**FLORIDA DEPARTMENT OF ENVIRONMENTAL PROTECTION**
BOB MARTINEZ CENTER
2600 BLAIR STONE ROAD
TALLAHASSEE, FLORIDA 32399-2400

RICK SCOTT
GOVERNOR

HERSCHEL T. VINYARD JR.
SECRETARY

**PERMITTEE**

Wheelabrator South Broward, Inc.
South Broward Waste-to-Energy Facility

Authorized Representative:
Mr. Scott McIlvaine, Plant Manager

Permit No. 0112119-017-AC/PSD-FL-105E
Permit Expires: December 31, 2018
Air Construction Permit

Project: Combustion of Higher Rates of Non-MSW Materials; Waste (Fuel Slate) Revisions & Miscellaneous Revision
Broward County, Florida

**PROJECT**

This is the final air construction permit, which authorizes combustion of higher rates of non-MSW (municipal solid waste) materials ("non-hazardous solid and liquid wastes"), waste (fuel slate) revisions and a miscellaneous revision at the existing municipal waste combustor facility (Project). The miscellaneous revision is for removal of the beryllium emission limit. This facility is an existing municipal waste combustor facility categorized under Standard Industrial Classification No. 4953. The existing South Broward Waste-to-Energy Facility is located in Broward County at 4400 South State Road 7, Fort Lauderdale, Florida. The (UTM) Coordinates are: Zone 17, 579.54 kilometers (km) East and 2883.34 km North. Latitude is: 26° 04' 07" North; and, Longitude is: 80° 12' 19" West.

This final permit is organized into the following sections: Section I (General Information), Section II (Requirements) and Section III (Emission(s) Unit(s) Specific Conditions); and, Section IV (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section IV of this permit. As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit]

**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.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

Upon issuance of this final permit, any party to this order has the right to seek judicial review of it under Section 120.68 of the Florida Statutes by filing a notice of appeal under Rule 9.110 of the Florida Rules of Appellate Procedure with the clerk of the Department of Environmental Protection in the Office of General Counsel (Mail Station #35, 3900 Commonwealth Boulevard, Tallahassee, Florida, 32399-3000) and by filing a copy of the notice of appeal accompanied by the applicable filing fees with the appropriate District Court of Appeal. The notice must be filed within 30 days after this order is filed with the clerk of the Department.

Executed in Tallahassee, Florida
For the Division of Air Resource Management

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*for* Jeffery F. Koerner, Program Administrator
Office of Permitting and Compliance
Division of Air Resource Management

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## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this Final Air Permit package (including the Final Determination and Final Permit) was sent by electronic mail, or a link to these documents made available electronically on a publicly accessible server, with received receipt requested before the close of business on the date indicated below to the persons listed below.

Mr. Scott McIlvaine, South Broward: smcilvai@wm.com
Ms. Nicole Turnbull, South Broward: nturnbul@wm.com
Mr. Chuck Faller, North Broward: cfaller@wm.com
Mr. Kennard F. Kosky, P.E., Golder Associates: kkosky@golder.com
Mr. Loranzo Fernandez, Broward County: lfernandez@gbroward.org
Ms. Heather Ceron, U.S. EPA Region 4: ceron.heather@epa.gov
Ms. Katy R. Forney, U.S. EPA Region 4: forney.kathleen@epa.gov
Ms. Barbara Friday, DEP OPC: barbara.friday@dep.state.fl.us
Ms. Lynn Scearce, DEP OPC: lynn.scearce@dep.state.fl.us

Clerk Stamp

**FILING AND ACKNOWLEDGMENT FILED**, on this date, pursuant to Section 120.52(7), Florida Statutes, with the designated agency clerk, receipt of which is hereby acknowledged.

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## FACILITY DESCRIPTION

This existing facility consists of three municipal solid waste combustors (E.U. ID Nos. 001, 002 and 003) with auxiliary burners, lime storage and processing facilities, ash storage and processing facilities, a cooling tower and ancillary support equipment. The nominal (i.e., generator nameplate) electric generating capacity of the facility is 202.8 megawatts (MW), which is sold to the local utility company. Each of the combustor units at the facility includes an acid gas, air toxics, and particulate matter emissions control system consisting of a lime spray dryer and baghouse. Nitrogen oxide emissions are controlled by a urea injection system that operates under the principle of selective non-catalytic reduction (SNCR). There is a metals recovery system which is a potential source of fugitive emissions.

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

This project will affect the following *existing* permitted emissions units:

| E.U. ID No. | Brief Description |
|---|---|
| 001 | 863 tons per day (TPD) (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 001 |
| 002 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 002 |
| 003 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 003 |

## FACILITY REGULATORY CLASSIFICATION

- This facility is a major source of hazardous air pollutants (HAP).
- This facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400 (PSD), F.A.C.

## PROPOSED PROJECT

This project is for a minor source air construction permit. The minor source air construction permit is for combustion of higher rates of non-MSW materials ("non-hazardous solid and liquid wastes"), waste (fuel slate) revisions and a miscellaneous revision at the existing municipal waste combustor facility. The higher rate increases the total quantity of non-MSW materials received as segregated loads from 5% to 20%. The miscellaneous revision is for removal of the beryllium emission limit.

Specifically, this permit authorizes the following subprojects comprising the "project:"

- Combustion of higher rates of non-MSW materials ("non-hazardous solid and liquid wastes"), e.g., increase the total quantity of non-MSW materials received as segregated loads from 5% to 20%;
- Waste (fuel slate) revisions; and,
- A miscellaneous revision - removal of the (Be) emission limit.

This air construction permit was issued for the project to avoid the PSD BACT requirements of Rule 62-212.400(4) through (12), F.A.C., based in whole or in part on projected actual emissions. The projected actual emissions are shown in the table below. The baseline actual emissions and the projected actual emissions for the *existing* MWC Unit Nos. 1, 2 and 3 were provided by the applicant.

**Baseline Actual Emissions vs. Projected Actual Emissions Used under this Project**

| PSD-(Air) Pollutant | Baseline Actual Emissions, TPY (tons/year) | Projected Actual Emissions, TPY | Increase (+)/Decrease (-) in Emissions, TPY | PSD SER, TPY | PSD SER exceeded? |
|---|---|---|---|---|---|
| PM | 6.05 | 6.5 | +0.455 | 25 | No |
| $PM_{10}$ | 6.05 | 6.5 | +0.455 | 15 | No |



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| PSD-(Air) Pollutant | Baseline Actual Emissions, TPY (tons/year) | Projected Actual Emissions, TPY | Increase (+)/Decrease (-) in Emissions, TPY | PSD SER, TPY | PSD SER exceeded? |
|---|---|---|---|---|---|
| $PM_{2.5}$ | 6.05 | 6.5 | +0.455 | 10 | No |
| Pb | 0.03 | 0.04 | +0.016 | 0.60 | No |
| Hg | 0.04 | 0.04 | +0.006 | 0.10 | No |
| F | 0.34 | 0.35 | +0.010 | 3 | No |
| NOx | 1,370.24 | 1,386.11 | +16 | 40 | No |
| CO | 93.39 | 97.44 | +4 | 100 | No |
| VOC | 11.52 | 11.81 | +0.29 | 40 | No |
| $SO_2$ | 161.16 | 181.48 | +20 | 40 | No |
| SAM | 24.68 | 27.79 | +3.111 | 7 | No |
| MWC acid gases [$SO_2$ + HCl] | 237.61 | 261.88 | +24.272 | 40 | No |
| MWC organics [dioxins/furans] | 1.50E-05 | 1.80E-05 | +3.00E-06 | $3.5 \times 10^{-6}$ | No |
| Total GHGs ($CO_2e$) | 745,119.8 | 749,577.3 | +4,457.5 | 75,000 | No |

**PROCESSING SCHEDULE AND RELATED DOCUMENTS**

Application for Air Construction Permit received on August 13, 2013.

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## GENERAL REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance, Division of Air Resource Management, Florida Department of Environmental Protection (Department). The mailing address for the Office of Permitting and Compliance is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities, such as reports, tests, and notifications, shall be submitted to the Air Resource Section of the Department's Southeast District Office (Compliance Authority) at 400 North Congress Avenue, Suite 200, West Palm Beach, Florida 33401; Telephone: (561) 681-6600, Fax: (561) 681-6755.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of: Chapter
403, F.S.; and, Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 & 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. Construction and Expiration: The Department may extend the expiration date upon a satisfactory showing that an extension is justified. For good cause, the permittee may request that this air construction permit be extended. Such a request shall be submitted to the Department's Office of Permitting and Compliance at least sixty (60) 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.]

6. 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.]

7. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be 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) & 62-212.300(1)(a), F.A.C.]

8. 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 constructions 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

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(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.]

**5-YEAR EMISSIONS MONITORING**

9. 5-Year Emissions Monitoring - PSD Avoidance Requirements:

a. Monitoring. The permittee shall monitor the emissions of any PSD pollutant that the Department identifies could increase as a result of the construction or modification and that is emitted by any emissions unit that could be affected; and, using the most reliable information available, calculate and maintain a record of the annual emissions, in tons per year on a calendar year basis, for a period of 5 years following resumption of regular operations after the change. The change (proposed project under Permit No. 0112120-015-AC/PSD-FL-112D) shall not increase the design capacity of any emissions unit or its potential to emit that PSD pollutant. Emissions shall be computed in accordance with Rule 62-210.370, F.A.C.

- The Department identified the following PSD pollutants that could increase from this project: **$SO_2$**, **$NO_X$**, **CO**, **PM**, **Hg**, **Pb**, **HCl** and **dioxin/furan**.
- The permittee shall use the same calculation methodology for emissions before and after the completed project under Permit No. 0112120-015-AC/PSD-FL-112D. In summary, the CEMS shall be used for emissions of **$SO_2$**, **$NO_X$** and **CO** and stack testing shall be used for emissions of **PM**, **Hg**, **Pb**, **HCl** and **dioxin/furan**.

[Rule 62-212.300(1)(e)1., F.A.C.; and, Applicant Request.]

b. Reporting. The permittee shall report to the Department by March 1st based on the records required to be generated under subparagraph 62-212.300(1)(e)1., F.A.C., setting out the unit's annual emissions during the calendar year that preceded submission of the report. The report shall contain the following:

(1) The name, address and telephone number of the owner or operator of the major stationary source;

(2) The specific dates for commencement of the project and completion of the project;

(3) The annual emissions as calculated pursuant to subparagraph 62-212.300(1)(e)1., F.A.C.;

(4) If the emissions differ from the preconstruction projection, an explanation as to why there is a difference;

(5) Any other information that the owner or operator wishes to include in the report;

(6) The baseline actual emissions to which the annual emissions were compared to; and,

(7) For the Department identified PSD pollutants: a statement indicating whether or not the applicable PSD significant emission rates (SERs) defined in Rule 62-210.200, F.A.C., were exceeded. If and when a PSD SER is exceeded, the permittee shall submit a PSD permit application with a BACT analysis or if the permittee determines that a PSD permit application with a BACT analysis is not required, the permittee shall provide specific citations as to why the project is exempt from a PSD permit application with a BACT analysis.

[Rule 62-212.300(1)(e)2., F.A.C.; and, Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

c. Recordkeeping. The information required to be documented and maintained pursuant to subparagraphs 62-212.300(1)(e)1. and 2., F.A.C., shall be submitted to the Department, which shall make it available for review to the general public.

[Rule 62-212.300(1)(e)3., F.A.C.]

[Rule 62-212.400(12)(c), F.A.C.]

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This subsection of the permit addresses the following emissions units:

| E.U. ID No. | Brief Description |
|---|---|
| 001 | 863 tons per day (TPD) (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 001 |
| 002 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 002 |
| 003 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 003 |

The original PSD-FL-105 (1987) authorized the construction of municipal solid waste combustor Unit Nos. 1, 2 & 3. The original PSD-FL-113, was amended by PSD-FL-113B, adding waste (fuel slate) specific conditions. This permit changes the waste (fuel slate) specific conditions. No new equipment associated with this project is authorized under this permit.

This facility has MWC (municipal waste combustor) type emissions units that are subject to the emission standards and limitations under the May 10, 2006 federal amendments to the 40 CFR 60, Subpart Cb.

**PREVIOUS APPLICABLE REQUIREMENTS**

1. Effect on Other Permits: These conditions are in addition to all other applicable permit conditions and regulations for these emissions units. [Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.]

**PHYSICAL CHANGES**

2. Physical Changes at the Plant: There shall be no physical modifications (changes) to the plant to accomplish the waste (fuel slate) changes authorized by this permit. [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-210.200, *Definitions - PTE*, F.A.C.; and, Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.]

**INITIAL COMPLIANCE DEMONSTRATION (TESTING)**

3. Operating Rate During Testing: Testing of emissions shall be conducted with the emissions unit operating at permitted capacity. 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. Permitted capacity is defined as 90 to 100 percent of the maximum operation rate allowed by the permit. [Rule 62-297.310(2), F.A.C.]

4. E.U. ID Nos. 001, 002 & 003, MWC Unit Nos. 1, 2 & 3 - Initial Compliance Demonstration - Stack Test Data: The initial compliance demonstration at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate shall be performed for PM, the individual MWC metals (e.g., cadmium (Cd), lead (Pb) & mercury (Hg)), HCl and dioxin/furan using stack test data. All of the stack tests at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate shall be performed on either MWC Unit No. 1, 2 or 3. Should the Department believe that the PM, the individual MWC metals (e.g., Cd, Pb & Hg), HCl or dioxin/furan emission standards/limits are not being met on the MWC unit not tested, the Department may require stack testing for these pollutants on that MWC unit. The compliance test shall be conducted in accordance with the appropriate reference method for each air pollutant (e.g., PM, Cd, Pb, Hg, HCl and dioxin/furan) at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate. The average of the three stack test runs shall be compared to the existing emission standards/limits. A summary of the stack tests and results at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate shall be submitted in a test report to the permitting and compliance authorities. In a summary of the test report, the permittee shall evaluate & report any changes in emissions.

   The test report shall include the non-MSW materials ("non-hazardous solid and liquid wastes") rate (TPH, tons per hour), a brief description of the non-MSW materials along with the material characterization forms and the % of the total MSW/fuel charging rate during testing.

   The carbon injection rate during Hg stack testing shall be included in the test report.

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**Subsection A. Combustion of Higher Rates of Non-MSW Materials ("Non-hazardous Solid and Liquid Wastes")**

[Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-297.310(7), *Special Compliance Tests*, F.A.C.; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

5. E.U. ID Nos. 001, 002 & 003, MWC Unit Nos. 1, 2 & 3 - Initial Compliance Demonstration - COMS Data: The initial compliance demonstration at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate in each MWC unit shall be performed for VE using COMS data. COMS data shall be from the same time period as the PM stack test. While at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate, a total of 3 hours of emissions data shall be used from the COMS. The emissions data shall be reduced to the averaging time(s) as specified in the current valid Title V air operation permit, Permit No. 0112119-015-AV. The results shall be compared to the existing emission standards/limits. A summary of the emissions data from the COMS at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate shall be submitted in a test report to the permitting and compliance authorities. In a summary of the test report, the permittee shall evaluate & report any changes in emissions.

   The test report shall include the non-MSW materials ("non-hazardous solid and liquid wastes") rate (TPH, tons per hour), a brief description of the non-MSW materials along with the material characterization forms and the % of the total MSW/fuel charging rate during testing.

   The baghouse inlet temperature during VE testing shall be included in the test report.

   [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

6. E.U. ID Nos. 001, 002 & 003, MWC Unit Nos. 1, 2 & 3 - Initial Compliance Demonstration - CEMS Data: The initial compliance demonstration at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate in each MWC unit shall be performed for NOx, CO (indicator of VOC) and $SO_2$ using CEMS data. The CO CEMS data shall serve as an indicator of VOC emissions; no initial VOC test is required. At least 24 hours of CEMS data shall be collected at the higher non-MSW materials ("non-hazardous solid and liquid wastes") to demonstrate compliance with the NOx, CO and $SO_2$ emissions standards. The periods of time in which the data is collected shall be the same periods of time for NOx, CO and $SO_2$ emissions and each time period shall be no less than 4 continuous hours. The emissions data shall be reduced to the averaging time(s) as specified in the current valid Title V air operation permit, Permit No. 0112119-015-AV. The results shall be compared to the existing emission standards/limits. A summary of the emissions data from the NOx, CO and $SO_2$ CEMS at the higher non-MSW materials ("non-hazardous solid and liquid wastes") rate shall be submitted in a test report to the permitting and compliance authorities. In a summary of the test report, the permittee shall evaluate & report any changes in emissions.

   The test report shall include the non-MSW materials ("non-hazardous solid and liquid wastes") rate (TPH, tons per hour), a brief description of the non-MSW materials along with the material characterization forms and the % of the total MSW/fuel charging rate during testing.

   [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210,*Construction Permits*, F.A.C.]

7. Test Procedures: The test procedures specified in the current valid Title V air operation permit, Permit No. 0112119-015-AV shall be used for the initial compliance demonstration at the higher non-MSW material rate. [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

**REPORTING**

8. Special Report on the Effects of the Combustion of Non-MSW Materials ("Non-hazardous Solid and Liquid Wastes"): The owner or operator shall submit a special report on the effects of the combustion of higher rates of non-MSW materials ("non-hazardous solid and liquid wastes") on plant equipment, air pollution control devices & systems, the COMS and the CEMS. In the report the owner or operator shall indicate whether or not there have been any observed effects on plant equipment, air pollution control devices & systems, the COMS and the CEMS from the combustion of higher rates of non-MSW materials ("non-hazardous solid and liquid wastes"). This special report shall be submitted to the permitting and compliance

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authorities within one year of performing the initial compliance demonstration. [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

**NOTIFICATIONS AND RECORDS**

9. Notification: Within 15 (fifteen) days of initiating the higher non-MSW material rate, the permittee shall notify the Compliance Authority and Permitting Authority. [Application No. 0112119-017-AC/PSD-FL-105E; and, Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.]

10. Records of Quantities of Non-MSW Materials ("Non-hazardous Solid and Liquid Wastes") Combusted: The permittee shall keep records on-site of the total quantity of non-MSW materials ("non-hazardous solid and liquid wastes") combusted in the MWC units. [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

11. Records Availability: All records shall be made available to the Department upon request. [Application No. 0112119-017-AC/PSD-FL-105E; Rule 62-4.070(1)&(3), *Reasonable Assurance*, F.A.C.; Rule 62-4.030, *General Prohibition*, F.A.C.; and, Rule 62-4.210, *Construction Permits*, F.A.C.]

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This subsection of the permit addresses the following emissions units:

| E.U. ID No. | Brief Description |
|---|---|
| 001 | 863 tons per day (TPD) (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 001 |
| 002 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 002 |
| 003 | 863 TPD (maximum) Municipal Waste Combustor and Auxiliary Burners - Unit 003 |

This part of the permit addresses the waste (fuel slate) revisions for municipal solid waste combustor Unit Nos. 1, 2 and 3.

| | |
|---|---|
| **Permit Being Modified:** | PSD-FL-105B |
| **Affected Emissions Units:** | Municipal Waste Combustor Units 1, 2 & 3 (E.U. ID Nos. 001, 002 & 003) |

The affected specific conditions from Permit No. PSD-FL-105B are hereby changed in its entirety as follows (the remainder of the permit remains unchanged as a result of this permitting action):

**Specific Condition 7.**

**Specific Condition 7. as reflected in Specific Conditions A.4. & A.47. in the current valid Title V air operation permit No. 0112119-015-AV is changed to read as follows:**

{For simplified reading, the important revisions are emphasized with yellow highlight in this electronic document. ~~Strikethrough~~ is used to denote the deletion of text and double-underlines are used to denote the addition of text.}

**7.** Methods of Operation -- Fuels.

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

b. *Unauthorized Fuels.*
(1) shall not burn:
(a) those materials that are prohibited by state or federal law;
(b) those materials that are prohibited by this permit;
(c) those materials that are not authorized by this permit;
(d) lead acid batteries;
(e) hazardous waste;
(f) nuclear waste;
(g) radioactive waste;
(h) sewage sludge;
(i) explosives;
(j) asbestos containing materials;
(k) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
(2) and shall not knowingly burn:
(a) nickel-cadmium batteries pursuant to Section 403.7192(3);
(b) mercury containing devices and lamps pursuant to Sections 403.7186(2) and (3);

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(c) untreated biomedical waste from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources). See the attached Appendix BW: Biomedical Waste Definitions, for definitions of what constitutes biomedical waste;
(d) segregated loads of biological waste.

c. *Fuel Handling.* 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:
(1) well mixed with MSW in the refuse pit; or
(2) alternately charged with MSW in the hopper.
The facility owner/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 as described below. For the purposes of this permit, a segregated load is defined to mean a container or truck that is almost completely or exclusively filled with a single item or homogeneous composition of waste material, as determined by visual inspection.

d. *Other Solid Waste.* Subject to the conditions and limitations contained in this permit, the following other solid waste may be used as fuel at the facility:
(1) Confidential, proprietary or special documents (including but not limited to business records, lottery tickets, event tickets, coupons, credit cards, magnetic tape and microfilm);
(2) 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;
(3) Wood pallets, clean wood and land clearing debris;
(4) Packaging materials and containers;
(5) Clothing, natural and synthetic fibers, fabric remnants, and similar debris, including but not limited to aprons and gloves; and
(6) Rugs, carpets, and floor coverings but not asbestos-containing materials or polyethylene or polyurethane vinyl floor coverings.
(7) The predominantly combustible fraction of sorted construction and demolition debris. Sorting of mixed construction and demolition debris at the facility shall occur on the tipping floor or at another location approved by the Department.

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

f. *Non-MSW Material.* Subject to the conditions and limitations contained in this permit, the following other solid waste materials may be used as fuel at the facility (i.e., the following are authorized fuels that are non-MSW material). The total quantity of the following non-MSW material received as segregated loads and burned at the facility shall not exceed ~~5~~20%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined by using a rolling 30 day average**.**
(1) Construction and demolition debris.
(2) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
(3) 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.

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(4) 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.
(5) Waste materials that:
(a) are generated in the manufacture of items in categories d.(3) or (4), 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.
(6) 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.
(7) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 parts per million (ppm) shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
(8) 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.

g. *Non-hazardous Solid and Liquid Wastes/Segregated Loads.* Subject to the conditions and limitations contained in this permit, non-hazardous solid and liquid wastes may be used as fuel at the facility (i.e., authorized fuels that are non-MSW material). The total quantity of the non-MSW material received as segregated loads and burned at the facility shall not exceed 20%, by weight, of the facility's total fuel, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis in accordance with Specific Condition **A.47.** [Section 403.707(1), F.S. (amendment in 2012).]

~~g.~~h. *Auxiliary Burners Fuels*. Only distillate fuel oil or natural gas shall be used in the startup burners. 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.

~~g. *Prior Approval to Burn Additional Fuels or Wastes*. Other fuels or wastes shall not be burned in the MSW combustors without prior specific written approval of the Secretary of the Department of Environmental Protection.~~

[Rules 62-4.160(2), 62-210.200, 62-4.070(3), Rule 62-213.410 and 62-213.440(1), F.A.C.; Applicant's request in Title V permit renewal application received June 22, 2010; ~~and~~ PSD-FL-105(B) and (D); Section 403.707(1), F.S. (amendment in 2012); and, Permit No. 0112119-017-AC/PSD-FL-105E.]

**Recordkeeping and Reporting Requirements**

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 **7.**

a. Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of Specific Condition **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.

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 29 days. The resultant 30 day total weight of tires shall be divided by the total weight of all waste materials received in the same 30 day period, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% limitation.

c. *Non-hazardous Solid and Liquid Waste/Segregated Loads.* Each day, the total weight of segregated non-MSW materials received that are subject to the 20% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of segregated non-

MSW materials shall be divided by the total weight of all waste materials received in the same calendar month, and the resulting number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 20% limitation. Records shall be maintained showing the non-hazardous solid and liquid waste's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste and a material characterization form for the waste components. Tonnages of non-hazardous solid and liquid waste fired shall be recorded and made available to the Department upon request. These records shall be maintained for a period of five (5) years. [Section 403.707(1), F.S. (amendment in 2012).]

[PSD-FL-105(B); Section 403.707(1), F.S. (amendment in 2012); and, Permit No. 0112119-017-AC/PSD-FL-105E.]

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## Subsection C. Miscellaneous Revision

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. Double-underlines are used to denote the addition of text. All changes are emphasized with yellow highlight in the electronic document.

This facility has MWC (municipal waste combustor) type emissions units that are subject to the emission standards and limitations under the May 10, 2006 federal amendments to the 40 CFR 60 Subpart Cb.

**Permit Being Modified:** PSD-FL-105B
**Affected Emissions Units:** Municipal Waste Combustor Nos. 1, 2 and 3 (E.U. ID Nos. 001, 002 & 003)

The affected Specific Condition No. 1.a from PSD-FL-105B is hereby changed as follows (the remainder of the permit remains unchanged as a result of this permitting action):

1.a The following emission standards apply …

| | | EQUIVALENT EMISSIONS[2] | | |
|---|---|---|---|---|
| **POLLUTANT** | **EMISSION STANDARDS[1]** | **lb/mmBtu** | **lb/hr** | **TPY** |
| … | … | … | … | … |
| ~~**Be**~~ [4] ~~Beryllium~~ | ~~0.001 mg/dscm corrected to 7 % $O_2$~~ | ~~9.3E-07~~ | ~~0.0003~~ | ~~0.0013~~ |

…

~~4. Beryllium: PSD original permit limit~~

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