

Jeb Bush
Governor

Department of Environmental Protection

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

David B. Struhs
Secretary

March 15, 2000

CERTIFIED MAIL - RETURN RECEIPT REQUESTED

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

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

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

Specific condition 2.m. Emission Standards.

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

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

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

Specific condition 3.a. Test Methods.

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

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

9. Visible emission determination of opacity.

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

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

Specific condition 3.c. Testing Frequency.

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

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

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

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

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

This condition shall be replaced entirely by the following:

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

Specific condition 4.b. Operating Procedures.

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

The emission limitations for this facility shall apply at all times, except during periods of startup, shut down, or malfunctions, provided that the duration of startup, shut down and malfunction periods shall not exceed three hours per occurrence. The startup period commences when the affected facility begins the continuous burning of municipal solid waste and does not include any warm-up period when the affected

facility is combusting natural gas or propane, and no municipal solid waste is being fed to the combustor. Continuous burning is the continuous, semi-continuous, or batch feeding of municipal solid waste for purposes of waste disposal, energy production, or providing heat to the combustion system in preparation for waste disposal or energy production. The use of municipal solid waste solely to provide thermal protection of the grate or hearth during the startup period when municipal solid waste is not being fed to the grate is not considered to be continuous burning. During all periods of startup, shut down and malfunction, the owner or operator shall use best operational practices to minimize air pollutant emissions. The owner or operator shall maintain a manual that identifies and describes best operational practices that will be used during periods of startup, shut down and malfunction at this facility.
[Rules 62-4.070(3), and 62-210.700(1) and (5), F.A.C., 40 CFR 60.38b and 40 CFR 60.58b(a), and request of the applicant]

4.d. Auxiliary Burners.

This condition shall be replaced entirely by the following:

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

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

This condition shall be replaced entirely by the following:

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

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

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

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

Further, the facility shall not knowingly burn:

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

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

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

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

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

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

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

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

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

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

Subject to the conditions and limitations contained in this permit, waste tires may be used as fuel at the facility. The total quantity of waste tires received as segregated loads and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel, except as provided in the following sentence. Subsequent to an initial test burn scheduled to allow Department representatives to observe, while firing 5% (by weight) tires at each of the combustion units while operating each unit at capacity that demonstrates via the CEMS that each unit can comply with the emission limits for pollutants monitored by the CEMS while firing 5% (by weight) tires, this quantity limitation shall rise from 3% to 5%. Compliance with this limitation shall be determined on a calendar monthly basis.

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

- (a) Unsorted mixtures of construction and demolition debris, or that fraction of sorted construction and demolition debris that is predominantly non-combustible. Non-combustible construction and demolition debris shall include concrete, metals, gypsum products, plaster, rock, brick, and masonry.
- (b) Oil spill debris from aquatic, coastal, estuarine or river environments. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (c) Items suitable for human, plant or domesticated animal use, consumption or application where the item's shelf-life has expired or the generator wishes to remove the items from the market. Such items or materials include but are not limited to off-specification or expired consumer products, pharmaceuticals, medications, health and personal care products, cosmetics, foodstuffs, nutritional supplements, returned goods, and controlled substances.
- (d) Consumer-packaged products intended for human or domesticated animal use or application but not consumption. Such items or materials include but are not limited to carpet cleaners, household or bathroom cleaners, polishes, waxes and detergents.
- (e) Waste materials that:
 - (i) are generated in the manufacture of items in categories (c) or (d), above and are functionally or commercially useless (expired, rejected or spent); or
 - (ii) are not yet formed or packaged for commercial distribution. Such items or materials must be substantially similar to other items or materials routinely found in MSW.
- (f) Waste materials that contain oil from:
 - (i) the routine cleanup of industrial or commercial establishments and machinery; or
 - (ii) spills of virgin or used petroleum products. Such items or materials include but are not limited to rags, wipes, and absorbents.
- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal or greater than 50 ppm shall not be burned, pursuant to the limitations of 40 CFR 761.20(e).
- (h) Waste materials generated by manufacturing, industrial or agricultural activities, provided that these items or materials are substantially similar to items or materials that are found routinely in MSW, subject to prior approval of the Department.

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

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

Each day the total weight of segregated tires received shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly total weight of tires shall be divided by the total weight of all waste materials received in the same calendar month, and the resultant number shall be multiplied by 100 to express the ratio in percentage terms. The percentage computed shall be compared to the 3% or 5% limitation, whichever is applicable.

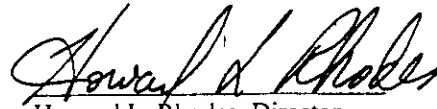
Each day the total weight of segregated non-MSW materials received that are subject to the 5% restriction shall be computed, and the daily total shall be added to the sum of the daily totals from the previous days in the current calendar month. At the end of each calendar month, the resultant monthly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

[Rule 62-4.070(3), F.A.C., PSD-FL-151, request of the applicant]

A copy of this letter shall be filed with the referenced permit and shall become part of the permit. This permit modification is issued pursuant to Chapter 403, Florida Statutes.

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

Executed in Tallahassee, Florida.



Howard L. Rhodes, Director
Division of Air Resources
Management


CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this permit modification was sent by certified mail (*) and copies were mailed by U.S. Mail before the close of business on 3-21-00 to the person(s) listed:

Lindsey Sampson, P.E. *
David Dee, Landers & Parsons
Karen Skinner, DEP Siting Coordination Office
David Knowles, P.E., DEP SD
Gregg Worley, EPA
John Bunyak, NPS

Clerk Stamp

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


(Clerk)

3-21-00
(Date)

Florida Department of
Environmental Protection

Memorandum

TO: Howard L. Rhodes
THRU: Clair Fancy *CAF*
Al Linero *AL*
FROM: Joe Kahn *JK*
DATE: March 14, 2000
SUBJECT: Lee County Resource Recovery Facility
PSD-FL-151B
Revised Draft Modification

BAR

Attached for approval and signature is a PSD permit modification to Lee County. The applicant applied on August 6, 1999 to the Department for a modification to PSD permits number PSD-FL-151 and PSD-FL-151A for the Lee County Resource Recovery Facility located at 10500 Buckingham Rd., Fort Myers, Lee County, 33905. The modification is to reduce testing requirements for certain pollutants with emissions that are well below limitations, consolidate testing for particulate matter emissions, revise certain requirements to conform to federal standards for municipal waste combustion facilities, allow for the use of natural gas as an auxiliary fuel, and revise the definition of allowable solid waste fuels.

The Department mailed the initial intent to issue and draft PSD permit modification to the applicant on October 18, 1999. The applicant published the public notice on November 6, 1999 but subsequently commented on the initial draft. I worked with the applicant to revise the draft since November. Principal changes from the initial draft are a change to allow combustion of up to 5% tires as segregated loads after demonstration tests are conducted, removal of the predominantly combustible fraction of sorted construction and demolition debris from the percentage limitation on wastes fired, deletion of the minimum roof temperature requirement, changes in allowable excess emissions to match federal requirements, and minor changes to testing requirements. Because provisions of the initial draft permit modification were changed, another public notice was required. That notice was published in the Ft. Myers News-Press on February 11, 2000.

I recommend your approval and signature.

Since the applicant had previously requested an extension of time to file a request for administrative hearing, the project is not subject to the 90 day timeclock.

Attachment

/jk