013	...
2014-2015	...
2016-2017	...
2018-2019	...
2020-2021	...
2022-2023	...
2024-2025	...
2026-2027	...
2028-2029	...
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2040-2041	...
2042-2043	...
2044-2045	...
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2068-2069	...
2070-2071	...
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2074-2075	...
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2080-2081	...
2082-2083	...
2084-2085	...
2086-2087	...
2088-2089	...
2090-2091	...
2092-2093	...
2094-2095	...
2096-2097	...
2098-2099	...
2100-2101	...
2102-2103	...
2104-2105	...
2106-2107	...
2108-2109	...
2110-2111	...
2112-2113	...
2114-2115	...
2116-2117	...
2118-2119	...
2120-2121	...
2122-2123	...
2124-2125	...
2126-2127	...
2128-2129	...
2130-2131	...
2132-2133	...
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2136-2137	...
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2150-2151	...
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2158-2159	...
2160-2161	...
2162-2163	...
2164-2165	...
2166-2167	...
2168-2169	...
2170-2171	...
2172-2173	...
2174-2175	...
2176-2177	...
2178-2179	...
2180-2181	...
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2208-2209	...
2210-2211	...
2212-2213	...
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2218-2219	...
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2222-2223	...
2224-2225	...
2226-2227	...
2228-2229	...
2230-2231	...
2232-2233	...
2234-2235	...
2236-2237	...
2238-2239	...
2240-2241	...
2242-2243	...
2244-2245	...
2246-2247	...
2248-2249	...
2250-2251	...
2252-2253	...
2254-2255	...
2256-2257	...
2258-2259	...
2260-2261	...
2262-2263	...
2264-2265	...
2266-2267	...
2268-2269	...
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2294-2295	...

[~100] Ash Building and Handling System

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
Visible Emissions	N/A	Method 22	Annual	TBE	1 hr.		D.9.
Particulate Matter	N/A	Method 5	Renewal	TBE	1 hr.		D.11. & D.13.
Visible Emissions	N/A	Method 9	Annual	TBE	1 hr.		D.12.

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C., this date is to be established (TBE) by the initial compliance test.

****CMS [=] continuous monitoring system**

Table 2-1, Summary of Compliance Requirements

Hillsborough County
Hillsborough County Resource Recovery Facility
FINAL Permit No.: 0570261-005-AV
Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.		Brief Description					
[-101]		Lime Storage Silo					
[-106]		Dolomitic Lime Storage Silo					
Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
Particulate Matter	N/A	Method 5	Renewal	TBE	60 min.		E.6. & E.8.
	N/A	Method 9	Annual	TBE	30 min.		E.7.
Visible Emissions							
Notes:							
* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C., this date is to be established (TBE) by the initial compliance test.							
**CMS [=] continuous monitoring system							

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Table 2-1, Summary of Compliance Requirements

Hillsborough County

FINAL Permit No.: 0570261-005-AV

Hillsborough County Resource Recovery Facility

Facility ID No.: 0570261

This table summarizes information for convenience purposes only. This table does not supersede any of the terms or conditions of this permit.

E.U. ID No.	Brief Description
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[-102] Activated Carbon Storage Silo

Pollutant Name or Parameter	Fuel(s)	Compliance Method	Testing Time Frequency	Frequency Base Date *	Min. Compliance Test Duration	CMS**	See permit condition(s)
Particulate Matter Visible Emissions	N/A	Method 5	Renewal	TBE	60 min.		F.6. & F.8. F.7.
	N/A	Method 9	Annual	TBE	30 min.		

Notes:

* The frequency base date is established for planning purposes only; see Rule 62-297.310, F.A.C., this date is to be established (TBE) by the initial compliance test.

**CMS [=] continuous monitoring system

[electronic file name: 05702612.xls]

Appendix B – Draft PSD Permit No. PSD-FL-369

PERMITTEE

Hillsborough County
Department Solid Waste Management
601 East Kennedy Boulevard
Tampa, Florida 33602

DEP File No.: 0570261-007-AC
Permit No.: PSD-FL-369
Facility ID No.: 0570261
Project: Resource Recovery Facility Unit 4

PROJECT AND LOCATION

This permit authorizes the construction of a nominal 600 ton per day (TPD) Municipal Waste Combustor referred to as Unit 4 at the existing facility.

The existing facility, Hillsborough County Resource Recovery Facility (HCRRF), is located at 350 N. Falkenburg Road, Tampa, Hillsborough County. The UTM coordinates are Zone 17, 368.2 km East and 3092.7 km North; Latitude: 27° 57' 14" North and Longitude: 82° 40' 22" West.

STATEMENT OF BASIS

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

Appendices

The following Appendices are attached as part of this permit.

Appendix A	NSPS Subpart A, Identification of General Provisions
Appendix BD	Final BACT Determinations and Emissions Standards
Appendix Eb	NSPS Subpart Eb - Requirements for Municipal Waste Combustors
Appendix GC	General Conditions
Appendix SC	Standard Conditions

Expiration Date: December 31, 2009

Effective Date: {date signed below}

_____ Director	_____ date
Division of Air Resource Management	

D/AAL/sms

FACILITY DESCRIPTION

The existing facility, Hillsborough County Resource Recovery Facility (HCRRF), is located at 350 N. Falkenburg Road, Tampa, Hillsborough County.

The existing facility consists of three municipal waste combustors (MWCs), each having a nominal design rate capacity of 400 tons MSW (municipal solid waste) per day, 150 MMBtu per hour (excluding 9.9 MMBtu/hr from the combustion air preheaters) and 94,270 pounds steam per hour with MSW having a heating value of 4,500 Btu per pound.

The facility is owned by Hillsborough County and is currently operated by Covanta Hillsborough, Inc. a subsidiary of Covanta Energy Corporation. The Hillsborough County Resource Recovery Facility began operation in 1987.

PROJECT

The permittee, Hillsborough County, proposes to construct a new 600 ton per day (TPD) Municipal Waste Combustor referred to as Unit 4 at the existing facility. The nominal design rate capacity is 600 tons MSW per day, with a nominal heat input of 288 MMBtu per hour and maximum steam production of 163,780 pounds per hour. The new unit will be equipped with two natural gas-fired auxiliary burners, each with a nominal heat input of 50 MMBtu per hour. The new unit will be installed at the existing site. The flue for the new boiler is already encased in the existing stack. With the addition of the fourth unit, the existing 220 feet tall stack will contain four active flue streams. With the addition of this unit, the site capacity will increase from approximately 1,200 TPD to 1,800 TPD. The site's steam electric generating capacity will be increased from 39 MW to 47 MW (nominal).

The existing ash building and handling system will be expanded. Two new lime storage silos and a new activated carbon storage silo will be constructed for Unit 4.

Unit 4 will be a mass burn unit incorporating much of the same technology as the existing units including: combustion on a reverse-reciprocating grate system; ash discharge system; energy recovery through the furnace waterwall, superheater and economizers; electrical power production; and a pollution control system consisting of a spray dryer, fabric filter, activated carbon injection system and a selective non-catalytic reduction (SNCR). In addition the new unit will incorporate flue gas recirculation for energy efficiency and pollution reduction.

REGULATORY CLASSIFICATIONS

Section 111, Clean Air Act, Standards of Performance for New Stationary Sources (NSPS): The new unit is a large Municipal Waste Combustor (MWC) unit subject to 40CFR60, Subpart Eb - Standards of Performance for New Stationary Sources and Emission Guidelines for Municipal Waste Combustors.

Section 112, Clean Air Act, Hazardous Air Pollutants (HAPs): The facility is a major source of HAPs. The maximum achievable control technology (MACT) requirements typically specified in the National Emissions Standards for Hazardous Air Pollutants (NESHAP) for this industry were included in 40CFR60, Subpart Eb as required by Section 169, Clean Air Act, Solid Waste Combustion.

SECTION I. FACILITY INFORMATION (DRAFT)

Title IV, Acid Rain: The facility operates no units subject to the acid rain provisions of the Clean Air Act.

SECTION I. FACILITY INFORMATION (DRAFT)

Title V, Clean Air Act, Permits: The facility is a Title V or “Major Source” of air pollution because the potential emissions of at least one regulated pollutant exceed 100 tons per year or because it is a Major Source of HAPs. Regulated pollutants include pollutants such as carbon monoxide (CO), nitrogen oxides (NO_x), particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), and volatile organic compounds (VOC).

Part C, Clean Air Act, Prevention of Significant Deterioration (PSD): The facility is located in an area that is designated as “attainment”, “maintenance”, or “unclassifiable” for each pollutant subject to a National Ambient Air Quality Standard. The facility is classified as a “municipal incinerator capable of charging more than 250 tons of refuse per day”, which is one of the facility categories with the lower PSD applicability threshold of 100 tons per year. Potential emissions of at least one regulated pollutant exceed 100 tons per year, therefore the facility is classified as a “Major Stationary Source” with respect to Rule 62-212.400 F.A.C.

Stationary Sources - Emission Standards in Chapter 62-296, F.A.C.: The facility operates one or more units subject to emission standards. The new Unit 4 is subject to the mercury standard in Rule 62-296.416, F.A.C. The numerical mercury emissions limit under state Rule 62-296.416, F.A.C., is more stringent than the NSPS emissions limit.

Reasonable Available Control Technology (RACT): The entire State of Florida is either classified as attainment or considered to be in attainment (i.e., unclassifiable) with respect to the NAAQS for all pollutants. However, the facility is located in a maintenance area for ozone, particulate matter and lead. The VOC and NO_x RACT provisions do not apply. The new unit has operations that are subject to PM RACT.

Siting: The facility was originally certified under PA83-19 pursuant to the power plant siting provisions of Chapter 62-17, F.A.C.

RELEVANT DOCUMENTS

- Received Site Certification and PSD application on November 21, 2005;
- Sufficiency information requested via Power Plant Siting Office on January 10, 2006;
- Supplemental information received on January 17, 2006;
- Received responses to sufficiency request on March 2, 2006;
- Siting Application found sufficient on March 31, 2006; and
- Intent to Issue PSD Permit distributed with Siting Staff Report on May 24, 2006.

SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT)

GENERAL AND ADMINISTRATIVE REQUIREMENTS

- d. **Permitting Authority:** All documents related to applications for permits to construct, modify or operate this emissions unit shall be submitted to the Bureau of Air Regulation (BAR), Florida Department of Environmental Protection (DEP), at 2600 Blair Stone Road, Tallahassee, Florida 32399-2400 and phone number 850/488-0114. Copies of these documents shall be submitted to the Compliance Authority.
- e. **Compliance Authority:** All documents related to compliance activities such as reports, tests, and notifications should be submitted to the compliance authority. The compliance authority is the Department's Southwest District Office at 13051 N. Telecom Parkway, Temple Terrace, FL 33637-0926.
- f. **General Conditions:** The owner and operator are subject to, and shall operate under, the attached General Conditions listed in *Appendix GC* of this permit. General Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
- g. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter 403 of the Florida Statutes (F.S.); Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, and 62-297 of the Florida Administrative Code (F.A.C.); and the Title 40, Parts 51, 52, 60, 63, 72, 73, and 75 of the Code of Federal Regulations (CFR), adopted by reference in Rule 62-204.800, F.A.C. The terms used in this permit have specific meanings as defined in the applicable chapters of the Florida Administrative Code. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.
[Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
- h. **Construction and Expiration:** The Department may extend the 18-month period upon a satisfactory showing that an extension is justified. In conjunction with an extension of the 18-month period to commence or continue construction (or to construct the project in phases), the Department may require the permittee to demonstrate the adequacy of any previous determination of Best Available Control Technology (BACT) for emissions units regulated by the project. For good cause, the permittee may request that this PSD air construction permit be extended. Such a request shall be submitted to the Department's Bureau of Air Regulation at least sixty (60)

SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT)

days prior to the expiration of this permit. [Rules 62-4.070(4), 62-4.080, 62-210.300(1), and 62-212.400(6)(b), F.A.C.]

- i. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]
- j. Source Obligation.
 - (a) Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between construction of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit.
 - (b) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by virtue of a relaxation in any enforceable limitation which was established after August 7, 1980, on the capacity of the source or modification otherwise to emit a pollutant, such as a restriction on hours of operation, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification
 - (c) At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification.

[Rule 62-212.400(12), F.A.C.]

- k. Modifications: No emissions unit or facility subject to this permit shall be constructed or modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification.

[Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

- l. Title V Permit: This permit authorizes construction of the permitted emissions unit and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emission units. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration of this permit, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the

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SECTION II. ADMINISTRATIVE REQUIREMENTS (DRAFT)

Department's Bureau of Air Regulation and a copy to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213, F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

A. Common Conditions

The proposed new emissions units are:

E.U. ID No.	Emission Unit Description
-107	Nominal 288 MMBtu/hr Municipal Waste Combustor & Auxiliary Burners - Unit 4
-108	Pebble Lime Storage Silo - Unit 4
-109	Dolomitic Lime Storage Silo - Unit 4
-110	Activated Carbon Storage Silo - Unit 4
-111	Cooling Tower Cell

CONSTRUCTION ACTIVITIES

- 3. Unconfined Particulate Matter Emissions:** Pursuant to Rules 62-296.320(4)(c)1., 3. & 4., F.A.C., reasonable precautions to prevent emissions of unconfined particulate matter include the following requirements consistent with current practices by the permittee:

All roads shall be adequately paved, and vacuum swept if appropriate, to minimize accumulations of ash and dust. The unpaved areas of the facility will be maintained and either sodded or landscaped. Hoods, fans, filters, or similar equipment will be used to contain, capture, and/or vent particulate matter. The conveyor systems of the facility will be enclosed or covered. The ash will be wetted before being stored in the ash handling building. Speed limit signs shall be posted.

Unprocessed refuse storage areas which must be open for operational purposes (e.g., tipping floor or the refuse bunker while trucks are entering or leaving) shall be under negative air pressure.

[Rule 62-296.320(4)(c)2., F.A.C.; and, items proposed by the applicant.]

- 4. General Pollutant Emission Limiting Standards. Objectionable Odor Prohibited.** No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. [Rule 62-296.320(2), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

This section of the permit addresses the following emissions units.

Emissions Unit 107

Description: Emissions unit 107 consists of a nominal a nominal 600 TPD mass-burn municipal waste combustor (MWC) with two nominal 50 mmBtu/hr natural gas-fired auxiliary burners. The project will also include: a new nominal 17 megawatt (MW) steam turbine-electrical generator; expansion of the ash handling and refuse building; a new transformer yard; a new lime silo; a urea reagent storage tank; and a new settling basin. Exhaust from the new unit will be directed to a separate flue already constructed within the existing 220 foot stack.

Steam Capacity: The maximum steam production rate is 164,000 pounds of steam per hour (4-hour block average). The nominal heat input to achieve this load is approximately 288 mmBtu/hour.

Controls: Controls consist of: efficient combustion on the grate and furnace; flue gas recirculation (FGR); a spray dryer/absorber in conjunction with a fabric filter (SD/FF) for control of acid gases, particulate matter, and most metals; activated carbon injection (ACI) to enhance mercury (Hg) removal; selective non-catalytic reduction (SNCR) by ammonia or urea injection for NO_x control.

Stack Parameters: The Department may require the permittee to perform additional air dispersion modeling should the actual specified stack dimensions change. The following summarizes the exhaust characteristics:

Fuel	Heat Input Rate	Exhaust Temp., °F	Flow Rate ACFM
MSW	~288 mmBtu/hour	270° F	~125,000

Continuous Monitors: The unit is equipped with continuous emissions monitoring systems (CEMS) to measure and record NO_x, CO, SO₂, and Hg as well as instrumentation to monitor steam flow, flue gas flow rate, oxygen, temperature, and opacity.

APPLICABLE STANDARDS AND REGULATIONS

- a. BACT Determinations:** The emission unit addressed in this section is subject to a Best Available Control Technology (BACT) determination for nitrogen oxides (NO_x), carbon monoxide (CO), MWC acid gases (SO₂+HCl); SO₂ as an individual pollutant, and MWC organics (dioxin/furan).
[Rule 62-212.400, F.A.C.]
- b. NSPS Requirements:** The municipal waste combustor and auxiliary burners shall comply with all applicable requirements of 40 CFR 60, listed below, adopted by reference in Rule 62-204.800(7)(b), F.A.C. The Department determines that the BACT emissions performance requirements are as stringent as or more stringent than the limits imposed by the applicable NSPS provisions. Some separate reporting and monitoring may be required by the individual subparts.

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SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

(a) **Subpart A, General Provisions, including:**

- 40 CFR 60.7, Notification and Record Keeping
- 40 CFR 60.8, Performance Tests
- 40 CFR 60.11, Compliance with Standards and Maintenance Requirements
- 40 CFR 60.12, Circumvention
- 40 CFR 60.13, Monitoring Requirements
- 40 CFR 60.19, General Notification and Reporting Requirements

(b) **Subpart Eb, Standards of Performance for Large Municipal Waste Combustors**

- c.** Emission Standards for Stationary Sources: This unit has a charging rate of 40 tons per day or more and is subject to the requirements of Stationary Sources – Emission Standards for Waste-To-Energy Facilities of Rule 62-296.416, F.A.C.

AIR POLLUTION CONTROL TECHNOLOGY

- d.** Control Equipment: The owner or operator shall install, operate and maintain the following air pollution control equipment consistent with the manufacturers' specifications.

NO_x Controls: A flue gas recirculation system (FGR) will be used to limit NO_x formation. A urea-based selective non-catalytic reduction (SNCR) system will be employed for the destruction of NO_x.

MWC Acid Gas Control: A spray dryer (SD) with lime injection will be installed to absorb MWC acid gases.

MWC Organics and Mercury (Hg): An activated carbon injection (ACI) system will be installed to adsorb MWC organics and mercury (Hg).

Particulate Matter (PM/PM₁₀): A fabric filter (FF) baghouse, including absorption/adsorption reagent, will be installed to remove particulate matter.

[BACT Determination, and Rules 62-4.070(1), and (3), F.A.C.]

OPERATIONAL DESCRIPTIONS AND LIMITATIONS

- e.** Nameplate: The combustor (boiler) shall have a metal name plate affixed in a conspicuous place on the shell showing the manufacturer, model number, type of waste, and rated capacity.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

- f.** Hours of Operation. This emissions unit may operate continuously, i.e., 8,760 hours/year.
[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C.]

- g.** Permitted Capacity. The maximum steam production rate shall not exceed 164,000 pounds steam per hour (on a 4-hour block arithmetic average).

{Permitting Note: The nominal capacity of Unit 4 is 600 tons per day and has been determined to be greater than 250 tons per day, thus classifying the unit as a "large MWC unit" under NSPS - 40 CFR 60, Subpart Eb.}

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

[Rules 62-4.160(2) and 62-210.200(PTE), F.A.C., 40 CFR 60, Subpart Eb, and Design]

- h. Maximum Demonstrated Municipal Waste Combustor Unit Load.** Unit load means the steam load of the municipal waste combustor measured as specified in 40 CFR 60.58b(I)(6). Each unit shall not operate at a load level greater than 110 percent of the unit's "maximum demonstrated unit load." Maximum demonstrated municipal waste combustor unit load means the highest 4-hour arithmetic average municipal waste combustor unit load achieved during four consecutive hours during the most recent dioxin/furan performance test demonstrating compliance with the applicable limit for municipal waste combustor organics. Higher loads are allowed for testing purposes as specified in 40 CFR 60.53b(b). [40 CFR 60.34b(b), 60.51b, 60.53b(b), and 60.58b(I)(6)]
- i. Prohibited Fuels:**
- a. The facility shall not burn:
 - i. those materials that are prohibited by state or federal law;
 - ii. those materials that are prohibited by this permit;
 - iii. lead acid batteries;
 - iv. hazardous waste;
 - v. nuclear waste;
 - vi. radioactive waste;
 - vii. sewage sludge;
 - viii. explosives;
 - ix. beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
 - b. Further, the facility shall not knowingly burn:
 - i. nickel-cadmium batteries pursuant to Section 403.7192 (3);
 - ii. mercury containing devices and lamps pursuant to Sections 403.7186(2), and (3);
 - iii. untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from similar generators (or sources);
 - iv. segregated loads of biological waste; and
 - v. CCA treated wood.
- j. Authorized Fuels.** The primary fuel for the facility is municipal solid waste (MSW), including the items and materials that fit within the definition of MSW contained in either 40 CFR 60.51b or Section 403.706(5), Florida Statutes (1995). Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described below:
- a. Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:
 - i. Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons and microfilm);
 - ii. Contraband which is being destroyed at the request of appropriately authorized local, state or federal governmental agencies, provided that such material is not an explosive, a

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

propellant, a hazardous waste, or otherwise prohibited at the facility. For the purposes of this section, contraband includes but is not limited to drugs, narcotics, fruits, vegetables, plants, counterfeit money, and counterfeit consumer goods;

- iii. Wood pallets, clean wood, and land clearing debris;
 - iv. Packaging materials and containers;
 - v. Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; or
 - vi. Rugs, carpets, and floor coverings, but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
- b. Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with **Specific Condition 36** of this subsection.
- c. Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e. the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed 5%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined on a calendar month basis in accordance with **Specific Condition 36** of this subsection.
- i. Construction and demolition debris.
 - ii. Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
 - iii. Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
 - iv. Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
 - v. Waste materials that:
 - (a) are generated in the manufacture of items in categories (iii) or (iv), above and are functionally or commercially useless (expired, rejected or spent); or
 - (b) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
 - vi. Waste materials that contain oil from:
 - (a) the routine cleanup of industrial or commercial establishments and machinery; or
 - (b) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

vii. Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
{Permitting note: Waste materials specifically authorized above do not require Department approval.}

viii. Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW.

[Rule 62-4.070(1), and (3), F.A.C.]

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

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

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

- (1) comply with good combustion operating practices in accordance with 40 CFR 60.53b;
- (2) install, operate and maintain continuous emissions monitors (CEMS) for oxygen, carbon monoxide, sulfur dioxide, oxides of nitrogen and temperature in accordance with 40 CFR 60.58b; and
- (3) record and maintain the CEMS data in accordance with 40 CFR 60.59b.

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

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

MONITORING OF OPERATIONS

m. Continuous Steam Flow Monitoring: Municipal waste combustor unit load means the steam load of the municipal waste combustor unit measured as specified in §60.58b(i)(6). The owner or operator shall install, calibrate, maintain, and operate a steam flow meter, measure steam flow in kilograms (or pounds) per hour on a continuous basis, and record the output of the monitor (in accordance with the ASME method described in 40 CFR 60.58b(i)(6)). Steam flow shall be calculated in 4-hour block arithmetic averages. Higher unit loads are allowed for testing purposes pursuant to 40 CFR 60.53b(b).

[Rules 62-204.800(8) and 62-4.070(1), and (3), F.A.C., and 40 CFR 60.53(a), and 60.58b(i)]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4**EMISSIONS STANDARDS**

- n.** Emissions from Unit 4 shall not exceed the emissions standards listed in the following table or in **Specific Conditions 15-22** and using the test methods and procedures described in **Specific Conditions 23-27**.

Pollutant	Emission Standard/Limit ¹	Lb/hour	Basis
Nitrogen Oxides (NO _x)	1 st year of operation:		
	150 ppmvd - 24 hour block average and	79.8	Subpart Eb
	110 ppmvd- 30 day rolling average	58.5	Limit PTE
	Thereafter:		
	110 ppmvd - 24 hour block average and	58.5	BACT
	90 ppmvd - 12 month rolling average	47.9	BACT
Carbon Monoxide (CO)	80 ppmvd – 30-day rolling avg.	25.9	BACT
	100 ppmvd - 4 hr block average	32.4	BACT/Eb
Sulfur Dioxide (SO ₂)	26 ppmvd - 24 hour block average or 80% reduction ²	19.2	BACT/Eb
Hydrogen Chloride (HCl)	25 ppmvd or 95% reduction ²	25.4	BACT/Eb
Particulate Matter (PM/PM ₁₀)	12.0 mg/dscm	3.3	Avoid PSD
Lead (Pb)	140 µg/dscm	NA	Subpart Eb
Mercury (Hg)	28 µg/dscm or 85% reduction ²	0.022	Avoid PSD/Eb
Cadmium (Cd)	10 µg/dscm	NA	Subpart Eb
Dioxins/Furans ³	13.0 ng/dscm	3.61 x 10 ⁻⁶	BACT/Eb

- ¹ All concentration values are corrected to 7% O₂.
µg/dscm: Micrograms per dry standard cubic meter
mg/dscm: Milligrams per dry standard cubic meter
ng/dscm: Nanograms per dry standard cubic meter
ppm: Part per million dry volume
NA: not applicable

²Whichever standard is less stringent.

³Dioxins/ furans: Total tetra through octa-chlorinated dibenzo-p-dioxins and dibenzofurans

[40 CFR 60.44b, Rules 62-210.200, 62-210.200(BACT), 62-204.800(8), 62-4.070, F.A.C.]

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SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

Opacity	10 % - 6 minute average	NA	BACT/Eb
Ammonia Slip	@ 195 MMBtu/hr: 10 ppmvd @ 260 MMBtu/hr: 15 ppmvd	NA	PM, Opacity.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

- o. Nitrogen Oxides (NO_x): During the first calendar year of operation, emissions of NO_x in the stack exhaust gas as measured by the required CEMS shall exceed neither 150 ppmvd on a 24-hr daily arithmetic average nor 79.8 lb/hr and shall exceed neither 110 ppmvd nor 58.5 lb/hr on a 30-operating day rolling average.

Thereafter, emissions of NO_x in the stack exhaust gas as measured by the required CEMS shall exceed neither 110 ppmvd nor 58.5 lb/hr on a 24-hr daily arithmetic average and shall exceed neither 90 ppmvd nor 47.9 lb/hr on a 12-month rolling average, rolled monthly.

- p. Carbon Monoxide (CO): Emissions of CO in the stack exhaust gas as measured by the required CEMS shall exceed neither 100 ppmvd on a 4-hr block average nor 32.4 lb/hr and shall exceed neither 80 ppmvd nor 25.9 lb/hr on a 30-operating day rolling average.
- q. Sulfur Dioxide (SO₂): Emissions of SO₂ as measured by the required CEMS shall exceed neither 26 ppmvd nor 19.2 lb/hr on a 24-hr daily geometric mean, or an emissions reduction of 80 percent shall be achieved.
- r. Hydrogen Chloride (HCl): Emissions of HCl shall exceed neither 25 ppmvd nor 25.4 lb/hr or, an emissions reduction 95 percent shall be achieved as demonstrated during the required stack test.
- s. Mercury Hg: Emissions of Hg shall not exceed 28 µg/dscm or an emissions reduction of 85 percent shall be achieved as demonstrated during the required annual stack test.

During the first two years of operation, emissions of Hg shall not exceed 0.022 lb/hr as measured during quarterly stack tests to provide reasonable assurance that 12-month emissions are less than the applicable PSD threshold of 200 lb/yr.

Thereafter, the owner or operator may demonstrate compliance with all Hg limits in this permit with data collected from the required Hg-CEMS as described in **Specific Condition 26**.

Otherwise, the required quarterly testing for mercury shall continue.

- t. Dioxins/Furans: Emissions of dioxins/furans shall exceed neither 13.0 ng/dscm nor 3.61×10^{-6} lb/hr.
- u. Particulate Matter (PM/PM₁₀): Emissions of PM shall exceed neither 12.0 mg/dscm nor 3.3 lb/hr. This will simultaneously demonstrate compliance with the PM₁₀ limits.

{Permitting note: Compliance with this condition will also demonstrate that emissions are less than the 15 TPY PSD thresholds for PM₁₀ and MWC-Metals.}

- v. Opacity: Visible emissions shall not exceed 10 percent opacity on a 6-minute average as measured by the required continuous opacity monitoring system (COMS) and measured by an annual visible emissions test (VE).

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

TEST METHODS AND PROCEDURES

- w.** Test Methods: Any required stack test shall be performed in accordance with the following methods.

EPA Method	Description of Method and Comments
1 - 4	Determination of Traverse Points, Velocity and Flow Rate, Gas Analysis, and Moisture Content. Methods shall be performed as necessary to support other methods.
5	Determination of Particulate Emissions. The minimum sample volume shall be 30 dry standard cubic feet.
6C	Determination of SO ₂ Emissions (Instrumental).
7E	Determination of NO _x Emissions (Instrumental). NO _x emissions testing shall be conducted with the air heater operating at the highest heat input possible during the test.
9	Visual Determination of Opacity
10	Measurement of Carbon Monoxide Emissions (Instrumental). The method shall be based on a continuous sampling train.
23	Measurement of Dioxin/Furan Emissions
26 or 26A	Determination of Hydrogen Chloride Emissions
29	Determination of Metals Emissions from Stationary Sources
CTM-027	Procedure for Collection and Analysis of Ammonia in Stationary Source - This is an EPA conditional test method. - The minimum detection limit shall be 1 ppm.

Method CTM-027 is published on EPA's Technology Transfer Network Web Site at "<http://www.epa.gov/ttn/emc/ctm.html>". The other methods are specified in Appendix A of 40 CFR 60, adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. Tests shall be conducted in accordance with the appropriate test method and the applicable requirements specified in this permit, and NSPS Subpart A in 40 CFR 60. [Rules 62-204.800, F.A.C.; 40 CFR 60, Appendix A]

- x.** Testing Requirements: Initial tests shall be conducted between 90% and 100% of permitted capacity; otherwise, this permit shall be modified to reflect the true maximum capacity as constructed. Subsequent annual tests shall be conducted between 90% and 100% of permitted capacity in accordance with the requirements of Rule 62-297.310(2), F.A.C. [Rule 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8]
- y.** Initial Compliance Demonstration: Initial compliance stack tests shall be conducted within 60 days after achieving the maximum production rate, but not later than 180 days after the initial startup. In

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B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

accordance with the test methods specified in this permit, Unit 4 exhaust stack gas shall be tested to demonstrate compliance with the emission standards for NO_x, CO, SO₂, HCl, PM/PM₁₀, lead, cadmium, Hg, dioxin/furans, and ammonia. The permittee shall provide the Compliance Authority with any other initial emissions performance tests conducted to satisfy vendor guarantees. [Rule 62-297.310(7)(a) and (b), F.A.C.; 40 CFR 60.8]

- z.** Subsequent Compliance Testing: Annual compliance stack tests for NO_x, CO, SO₂, HCl, PM/PM₁₀, lead, cadmium, dioxins/furans, and ammonia shall be conducted during each federal fiscal year (October 1st to September 30th). Data collected from the reference method during the required RATA tests for CO, NO_x, and SO₂ may be used to satisfy the annual testing requirement provided the notification requirements and emission testing requirements for performance and compliance tests of this permit are satisfied.

Performance tests for Hg emissions shall be conducted on a calendar year basis to demonstrate compliance with the concentration/reduction standards. Performance tests to demonstrate compliance with the lb/hr Hg standard shall be conducted on a quarterly basis.

Following the first two years of operation, the owner or operator may demonstrate compliance with the Hg limits in this permit using the required Hg CEMS in lieu of the quarterly and annual testing requirements provided all provisions of **Specific Condition 35** and subpart 40 CFR 60.58b(n) and (o) are met. Otherwise, the required quarterly testing for mercury shall continue.

[Rules 62-297.310(7)(a) and (b), and 62-296.416, F.A.C., and 40 CFR 60.8 and 60.58b]

- aa.** Continuous Compliance: The permittee shall demonstrate continuous compliance with the CO, NO_x, and SO₂ emissions standards based on data collected by the certified CEMS. The permittee shall demonstrate continuous compliance with the opacity limit based on data collected by the required COMS. [Rule 62-210.200 (BACT), F.A.C., and 40 CFR 60, Subpart Eb]

EXCESS EMISSIONS

- bb.** Department Regulations: The following conditions apply only to the emissions limits given in **Specific Conditions 14-22** that were specified pursuant to BACT or to avoid PSD applicability.

- a.** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing best operational practices to minimize emissions are adhered to and the duration of excess emissions shall be minimized but in no case exceed two hours in any 24-hour period unless specifically authorized by the Department for longer duration. The Department authorizes three hours in any 24-hour period for this emissions unit. A malfunction means any unavoidable failure of air pollution control equipment or process equipment to operate in a normal or usual manner.
- b.** Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown or malfunction shall be prohibited.

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- c. The permittee shall notify the Compliance Authority within one working day of discovering any emissions in excess of a CEMS standard subject to the specified averaging period. All such reasonably preventable emissions shall be included in any CEMS compliance determinations. All valid emissions data (including data collected during startup, shutdown and malfunction) shall be used to report emissions for the Annual Operating Report.

[Rule 62-210.700, F.A.C.]

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

- cc. Regulations pursuant to 40 CFR 60, Subpart Eb: The following conditions apply only to the emissions limits given in **Specific Conditions 14-22** that were specified pursuant to 40 CFR 60, Subpart Eb.

- a. *The opacity standards* set forth in 40 CFR 60 shall apply at all times except during periods of startup, shutdown, malfunction, and as otherwise provided in the applicable standard. [40 CFR 60.11(c)]
- b. *Startup, Shutdown and Malfunction.* Except as provided by 40 CFR 60.56b, the standards under 40 CFR 60, Subpart Eb, as incorporated in Rule 62-204.800(8)(b), F.A.C., apply at all times except during periods of startup, shutdown, or malfunction. Duration of startup or shutdown periods are limited to 3 hours per occurrence, except as provided in 40 CFR 60.58b(a)(1)(iii). During periods of startup, shutdown, or malfunction, monitoring data shall be dismissed or excluded from compliance calculations, but shall be recorded and reported in accordance with the provisions of 40 CFR 60.59b(d)(7).
- i. The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected facility is combusting fossil fuel or other non-municipal solid waste fuel, and no municipal solid waste is being fed to the combustor.
- ii. Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning.

[40 CFR 60.58b(a)]

- c. *Special Provisions for CO:* For the purpose of compliance with the carbon monoxide emission limits in 40 CFR 60.53b(a), if a loss of boiler water level control (e.g., loss of combustion air fan, induced draft fan, combustion grate bar failure) is determined to be a malfunction, the duration of the malfunction period is limited to 15 hours per occurrence.
[40 CFR 60.58b(a)(1)(iii)]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

CONTINUOUS MONITORING REQUIREMENTS

dd. CEM Systems: The permittee shall install, calibrate, maintain, and operate continuous emission monitoring systems (CEMS) to measure and record the emissions of CO, NO_x, Hg and SO₂ from

Unit 4 in a manner sufficient to demonstrate continuous compliance with the CEMS emission standards of this subsection. All continuous monitoring systems other than the Hg CEMS shall be installed and functioning within the required performance specifications by the time of the initial performance tests. The Hg CEMS shall be installed and functioning within the required performance specifications by the end of the second year of operation as specified in **Specific Condition 35**.

- a. *CO Monitor:* The CO monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 4 or 4A and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 10 in Appendix A of 40 CFR 60 and shall be based on a continuous sampling train. The CO monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
- b. *NO_x Monitor:* The NO_x monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F, and the Data Assessment Report of Section 7 shall be made each calendar quarter, and reported semiannually to the Compliance Authority. The required RATA tests shall be performed using EPA Method 7E in Appendix A of 40 CFR 60. The NO_x monitor span values shall be set appropriately, considering the allowable methods of operation and corresponding emission standards.
- a. *SO₂ Monitor.* The SO₂ monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 2 and shall comply with all requirements of 40 CFR 60.58b. Quality assurance procedures shall conform to the requirements of 40 CFR 60, Appendix F. The required RATA tests shall be performed using EPA Method 6C in Appendix A of 40 CFR 60. The SO₂ monitor span values shall be set appropriately, considering the expected range of emissions and corresponding emission standards.
- b. *Diluent Monitor.* A continuous emission monitoring system for measuring the oxygen content of the flue gas at each location where carbon monoxide, sulfur dioxide, nitrogen oxides emissions are monitored shall be installed, calibrated, maintained, and operated in accordance with the requirements of 40 CFR 60.58b.
- c. *Mercury Monitor.* A mercury monitor (Hg CEMS) shall be installed and operated as described in **Specific Condition 35** below.

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

- ee.** COMS: A continuous opacity monitoring system (COMS) shall be installed, calibrated, operated, and maintained in exhaust stack in a manner sufficient to demonstrate continuous compliance with the opacity standard specified in this section. Opacity shall be based on a 6-minute block average computed from at least one observation (measurement) every 15 seconds. For the COMS, the 6-minute block averages shall begin at the top of each hour. The COMS shall meet the applicable requirements of 40 CFR 60.58b(c)(8).
- ff.** CEMS/COMS Certification and Initial Startup: Each CEMS/COMS, other than the Hg CEMS, required by this permit shall be installed prior to startup. Within 60 calendar days of achieving the maximum production rate, but no later than 180 calendar days after initial startup, the owner or operator shall certify each CEMS/COMS. Upon certification of each CEMS/COMS, the owner or operator shall demonstrate compliance with all applicable standards as specified in this permit. The Hg CEMS shall be installed and functioning within the required performance specifications within the first two years of operation as specified in **Specific Condition 35**. [Rules 62-4.070(3), 62-210.800, 62-210.200(BACT) and 62-297.520, F.A.C.; 40 CFR 60.7(a), 60.13(b), and 60.58b, and Appendix B]
- gg.** CEMS Data Requirements: The CEMS shall express the results in the units of the applicable standard and in accordance with 40 CFR 60 subparts A, and Eb.
- a. *Data Exclusion:* Except for monitoring system breakdowns, repairs, calibration checks, and zero and span adjustments, each CEMS shall monitor and record emissions during all operations including episodes of startups, shutdowns, and malfunctions. Limited amounts of CEMS emissions data (other than mercury data) recorded during some of these episodes may be excluded from the corresponding compliance demonstration subject to the provisions of **Specific Conditions 28 and 29** in this subsection. The permittee shall minimize the duration of data excluded for such episodes to the extent practicable.
- b. *Availability.* Monitor availability for each CEMS used to demonstrate compliance shall be 95% or greater in any calendar quarter. Monitor availability shall be reported in the quarterly excess emissions report. In the event 95% availability is not achieved, the permittee shall provide the Department with a report identifying the problems in achieving 95% availability and a plan of corrective actions that will be taken to achieve 95% availability. The permittee shall implement the reported corrective actions within the next calendar quarter. Failure to take corrective actions or continued failure to achieve the minimum monitor availability shall be violations of this permit, except as otherwise authorized by the Compliance Authority. The monitor availability requirements of this condition do not apply to the Hg CEMS for the first two years of operation of the CEM system. (This is consistent with the Hg CEMS availability requirement of subpart Eb.)
- hh.** Continuous Flow Monitor: A continuous flow monitor shall be installed to determine the stack exhaust flow rate to be used in determining mass emission rates. The flow monitor shall be certified pursuant to 40 CFR 60, Appendix B, Performance Specification 6. [Rules 62-210.200(BACT), 62-204.800(8), and 62-4.070(1) and (3), F.A.C.]

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B. Municipal Waste Combustor & Auxiliary Burners - Unit 4

- ii. Mercury Continuous Emissions Monitoring System (Hg-CEMS): Within 24 months of commencing operation, the owner or operator shall install and certify a mercury CEMS demonstrated to meet the requirements in Performance Specification 12A (PS-12A), "Specifications and Test Procedures for Total Vapor phase Mercury Continuous Monitoring Systems in Stationary Sources," or that has passed verification tests conducted under the auspices of the U.S. Environmental Protection Agency's (EPA) Environmental Technology Verification (ETV) Program. If the vendor provides to the Department verification of certification difficulties such that the CEMS cannot be certified by the certification deadline, and every reasonable effort has been made to do so, the Department shall grant a reasonable extension of time to certify the CEMS. After certification the owner or operator will begin reporting Hg mass emissions data. The owner or operator shall adhere to the calibration drift and quarterly performance evaluation procedures and ongoing data quality assurance procedures in 40 CFR Part 60, Appendix F or 40 CFR Part 75, Appendix B. The mass emissions shall be estimated based on the actual data collected no later than 10 days following the end of the month. The mercury monitoring data results shall be submitted quarterly. The CEMS shall only be used as the method of compliance if the owner or operator, at a minimum, meets the requirements of 40 CFR 60.58b(n). Prior to use of the Hg-CEMS as the method to demonstrate compliance, the owner or operator shall submit written notice to the Department, and receive approval for missing data substitution and a data calculation approach plans.
- [Rules 62-4.070(1) and (3), and 62-210.200(BACT), F.A.C., 40 CFR 60.58b, and, Hillsborough County Environmental Protection Commission Local Ordinance 1-3.53.1(f), *Municipal Solid Waste Incinerators* (for Hg monitoring)]

REPORTING AND RECORD KEEPING REQUIREMENTS

- ii. Segregated Solid Waste Record Keeping: The following records shall be made and kept to demonstrate compliance with the segregated non-MSW percentage limitations of **Specific Condition 10** of this subsection:
- a. Each segregated load of non-MSW materials, subject to the percentage weight limitations of **Specific Condition 10**, which is received for processing, shall be documented as to waste description and weight. The weight of all waste materials received for processing shall be measured using the facility truck scale and recorded.
 - b. Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.
 - c. Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-MSW materials subject to the 5% restriction

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shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 5% limitation.

[Rules 62-4.070(1) and (3), and 62-210.200(BACT), F.A.C.]

kk. Stack Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Compliance Authority on the results of each such test. The required test report shall be filed with the Compliance Authority as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Compliance Authority to determine if the test was properly conducted and the test results properly computed. As a minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the specified in Rule 62-297.310(8), F.A.C. [Rule 62-297.310(8), F.A.C.]

ll. Malfunction Notifications: If temporarily unable to comply with any condition of the permit due to breakdown of equipment (malfunction) or destruction by hazard of fire, wind or by other cause, the permittee shall immediately (within one working day) notify the Compliance Authority. Notification shall include pertinent information as to the cause of the problem, and what steps are being taken to correct the problem and to prevent its recurrence, and where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with Department rules. If requested by the Compliance Authority, the owner or operator shall submit a quarterly written report describing the malfunction. [Rules 62-210.700(6) and 62-4.130, F.A.C.]

mm. SIP Quarterly Report: Within 30 days following the end of each calendar quarter, the permittee shall submit a report to the Compliance Authority summarizing: equipment malfunctions resulting in excluded CEMS data and/or excess emissions; and the monitor availability of each CEMS. The report shall contain the information and follow the general format specified in 40 CFR 60.7(c), subpart A. [Rules 62-4.070(3), 62-4.130, and 62-210.200(BACT), F.A.C.]

nn. Annual Operating Report: The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370, F.A.C]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

C. Lime and Carbon Storage Silos

This section addresses the following emissions units.

E.U. ID No.	Brief Description
108	Pebble Lime Storage Silo - Unit 4
109	Dolomitic Lime Storage Silo - Unit 4
110	Activated Carbon Storage Silo - Unit 4

EQUIPMENT AND CONTROL TECHNOLOGY

- (1) **Equipment Description:** The permittee is authorized to construct one pebble lime storage silo, one dolomitic lime storage silo, and one activated carbon storage silo. Each silo will have a volume of approximately 2,900 cubic feet and will be equipped with its own fabric filter baghouse.
- (2) **Baghouse Controls:** Each emissions unit identified for lime and carbon storage shall be controlled by a baghouse system. Each required baghouse shall be designed, operated, and maintained to achieve a PM design specification of 0.015 gr/dscf.

PERFORMANCE REQUIREMENTS

- (3) **Hours of Operation.** These emission units may operate continuously (8,760 hours/year). [Rules 62-4.160(2), and 62-210.228(PTE), F.A.C.]
- (4) **Emissions Limits:** The following standards apply to each emissions point of this unit:
 - (a) Visible emissions are limited to 5% opacity from each of the above listed emissions points controlled by a baghouse.
 - (b) Fugitive emissions are limited to 10% opacity from any emissions point not controlled by a baghouse.[Rule 62-070(3), F.A.C.]

{Note: The baghouses are designed to control PM emissions to 0.015 grains/dry standard cubic foot (gr/dscf). The 5% opacity limitation is consistent with this design and provides reasonable assurance that annual emissions of PM/PM₁₀ for all emission points in this emission unit system will be less than 0.5 TPY.}

[Rules 62-4.070(3), F.A.C.]
- (5) **Compliance Demonstrations:** Each emission point shall be tested to demonstrate initial compliance with the emission standards for visible emissions in accordance with EPA Method 9. The tests shall be conducted within 60 days after achieving the maximum production rate at which the unit will be operated, but not later than 180 days after the initial startup. Thereafter, compliance with the visible emission limits for each emission point shall be demonstrated during each federal fiscal year (October 1st to September 30th). [Rules 62-4.070(3), and 62-297.310(7)(a), F.A.C]
- (6) **Test Methods:** Any required tests shall be performed in accordance with the following reference methods and the applicable requirements of Appendix C of this permit, and the applicable NESHAP provisions.

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C. Lime and Carbon Storage Silos

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources

REPORTING AND RECORD KEEPING

- (7) **Baghouse O&M Plan:** For each baghouse the permittee shall prepare an operation and maintenance (O&M) plan to address proper operation, parametric monitoring, and a schedule for conducting periodic inspections and preventive maintenance. Baghouse inspections and maintenance activities shall be recorded in a written log. The O&M plan shall be submitted to the Compliance Authority prior to the initial compliance tests for this unit. [Rule 62-4.070(3), F.A.C.]
- (8) **Test Reports:** For each test conducted, the permittee shall file a test report including the information specified in Rule 62-297.310(8), F.A.C. with the compliance authority no later than 45 days after the last run of each test is completed. [Rules 62-297.310(8), F.A.C.]

SECTION III. EMISSIONS UNIT SPECIFIC CONDITIONS (DRAFT)

D. Cooling Tower

This section of the permit addresses the following new emissions unit.

ID	Emission Unit Description
111	One Cooling Tower Cell

EQUIPMENT

1. Cooling Tower: The permittee is authorized to construct one cooling tower cell with the following nominal design characteristics: a circulating water flow rate of 11,000 gpm; drift eliminators; a drift rate of no more than 0.001 percent of the circulating water flow. [Application; Design]

EMISSIONS AND PERFORMANCE REQUIREMENTS

2. Drift Rate: Within 60 days of commencing commercial operation, the permittee shall certify that the cooling tower was constructed to achieve the specified drift rate of no more than 0.001 percent of the circulating water flow rate. [Rule 62-210.200(BACT), F.A.C.]

{Permitting Note: This work practice standard is established as BACT avoidance for PM/PM₁₀ emissions from the cooling tower. Based on this design criteria, potential emissions are expected to be less than 0.5 tons of PM per year and less than 0.25 tons of PM₁₀ per year. Actual emissions are expected to be lower than these rates.}

SECTION IV. APPENDICES

APPENDIX A - NSPS SUBPART A, IDENTIFICATION OF GENERAL PROVISIONS

Emissions units subject to a New Source Performance Standard of 40 CFR 60 are also subject to the applicable requirements of Subpart A, the General Provisions, including:

- § 60.1 Applicability.
- § 60.2 Definitions.
- § 60.3 Units and abbreviations.
- § 60.4 Address.
- § 60.5 Determination of construction or modification.
- § 60.6 Review of plans.
- § 60.7 Notification and Record Keeping.
- § 60.8 Performance Tests.
- § 60.9 Availability of information.
- § 60.10 State Authority.
- § 60.11 Compliance with Standards and Maintenance Requirements.
- § 60.12 Circumvention.
- § 60.13 Monitoring Requirements.
- § 60.14 Modification.
- § 60.15 Reconstruction.
- § 60.16 Priority List.
- § 60.17 Incorporations by Reference.
- § 60.18 General Control Device Requirements.
- § 60.19 General Notification and Reporting Requirements.

Individual subparts may exempt specific equipment or processes from some or all of these requirements. The general provisions may be provided in full upon request.

SECTION IV. APPENDICES
APPENDIX BD – BACT DETERMINATION

Refer to the draft BACT proposal discussed in the initial Technical Evaluation for this project and to the Final Determination issued with the Final permit for the rationale regarding the following BACT determination.

Pollutant	Emission Standard/Limit ⁴	Lb/hour	Basis
Nitrogen Oxides (NO _x)	110 ppmvd - 24 hour block average and	58.5	BACT
	90 ppmvd - 12 month rolling average	47.9	BACT
Carbon Monoxide (CO)	80 ppmvd – 30-day rolling avg.	25.9	BACT
	100 ppmvd - 4 hr block average	32.4	BACT/Eb
Sulfur Dioxide (SO ₂)	26 ppmvd - 24 hour block average or 80% reduction ⁵	19.2	BACT/Eb
Hydrogen Chloride (HCl) ⁶	25 ppmvd or 95% reduction ²	25.4	BACT/Eb
Dioxins/Furans ⁷	13.0 ng/dscm	3.61 x 10 ⁻⁶	BACT/Eb

4 All concentration values are corrected to 7% O₂.

µg/dscm: Micrograms per dry standard cubic meter

mg/dscm: Milligrams per dry standard cubic meter

ng/dscm: Nanograms per dry standard cubic meter

ppm: Part per million dry volume

NA: not applicable

5 Whichever standard is less stringent.

6 HCl is not a BACT pollutant. However, it must be limited together with SO₂ because they both comprise MWC-Acid Gases which has its own PSD threshold.

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

a. Nitrogen Oxides (NO_x): Emissions of NO_x in the stack exhaust gas as measured by the required CEMS shall exceed neither 110 ppmvd nor 58.5 lb/hr on a 24-hr daily arithmetic average and shall exceed neither 90 ppmvd nor 47.9 lb/hr on a 12-month rolling average, rolled monthly.

b. Carbon Monoxide (CO): Emissions of CO in the stack exhaust gas as measured by the required CEMS shall exceed neither 100 ppmvd on a 4-hr block average nor 32.4 lb/hr and shall exceed neither 80 ppmvd nor 25.9 lb/hr on a 30-operating day rolling average.

c. Sulfur Dioxide (SO₂): Emissions of SO₂ as measured by the required CEMS shall exceed neither 26 ppmvd nor 19.2 lb/hr on a 24-hr daily geometric mean, or an emissions reduction of 80 percent shall be achieved.

d. Hydrogen Chloride (HCl): Emissions of HCl shall exceed neither 25 ppmvd nor 25.4 lb/hr or, an emissions reduction 95 percent shall be achieved as demonstrated during the required stack test.

e. Dioxins/Furans: Emissions of dioxins/furans shall exceed neither 13.0 ng/dscm nor 3.61 x 10⁻⁶ lb/hr.

{Permitting note: Compliance with this condition will also demonstrate that emissions are less than the 15 TPY PSD thresholds for PM₁₀ and MWC-Metals}

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Opacity	10 % - 6 minute average	NA	BACT/Eb
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- f. **Opacity:** Visible emissions shall not exceed 10 percent opacity on a 6-minute average as measured by the required continuous opacity monitoring system (COMS) and measured by an annual visible emissions test (VE).

[40 CFR 60.44b, Rules 62-210.200, 62-210.200(BACT), 62-204.800(8), 62-4.070, F.A.C.]

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APPENDIX BD – BACT DETERMINATION

DETAILS OF THE ANALYSIS MAY BE OBTAINED BY CONTACTING:

A. A. Linero, P.E., Program Administrator _____
South Permitting Section
Department of Environmental Protection
Bureau of Air Regulation
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Recommended By:

Approved By:

Trina L. Vielhauer, Chief
Bureau of Air Regulation

Joseph H. Kahn, Director
Division of Air Resources Management

Date

Date

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APPENDIX EB - Standards of Performance For Large Municipal Waste Combustors.

Applicability of 40CFR60, Subpart Eb- Standards of Performance for Large Municipal Waste Combustors for Which Construction is Commenced After September 20, 1994 or for Which Modification or Reconstruction is Commenced After June 19, 1996.

The proposed Hillsborough County Resource Recovery Facility Unit 4 is a new Large Municipal Waste Combustor (Large MWC) because it is a waste combustion unit that is capable of combusting more than 250 tons per day (TPD) of municipal solid waste (MSW).

The rules applicable to Large MWC's are given at 40CFR60, Sections 60.50b through 60.59b. More specifically, Unit 4 is a Mass Burn Waterwall Furnace. The emission limits applicable to this category of MWC are specified by type of combustor in the relevant sections, paragraphs and tables that address individual pollutants including CO, NO_x, SO₂, HCl, PM, dioxin/furan, opacity, Cd, Hg, Pb, and various emission monitoring and operational parameters.

Subpart 40CFR60, Subpart Eb was revised on May 10, 2006 just a few days prior to preparation of the draft permit for Unit 4. The Department is revising the Subpart description normally included in this appendix to reconcile the new requirements with the previous ones. An updated and complete Appendix Eb highlighting the requirements applicable to Unit 4 will be included in the final permitting action if and when issued.

The Department has insured that Permit is at least as stringent as the requirements of the revised Subpart Eb. Particular attention has been given to the revised PM, Pb, Cd and Hg including the use of Hg-CEMS.

The previous version of 40CFR60, Subpart Eb with links to the May 10, 2006 changes is available at:

<http://ecfr.gpoaccess.gov/cgi/t/text/text-idx?c=ecfr&sid=e62a6113b2c8fd1679806489b479eab4&rgn=div6&view=text&node=40:6.0.1.1.1.15&idno=40>

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Appendix - Construction Permit General Conditions

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

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

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

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

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

9. In accepting this permit, the permittee understands and agrees that all records, notes, monitoring data and other information relating to the construction or operation of this permitted source which are submitted to the Department may be used by the Department as evidence in any enforcement case involving the permitted source arising under the Florida Statutes or Department rules, except where such use is prescribed by Sections 403.73 and 403.111, Florida Statutes. Such evidence shall only be used to the extent it is consistent with the Florida Rules of Civil Procedure and appropriate evidentiary rules.
10. The permittee agrees to comply with changes in Department rules and Florida Statutes after a reasonable time for compliance, provided, however, the permittee does not waive any other rights granted by Florida Statutes or Department rules.
11. This permit is transferable only upon Department approval in accordance with Florida Administrative Code Rules 62-4.120 and 62-730.300, F.A.C., as applicable. The permittee shall be liable for any non-compliance of the permitted activity until the transfer is approved by the Department.
12. This permit or a copy thereof shall be kept at the work site of the permitted activity.
13. This permit also constitutes:
 - a. Determination of Best Available Control Technology (X);
 - b. Determination of Prevention of Significant Deterioration (X);
 - c. Compliance with National Emission Standards for Hazardous Air Pollutants (); and
 - d. Compliance with New Source Performance Standards (X).
14. The permittee shall comply with the following:
 - a. Upon request, the permittee shall furnish all records and plans required under Department rules. During enforcement actions, the retention period for all records will be extended automatically unless otherwise stipulated by the Department.
 - b. The permittee shall hold at the facility or other location designated by this permit records of all monitoring information (including all calibration and maintenance records and all original strip

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chart recordings for continuous monitoring instrumentation) required by the permit, copies of all reports required by this permit, and records of all data used to complete the application or this permit. These materials shall be retained at least three years from the date of the sample, measurement, report, or application unless otherwise specified by Department rule.

c. Records of monitoring information shall include:

- 1) The date, exact place, and time of sampling or measurements;
- 2) The person responsible for performing the sampling or measurements;
- 3) The dates analyses were performed;
- 4) The person responsible for performing the analyses;
- 5) The analytical techniques or methods used; and
- 6) The results of such analyses.

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

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

EMISSIONS AND CONTROLS

1. **Plant Operation - Problems:** If temporarily unable to comply with any of the conditions of the permit due to breakdown of equipment or destruction by fire, wind or other cause, the permittee shall notify each Compliance Authority as soon as possible, but at least within one working day, excluding weekends and holidays. The notification shall include: pertinent information as to the cause of the problem; steps being taken to correct the problem and prevent future recurrence; and, where applicable, the owner's intent toward reconstruction of destroyed facilities. Such notification does not release the permittee from any liability for failure to comply with the conditions of this permit or the regulations. [Rule 62-4.130, F.A.C.]
2. **Circumvention:** The permittee shall not circumvent the air pollution control equipment or allow the emission of air pollutants without this equipment operating properly. [Rule 62-210.650, F.A.C.]
3. **Excess Emissions Allowed:** Excess emissions resulting from startup, shutdown or malfunction of any emissions unit shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700(1), F.A.C.]
4. **Excess Emissions Prohibited:** Excess emissions caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure that may reasonably be prevented during startup, shutdown or malfunction shall be prohibited. [Rule 62-210.700(4), F.A.C.]
5. **Excess Emissions - Notification:** In case of excess emissions resulting from malfunctions, the licensee shall notify the Department or the appropriate Local Program in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700(6), F.A.C.]
6. **VOC or OS Emissions:** No person shall store, pump, handle, process, load, unload or use in any process or installation, volatile organic compounds or organic solvents without applying known and existing vapor emission control devices or systems deemed necessary and ordered by the Department. [Rule 62-296.320(1), F.A.C.]
7. **Objectionable Odor Prohibited:** No person shall cause, suffer, allow or permit the discharge of air pollutants, which cause or contribute to an objectionable odor. An "objectionable odor" means any odor present in the outdoor atmosphere which by itself or in combination with other odors, is or may be harmful or injurious to human health or welfare, which unreasonably interferes with the comfortable use and enjoyment of life or property, or which creates a nuisance. [Rules 62-296.320(2) and 62-210.200(203), F.A.C.]

8. General Visible Emissions: No person shall cause, let, permit, suffer or allow to be discharged into the atmosphere the emissions of air pollutants from any activity equal to or greater than 20 percent opacity. [Rule 62-296.320(4)(b)1, F.A.C.]
9. Unconfined Particulate Emissions: During the construction period, unconfined particulate matter emissions shall be minimized by dust suppressing techniques such as covering and/or application of water or chemicals to the affected areas, as necessary. [Rule 62-296.320(4)(c), F.A.C.]

TESTING REQUIREMENTS

10. Required Number of Test Runs: For mass emission limitations, a compliance test shall consist of three complete and separate determinations of the total air pollutant emission rate through the test section of the stack or duct and three complete and separate determinations of any applicable process variables corresponding to the three distinct time periods during which the stack emission rate was measured; provided, however, that three complete and separate determinations shall not be required if the process variables are not subject to variation during a compliance test, or if three determinations are not necessary in order to calculate the unit's emission rate. The three required test runs shall be completed within one consecutive five-day period. In the event that a sample is lost or one of the three runs must be discontinued because of circumstances beyond the control of the owner or operator, and a valid third run cannot be obtained within the five-day period allowed for the test, the Secretary or his or her designee may accept the results of two complete runs as proof of compliance, provided that the arithmetic mean of the two complete runs is at least 20% below the allowable emission limiting standard. [Rule 62-297.310(1), F.A.C.]
11. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. If it is impractical to test at permitted capacity, an emissions unit may be tested at less than the maximum permitted capacity; in this case, subsequent emissions unit operation is limited to 110 percent of the test rate until a new test is conducted. Once the unit is so limited, operation at higher capacities is allowed for no more than 15 consecutive days for the purpose of additional compliance testing to regain the authority to operate at the permitted capacity. [Rule 62-297.310(2), F.A.C.]
12. Calculation of Emission Rate: For each emissions performance test, the indicated emission rate or concentration shall be the arithmetic average of the emission rate or concentration determined by each of the three separate test runs unless otherwise specified in a particular test method or applicable rule. [Rule 62-297.310(3), F.A.C.]
13. Test Procedures: Tests shall be conducted in accordance with all applicable requirements of Chapter 62-297, F.A.C.
 - a. Required Sampling Time. Unless otherwise specified in the applicable rule, the required sampling time for each test run shall be no less than one hour and no greater than four hours, and the sampling time at each sampling point shall be of equal intervals of at least

two minutes. The minimum observation period for a visible emissions compliance test shall be thirty (30) minutes. The observation period shall include the period during which the highest opacity can reasonably be expected to occur.

- b. Minimum Sample Volume. Unless otherwise specified in the applicable rule or test method, the minimum sample volume per run shall be 25 dry standard cubic feet.
- c. Calibration of Sampling Equipment. Calibration of the sampling train equipment shall be conducted in accordance with the schedule shown in Table 297.310-1, F.A.C.

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

14. Determination of Process Variables

- a. Required Equipment. The owner or operator of an emissions unit for which compliance tests are required shall install, operate, and maintain equipment or instruments necessary to determine process variables, such as process weight input or heat input, when such data are needed in conjunction with emissions data to determine the compliance of the emissions unit with applicable emission limiting standards.
- b. Accuracy of Equipment. Equipment or instruments used to directly or indirectly determine process variables, including devices such as belt scales, weight hoppers, flow meters, and tank scales, shall be calibrated and adjusted to indicate the true value of the parameter being measured with sufficient accuracy to allow the applicable process variable to be determined within 10% of its true value.

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

15. Sampling Facilities: The permittee shall install permanent stack sampling ports and provide sampling facilities that meet the requirements of Rule 62-297.310(6), F.A.C.

16. Test Notification: The owner or operator shall notify the Department, at least 15 days prior to the date on which each formal compliance test is to begin, of the date, time, and place of each such test, and the test contact person who will be responsible for coordinating and having such test conducted for the owner or operator. [Rule 62-297.310(7)(a)9, F.A.C.]

17. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it shall require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emissions unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

18. Test Reports: The owner or operator of an emissions unit for which a compliance test is required shall file a report with the Department on the results of each such test. The required test report shall be filed with the Department as soon as practical but no later than 45 days after the last sampling run of each test is completed. The test report shall provide sufficient detail on the emissions unit tested and the test procedures used to allow the Department to determine if the test was properly conducted and the test results properly computed. As a

minimum, the test report, other than for an EPA or DEP Method 9 test, shall provide the following information:

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

- 20) The applicable emission standard, and the resulting maximum allowable emission rate for the emissions unit, plus the test result in the same form and unit of measure.
- 21) A certification that, to the knowledge of the owner or his authorized agent, all data submitted are true and correct. When a compliance test is conducted for the Department or its agent, the person who conducts the test shall provide the certification with respect to the test procedures used. The owner or his authorized agent shall certify that all data required and provided to the person conducting the test are true and correct to his knowledge.

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

RECORDS AND REPORTS

19. **Records Retention:** All measurements, records, and other data required by this permit shall be documented in a permanent, legible format and retained for at least five (5) years following the date on which such measurements, records, or data are recorded. Records shall be made available to the Department upon request. [Rules 62-4.160(14) and 62-213.440(1)(b)2, F.A.C.]
20. **Annual Operating Report:** The permittee shall submit an annual report that summarizes the actual operating rates and emissions from this facility. Annual operating reports shall be submitted to the Compliance Authority by March 1st of each year. [Rule 62-210.370(2), F.A.C.]

