## Florida Department of Environmental Protection

BAR

TO:

Howard Rhodes

FROM:

Clair Fancy Smg

SUBJECT:

Final Air Construction Permit/PSD Permit Amendment Nos.: 0690046-003-AC/PSD-FL-113(E)

Covanta Lake, Inc.

Lake County Resource Recovery Facility

DATE:

October 29, 2001

The attached Final Air Construction Permit/PSD Permit Amendment (letter) is for the modification of the AC permit and amendment to the PSD permit that primarily removes the ability to receive and incinerate medical waste (biological waste), which was permitted in a previously issued AC permit/PSD permit amendment issued December 10, 1990. The facility is located in Lake County, Florida.

Comments were received by letter and e-mail from Mr. Brian Bahor, Q.E.P., V.P. - Environmental Permitting, Covanta Energy Company, Inc. The comments were addressed and some changes were made to the letter that are considered insignificant.

This permitting action should not be considered controversial. Therefore, it is recommended that the attached Final Air Construction Permit/PSD Permit Amendment (letter) be signed.

CHF/bm

Attachment

cc: Scott M. Sheplak, P.E.

## NOTICE OF PERMIT

In the Matter of an Application for Permit:

Mr. Leon Brasowski Vice President, Environmental Permitting Covanta Energy Corporation, Inc. 40 Lane Road Fairfield, N.J. 07004 DEP File No.: 0690046-003-AC/PSD-FL-113(E) Lake County Resource Recovery Facility

Lake County

Enclosed is the Final Air Construction Permit/PSD Permit Amendment, No. 0690046-003-AC/PSD-FL-113(E), for the operation of the Covanta Lake, Inc. facility located at 3830 Rogers Industrial Park Road, Okahumpka, Lake County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.).

Any party to this order (permit) has the right to seek judicial review of the permit revision pursuant to Section 120.68, F.S., by the filing of a Notice of Appeal pursuant to Rule 9.110, Florida Rules of Appellate Procedure, with the Clerk of the Department in the Legal Office; 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 of Appeal must be filed within 30 (thirty) days from the date this Notice is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

C.H. Fancy, P.E.

Chief

Bureau of Air Regulation

## CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF PERMIT (including the Final Air Construction Permit/PSD Permit Amendment) was sent by certified mail (\*) and copies were mailed by U.S. Mail before the close of business on D to the person(s) listed or as otherwise noted:

Mr. Len Kozlov, DAPA, CD

Mr. William Robert Crellin, Jr., P.E., CLI

Mr. Cecil Boatwright, CLI, Facility Manager

Mr. Brian Bahor, QEP, V.P. - Environmental Permitting, CECI (Application Contact)

Mr. Welton Cadwell, Chairman, Lake County BCC

USEPA, Region 4 (INTERNET E-mail Memorandum),

Clerk Stamp

10/31/01 cc: Bruge Mitchell Reading File Marled on 10/31/01

FILING AND ACKNOWLEDGMENT FILED, on this date, pursuant to §120.52(7), Florida Statutes, with the designated Department Clerk, receipt of which is hereby, acknowledged.

Clerk)

(Date)

Covanta Lake, Inc.
Lake County Resource Recovery Facility

Air Construction Permit No.: 0690046-003-AC PSD Permit Amendment No.: PSD-FL-113(E) Facility ID: 0690046

#### I. Public Notice.

An "INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT/PSD PERMIT AMENDMENT AND A TITLE V AIR OPERATION PERMIT" to the Covanta Lake, Inc., located at 3830 Rogers Industrial Park Road, Okahumpka, Lake County, was clerked on June 26, 2001. The "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT/PSD PERMIT AMENDMENT AND A TITLE V AIR OPERATION PERMIT" was published in The DAILY COMMERCIAL on July 28, 2001. The Draft Air Construction Permit/PSD Permit Amendment and Revised DRAFT Title V Air Operation Permit were available for public inspection at the Department's Central District office in Orlando and the permitting authority's office in Tallahassee. Proof of publication of the "PUBLIC NOTICE OF INTENT TO ISSUE AN AIR CONSTRUCTION PERMIT/PSD PERMIT AMENDMENT AND A TITLE V AIR OPERATION PERMIT" was received on August 27, 2001.

#### II. Public Comment(s).

Comments were received and the Draft Air Construction Permit/PSD Permit Amendment (letter) were changed. The comments were not considered significant enough to reissue a Revised Draft Air Construction Permit/PSD Permit Amendment and require another Public Notice. Comments were received from one respondent during the 30 (thirty) day public comment period. Listed below is the comment letter and a response to each comment in the order that the comment was received. If appropriate, the comment(s) will not be restated. Where duplicative comments exist, the original response will be referenced.

- A. Letter with attachments from Mr. Brian Bahor dated August 24, 2001, and received on August 27, 2001.
- 1. Comment 1: AC35-115379/PSD-FL-113(B), signed on February 19, 1988: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.b.".) The Department agrees with the request to delete the phrase "until design furnace temperature is achieved" under "(2) Auxiliary Burners", because other operational requirements will ensure proper operation and control of each combustor. Therefore, the following is changed:

## FROM:

(2) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only natural gas or propane. The auxiliary burners may be used at startup during the introduction of any approved MSW fuel or wood chips until design furnace gas temperature is achieved; at shutdowns; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of any approved MSW fuel or wood chips.

#### TO:

(2) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only natural gas or propane. The auxiliary burners may be used at startup during the introduction of any approved MSW fuel or wood chips; at shutdowns; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of any approved MSW fuel or wood chips.

Covanta Lake, Inc.: Lake County RRF

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2. Comment 2. AC35-115379/PSD-FL-113(B), signed on February 19, 1988: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.b.".) The Department agrees with the request to redesignate two items identified under "(3) <u>Unauthorized Fuel.</u>", specifically move "(3)(a)(3) and (3)(a)(10)" to "(3)(b)(3) and (3)(b)(4)"; also, the terms remaining in "(3)(a)" will be renumbered where appropriate. Therefore, the following is changed:

#### FROM:

- (3) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW which are described in categories (5), (6), and (7), below. However, the facility
  - (a) shall not burn:
    - (3) lead acid batteries;
    - (10) beryllium-containing waste, as defined in 40 CFR 61, Subpart C; and,

#### TO:

- (3) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW, which are described in categories (5), (6) and (7), below. However, the facility
  - (a) shall not burn:
    - (1) those materials that are prohibited by state or federal law;
    - (2) those materials that are prohibited by this permit;
    - (3) hazardous waste;
    - (4) nuclear waste;
    - (5) radioactive waste;
    - (6) sewage sludge;
    - (7) used oil, except for what is generated on-site (no used oil in liquid form from outside generators); or,
    - (8) explosives; and,
  - (b) shall not knowingly burn:
    - (1) untreated biomedical waste <u>from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C.</u>, and from other similar generators (or sources);
    - (2) segregated loads of biological waste;
    - (3) lead acid batteries; or,
    - (4) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- 3. Comment 3. AC35-115379/PSD-FL-113(B), signed on February 19, 1988: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.b.".) The Department does not agree with the request and no change will be made to the item identified under "(3)(a) <u>Unauthorized Fuel.</u>", specifically "used oil, except for what is generated on-site (no used oil in liquid form from outside generators)". This condition prohibits the owner/operator of the facility from purchasing used oil from off-site for firing in the combustors. This prohibition is not in conflict with the terms and conditions established in the air construction permit/PSD permit amendment, No. AC35-115379/PSD-FL-113(D), clerked June 22, 1995, which allowed the burning of "non-hazardous solid waste contaminated with virgin or used-oil products", but <u>not</u> as a liquid fuel that can be fed through fuel oil burners.

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4. Comment 4. AC35-115379/PSD-FL-113(D), clerked June 22, 1995; Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the AC/PSD amendment letter, this issue was addressed in combined "Responses 13. and 17.".) The Department agrees with the request to repeat the text from the air construction permit/PSD permit amendment, No. AC35-115379/PSD-FL-113(D), clerked June 22, 1995, which allowed the burning of "non-hazardous solid waste contaminated with virgin or used-oil products". The following changes will be made: 1) replace some of the text under "Other Solid Waste/Segregated Loads", specifically (7)(b), (f), (g) & (i), and merge them with the permit's text at (7)(b); and, 2) renumber the rest of the condition:

#### FROM:

- (7) Other Solid Waste/Segregated Loads. 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, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
  - (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.
  - (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 to or greater than 50 ppm, by weight, 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.
  - (i) The maximum percentage of oil-contaminated solid waste defined as oil spill clean-up debris and absorbing media, including oil filters, is 20%, by weight, of the total solid waste input and shall be determined as a daily average on a calendar monthly basis in accordance with specific condition **A.94**.

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TO:

- (7) Other Solid Waste/Segregated Loads. 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, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
  - (a) Construction and demolition debris.
  - (b) The maximum percentage of oil-contaminated solid waste (non-hazardous solid waste contaminated with virgin or used oil products) defined as oil spill clean-up debris and absorbing media, including oil filters, fired in each combustor is 20%, by weight, of the total solid waste input, determined as a daily average on a calendar monthly basis. All "used oil" shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. The used oil shall <u>not</u> have a polychlorinated biphenyl (PCB) content equal to or greater than 50 ppm, by weight.
  - (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.

pursuant to the limitations of 40 CFR 761.20(e).

- (f) 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.
- 5. Comment 5. AC35-115379/PSD-FL-113(C), signed on December 10, 1990: Specific Condition 3.k.

<u>Response</u>. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.h.".) The Department does not agree with the request and no change will be made because the terms and requirements are SIP regulations and a direct quote of Rule 62-296.401(4)(c)2., F.A.C.

- Comment 6. AC35-115379/PSD-FL-113(B), signed on February 19, 1988: Specific Condition 1.e.
   Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.b.".) See "Response II.A.1.", above.
- 7. Comment 7. AC35-115379/PSD-FL-113(B), signed on February 19, 1988: Specific Condition 1.e.

  Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in "Response 2.b.".) See "Response II.A.2.", above.

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8. Comment 8. AC35-115379/PSD-FL-113(D), clerked June 22, 1995: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in combined "Responses 13. and 17.".) The Department does not agree with the request and no change will be made to the item identified under "(3) <u>Unauthorized Fuel.</u>", specifically "(3)(a)(8) used oil, except for what is generated on-site (no used oil in liquid form from outside generators);". This condition prohibits the owner/operator of the facility from purchasing used oil from off-site for firing in the combustors. This prohibition is not in conflict with the terms and conditions established in the air construction permit/PSD permit amendment, No. AC35-115379/PSD-FL-113(D), which allowed the burning of "non-hazardous solid waste contaminated with virgin or used-oil products" and assumes that it has been commingled with other solid waste in the receiving pit prior to burning, but <u>not</u> as a liquid fuel that can be fed through fuel oil burners.

9. Comment 9. AC35-115379/PSD-FL-113(D), clerked June 22, 1995: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this issue was addressed in combined "Responses 13. and 17.".) The Department agrees with the request to update the federal rule citations, change the Total Halogens qualifier from "1000 ppm" to "4000 ppm" under "(5) Other Solid Waste", and to add the "NOTE:" for the table, which is found in 40 CFR 279.11, as follows:

#### FROM:

(5) 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:

#### SOLID WASTE FROM ON-SITE OPERATIONS

## Used Oil from on-site operations

(a) The constituents and properties of the *on-spec used oil* generated from on-site operations shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.10 (July 1, 1998 version), which is adopted by reference in Rule 62-730.181, F.A.C.

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	1000 ppm maximum
Flash Point	100°F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm

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TO:

(5) 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:

## SOLID WASTE FROM ON-SITE OPERATIONS

## Used Oil from on-site operations

(a) The constituents and properties of the *on-spec used oil* generated from on-site operations shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.11, which is adopted by reference in Rule 62-710.210, F.A.C.

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	4000 ppm maximum
Flash Point	100°F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm

NOTE: Used oil containing more than 1000 ppm halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such oil is subject to subpart H of Part 266 of this chapter rather than this part when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

10. Comment 10. AC35-115379/PSD-FL-113(D), clerked June 22, 1995: Specific Condition 1.e.

Response. (Because of the order in which the comments were addressed in the AC/PSD amendment letter, this issue was addressed in combined "Responses 13. and 17.".). No change will be made because the Department has already provided a means for the owner/operator to use other test methods (requires prior written approval) by the "NOTE:" placed at the end of the table denoting the appropriate test methods for extraction and/or analysis. The "NOTE:" is stated as follows:

NOTE: Other test methods may be used only after receiving prior written approval from the Department.

11. Comment 11. The comment requested that the federal and state requirements for "Excess Emissions" be changed to reflect the language like that contained in the Hillsborough County RRF Title V Permit.

Response. (Because of the order in which the comments were addressed in the draft AC/PSD amendment letter, this comment was addressed in Response 14.) Both the SIP requirement, which was relaxed from "2 hours in a 24 hour period" to "3 hours in a 24 hour period", and the federal requirement are established in the DRAFT Title V Permit and will not be changed. They are both applicable.....one cannot replace nor negate the other, as stated in the "{Permitting note.}" preceding the conditions established for the section labeled "Excess Emissions". As for the other permit(s) referenced, it is our intent to change the condition in question back to what is reflected in this permit upon the next modification request for these facilities in question. In addition, we cannot place a condition in the permit that anticipates the promulgation and changes of a federal rule, which, if passed, the Department must adopt before implementing.

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## III. Conclusion.

The final action of the Department will be to issue the Air Construction Permit/PSD Permit Amendment (letter), No. 0690046-003-AC/PSD-FL-113(E), as proposed and with the changes noted above.



# Department of **Environmental Protection**

leb Bush Governor

Twin Towers Office Building 2600 Blair Stone Road Tallahassee, Florida 32399-2400 October 30, 2001

David B. Struhs Secretary

CERTIFIED MAIL - Return Receipt Requested

Mr. Leon Brasowski Vice President, Environmental Permitting Covanta Energy Corporation, Inc. 40 Lane Road Fairfield, N.J. 07004

Re: Final Air Construction Permit/PSD Permit Amendment Nos.: 0690046-003-AC/PSD-FL-113(E) Covanta Lake, Inc. Lake County Resource Recovery Facility

Dear Mr. Brasowski:

This letter amendment changes several federally enforceable specific conditions established in the state/federal air construction permits, Nos. AC35-115379/PSD-FL-113(A), signed on February 19, 1988, and the amendment issued December 10, 1990 (AC35-115379/PSD-FL-113(B)). The construction permits were issued for the construction of two (2) identical municipal waste combustors. The amendment was issued for the ability to process biomedical waste. Covanta Lake, Inc. (was formerly NRG/Recovery Group, Inc. and Ogden Martin of Lake, Inc.), which operates the Lake County Resource Recovery Facility, has decided to cease processing biomedical waste by September 1, 2001, which will negate the amendment issued on December 10, 1990; and, the recently promulgated federal regulations regarding existing Municipal Waste Combustors, 40 CFR 60, Subpart Cb, have rendered many of the specific conditions contained in the original AC/PSD permits not appropriate/impracticable and will be changed. Therefore, the following will be the Department's response to each comment/request, as detailed in the amendment application submittal received on April 11, 2001, and in the order received:

1. The facility has installed four (4) mechanisms to convey solid waste to the combustors. The request is to recognize each mechanism. The Department is agreeable to the request and the following is changed:

AC35-115379/PSD-FL-113(B): Project Description

FROM:

For the construction of two 250 ton-per-day combustors which will be fueled by wood chips and municipal waste which can, by definition, include biohazardous waste. A specially designed conveyor is to be constructed to transport boxed biohazardous waste from tipping floor to combustor feed hopper so that biohazardous waste is not mixed with other municipal solid waste until it enters the feed hopper.

TO:

For the construction of two 250 tons-per-day municipal solid waste (MSW) combustors, which will be fueled by wood chips and municipal solid waste. There are four methods of conveying MSW to a combustor: 1) the grapple system to Unit 1 or Unit 2; 2) the inclined conveyor to Unit 1; 3) the bucket conveyor to Unit 1 or Unit 2; and, 4) the package conveyor to Unit 2.

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- 2. The request is to delete Specific Conditions 1.c., 1.e., 1.g., 1.i., 1.j., 3.a., 3.d. and 3.k., established in AC35-115379/PSD-FL-113(B), and related to biohazardous waste (now, evolved to biomedical waste) processing. In addition, the facility has requested until September 1, 2001, to cease processing biomedical waste. The request is acceptable and the following are changed:
  - a. AC35-115379/PSD-FL-113(B): Specific Condition 1.c.

FROM:

The design furnace mean temperature at the fully mixed zone of the combustor shall be no less than 1800°F for a combustion gas residence time of at least one second.

TO:

Reserved.

b. AC35-115379/PSD-FL-113(B): Specific Condition 1.e.

FROM:

The MWC shall be fueled with wood chips or municipal solid waste which can include biohazardous waste. Radioactive waste may not be burned unless the combustor has been issued a permit or the waste is such quantity to be exempt in accordance with Department of Health and Rehabilitative Services (HRS) Rule 10D-91 or 10D-104.003, F.A.C. Hazardous waste may not be burned unless the combustor has been issued a permit or the waste is of such quantity to be exempt in accordance with Department Rule 17-30, F.A.C. Other wastes and special wastes shall not be burned without specific prior written approval of the Florida DER.

Note: A generic definition of acceptable and not acceptable fuels for MSW combustors has been developed with the industry and its consultants and has been placed in all of the initial Title V Operation Permits for MSW combustors. The definition addresses all of the terms contained in the original definition, above, including the prohibition on biomedical waste. Therefore, the following is the new definition language for Specific Condition 1.e.:

TΩ

Methods of Operation - Fuels.

- (1) Municipal Solid Waste. The primary fuels for each combustor are MSW or wood chips.
- (2) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only natural gas or propane. The auxiliary burners may be used at startup during the introduction of any approved MSW fuel or wood chips; at shutdowns; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of any approved MSW fuel or wood chips.
- (3) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW, which are described in categories (5), (6) and (7), below. However, the facility
  - (a) shall not burn:
    - (1) those materials that are prohibited by state or federal law;
    - (2) those materials that are prohibited by this permit;
    - (3) hazardous waste;
    - (4) nuclear waste;
    - (5) radioactive waste;
    - (6) sewage sludge;
    - (7) used oil, except for what is generated on site; or,
    - (8) explosives; and,
  - (b) shall not knowingly burn:
    - (1) untreated biomedical waste <u>from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C.</u>, and from other similar generators (or sources);
    - (2) segregated loads of biological waste;
    - (3) lead acid batteries; or,
    - (4) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.

- (4) 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 a percentage weight limitation, below [see (6) and (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.

- (5) 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:
  - (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.
- (6) <u>Waste Tires</u>. 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 <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
- (7) Other Solid Waste/Segregated Loads. 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, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
  - (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.
  - (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.

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- (g) Used oil and used oil filters. Used oil containing a PCB concentration equal to or greater than 50 ppm, by weight, 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.
- (i) The maximum percentage of oil-contaminated solid waste defined as oil spill clean-up debris and absorbing media, including oil filters, is 20%, by weight, of the total solid waste input and shall be determined as a daily average on a calendar monthly basis in accordance with specific condition A.94.
- (8) Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of the Department of Environmental Protection.
- c. AC35-115379/PSD-FL-113(B): Specific Condition 1.g.

FROM:

Auxiliary fuel burner(s) shall be used at startup during the introduction of MSW fuel (other than biohazardous) until design furnace gas temperature is achieved. Incineration of biohazardous waste shall not begin until the combustion chamber temperature requirement of 1800°F is attained. All air pollution control and continuous emission monitoring equipment shall be operational and functioning properly prior to incineration or ignition of waste until all the wastes are incinerated. During shut down, the combustion chamber temperature requirement shall be maintained using auxiliary burners until the wastes are completely combusted.

Note: See Response 2.b., above, and specifically Specific Condition 1.e.(2). Because the auxiliary fuel burners are now contained in the "Methods of Operation - Fuels", then Specific Condition 1.g. is changed to:

TO:

Reserved.

d. AC35-115379/PSD-FL-113(B): Specific Condition 1.i.

**FROM** 

The combustor shall be fed so as to prevent opening the combustor to the room environment.

TO:

Reserved.

e. AC35-115379/PSD-FL-113(B): Specific Condition 1.j.

FROM:

The applicant shall submit a copy of a certificate verifying the incinerator operator's satisfactory completion of a Department-approved training program prior to issuance of the operating permit.

TO:

Reserved.

f. AC35-115379/PSD-FL-113(B): Specific Condition 3.a. The new limitation is in accordance with 40 CFR 33b(a)(1)(i). FROM:

Particulate: 0.0150 grains/dscf corrected to 12% CO, or 0.20 grains/dscf corrected to 7% O<sub>2</sub>, whichever is less.

TO:

<u>Particulate Matter</u>. The emission limit for particulate matter contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.

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g. AC35-115379/PSD-FL-113(B): Specific Condition 3.d. The new limitation is in accordance with 40 CFR 34b(a).

Carbon Monoxide: 100 ppmdv corrected to 7% O<sub>2</sub> on an hourly basis.

TO

<u>Carbon Monoxide</u>. The emission limit for carbon monoxide contained in the gases discharged to the atmosphere 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, and calculated as a 4-hour block average.

h. AC35-115379/PSD-FL-113(B): Specific Condition 3.k. The new limitations are in accordance with 40 CFR 33b(b)(3)(ii). FROM:

Hydrochloric Acid: 50 ppmdv, corrected to  $7\% O_2$  on a three hour average basis; or shall be reduced by 90% by weight on an hourly basis.

TO:

Hydrogen Chloride. The emission limit for hydrogen chloride contained in the gases discharged to the atmosphere is:

- (1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis), calculated as a 3-hour average; or,
- (2) 5 percent of the potential hydrogen chloride emission concentration (95-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), and calculated as an 1-hour average, whichever is less stringent.
- 3. The request is to be subject to the annual performance tests for mercury, not more frequent such as quarterly. The request is in compliance with Rule 62-297.310(7)(a)4., F.A.C., and with Specific Condition 4.b., in AC35-115379/PSD-FL-113(A). Therefore, no change is necessary and performance testing for mercury is required annually pursuant to the regulations and a federally enforceable permit.
- 4. The request is to change Specific Conditions 1.a. and 1.b. established in AC35-115379/PSD-FL-113(A). The conditions describe the design and maximum throughput rates, respectively, for each combustor. No change will be made to the conditions except for Specific Condition 1.b., which will reflect a change in the timeframe for measurement. Therefore, the following specific conditions are changed as follows:
  - a. AC35-115379/PSD-FL-113: Specific Condition 1.a.

**FROM** 

Each of the two municipal waste combustors (MWC) shall have a design rated capacity of 250 tons Municipal Solid Waste (MSW) per day, 104 million Btu input per hour and 60,200 pounds steam output per hour with MSW having a heating value of 5,000 Btu per pound.

TO:

No change.

b. AC35-115379/PSD-FL-113: Specific Condition 1.b.

FROM:

The maximum individual MWC throughput shall not exceed 288 tons per day, 120 million Btu per hour and 69,000 pounds steam per hour, (3-hour average).

TO:

The maximum individual MWC throughput shall not exceed 288 tons per day, 120 million Btu per hour and 69,000 pounds steam per hour, (4-hr block arithmetic average).

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5. The request to delete Specific Condition 1.d., in AC35-115379/PSD-FL-113(A), is acceptable and the following is changed:

#### FROM

Normal Operating Range. The normal operating range for each combustor is 80% to 115% of design rated capacity, which is 250 tons/day of MSW or wood chips.

To:

Reserved.

6. The request to change Specific Condition 6.a., in AC35-115379/PSD-FL-113(A), is acceptable and the following is changed (the temperature monitoring requirement on the particulate matter control device is from the definition contained in 40 CFR 60.51b):

#### FROM:

Devices shall be installed to continuously monitor and record steam production, furnace exit gas temperature (FEGT) and flue gas temperature at the exit of the acid gas control equipment. An FEGT to combustion zone correlation shall be established to relate furnace temperature at the temperature monitor location to furnace temperature in the overfire air fully mixed zone.

TO:

Devices shall be installed to continuously monitor and record steam production and flue gas temperature measured at the particulate matter control device inlet.

7. The request to change Specific Condition 2.c, in AC35-115379/PSD-FL-113(A), is acceptable and the following is changed (the change reflects the text of 40 CFR 60.53b(c)):

## FROM:

The acid gas emission control system shall be designed to be capable of cooling flue gases to an average temperature not exceeding 300°F (3-hour rolling average).

TO:

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 6.a, except as specified below. The averaging time is specified in 40 CFR 60.58b(i). 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.
- 8. The request is to delete Specific Condition 3.h., established in AC35-115379/PSD-FL-113(A), for limiting beryllium. The beryllium tests conducted on MWC Units 1 and 2 in January 2000, show compliance (1.79 x 10<sup>-8</sup> & 2.9 x 10<sup>-8</sup> gr/dscf, respectively, corrected to 12% CO<sub>2</sub>) with the standard (2.0 x 10<sup>-7</sup> gr/dscf, corrected to 12% CO<sub>2</sub>) and an order of magnitude less than the allowable. Therefore, the request is acceptable and the following is changed:

#### FROM:

Flue gas emissions from each unit shall not exceed the following:

3.h. Beryllium

2.0 x 10<sup>-7</sup> gr/dscf, corrected to 12% CO<sub>2</sub>

TO

Flue gas emissions from each unit shall not exceed the following:

3.h. Reserved.

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Because of the deletion of the limitation for beryllium, there will be no testing requirements as contained in Specific Condition 4.f.(14), in AC35-115379/PSD-FL-113(A). Therefore, the following is changed:

#### FROM:

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DER shall be used for compliance purposes.

4.f.(14) Method 104 for determination of beryllium emission rate.

TO

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DEP shall be used for compliance purposes.

4.f.(14) Reserved.

9. The request is to delete Specific Condition 3.e., established in AC35-115379/PSD-FL-113(A), for limiting volatile organic compounds (VOC). The VOC tests conducted on MWC Units 1 and 2 in 1991, 1996 and 2000, show compliance (0.9 & 3.2, 4.67 & 4.45 and 1.53 & 1.68 ppmvd, respectively, corrected to 12% CO<sub>2</sub>) with the standard (70 ppmvd as carbon corrected to 12% CO<sub>2</sub>). Therefore, the request is acceptable and the following is changed:

#### FROM:

Flue gas emissions from each unit shall not exceed the following:

3.e. Volatile Organic Compounds

70 ppmvd as carbon corrected to 12% CO<sub>2</sub>

TO

Flue gas emissions from each unit shall not exceed the following:

3.e. Reserved.

Because of the deletion of the limitation for VOC, there will be no testing requirements as contained in Specific Condition 4.f.(12), in AC35-115379/PSD-FL-113(A). Therefore, the following is changed:

#### FROM:

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DER shall be used for compliance purposes.

4.f.(12) Method 25 or 25A for determination of VOC concentration.

TO:

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DEP shall be used for compliance purposes.

4.f.(12) Reserved.

10. The request is to delete Specific Condition 3.g., established in AC35-115379/PSD-FL-113(A), for limiting fluorides. The fluoride tests conducted on MWC Units 1 and 2 in 1991, 1996 and 2000, show compliance (1.49 x  $10^{-5}$  & 1.79 x  $10^{-5}$ , 2.54 x  $10^{-4}$  & 2.70 x  $10^{-4}$  and 5.8 x  $10^{-5}$  & 6.1 x  $10^{-5}$  gr/dscf, respectively, corrected to 12% CO<sub>2</sub>) with the standard (1.5 x  $10^{-3}$  gr/dscf, corrected to 12% CO<sub>2</sub>). Therefore, the request is acceptable and the following is changed:

#### FROM:

Flue gas emissions from each unit shall not exceed the following:

3.g. Fluoride

1.5 x 10<sup>-3</sup> gr/dscf corrected to 12% CO<sub>2</sub>

TO:

Flue gas emissions from each unit shall not exceed the following:

3.g. Reserved.

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Because of the deletion of the limitation for fluoride, there will be no testing requirements as contained in Specific Condition 4.f.(11), in AC35-115379/PSD-FL-113(A). Therefore, the following is changed:

#### FROM:

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DER shall be used for compliance purposes.

4.f.(11) Method 13B for determination of fluoride concentrations.

#### TO:

The following test methods and procedures of 40 CFR Parts 60 and 61 or equivalent methods having prior approval of Florida DEP shall be used for compliance purposes.

4.f.(11) Reserved.

11. The request is acceptable to recognize the change in the method of operation of the carbon injection system being used to control mercury, which is contained in Specific Condition No. 3, in AC35-264176. Therefore, the following is changed:

#### FROM:

The operation of the carbon injection system used to control mercury emissions shall be as follows:

- a. The carbon injection rate shall be 11 lbs/hr at a rate of 60-80 ft/second.
- b. The carbon grind size shall be at least 95% passing through 325 mesh.
- c. The activated carbon shall be pneumatically conveyed and injected into the flue gas duct near the scrubber outlet.
- d. The pressure in the carbon duct shall be approximately 1.5 psig.
- e. The activated carbon, along with the adsorbed mercury, dioxins and other heavy metals, shall be captured in the scrubber under flow and in the baghouse for disposal along with the fly ash and the bottom ash.

#### TO:

The operation of the carbon injection system used to control mercury emissions shall be as follows:

- a. The activated carbon will be pneumatically conveyed and injected into the flue gas duct near the scrubber inlet.
- b. The activated carbon along with the adsorbed mercury, dioxins and other heavy metals will be captured in the scrubber under flow and in the baghouse for disposal along with the fly ash and the bottom ash.
- c. Pursuant to Rule 62-296.416(3)(a), F.A.C., and 40 CFR 60.33b(a)(3), mercury emissions shall be limited to (1) 70 micrograms per dry standard cubic meter, corrected to 7 percent oxygen or (2) 15 percent of the potential mercury emission concentration (85-percent reduction by weight), corrected to 7 percent oxygen, respectively, whichever is less stringent.
- 12. The request to change excess emissions reporting from "quarterly" to "semiannual", as contained in Specific Condition No. 7.c., in AC35-115379/PSD-FL-113(A), is acceptable and is also in compliance with the 40 CFR 60.7(c) requirements. In addition, the text of 40 CFR 60.7(c)(1) thru (4) will be stated verbatim from the regulations and the rule citing for "(5)" will be corrected to 40 CFR 60.7(f). Therefore, the following is changed:

## FROM:

The owner or operator shall submit excess emissions reports for any calendar quarter during which there are excess emissions from the facility. If there are no excess emissions during the calendar quarter, the owner or operator shall submit a report semiannually stating that no excess emissions occurred during the semiannual reporting period. The report shall include the following:

- (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. (60.7(c)(1))
- (2) Specific identification of each period of excess emissions that occurs during startups, shutdowns, and malfunctions of the furnace boiler system. The nature and cause of any malfunction (if known) and the corrective action taken or preventative measures adopted. (60.7(c)(2))
- (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. (60.7(c)(3))

- (4) When no excess emissions have occurred or the continuous monitoring system has not been inoperative, repaired, or adjusted, such information shall be stated in the report. (60.7(c)(4))
- (5) The owner or operator shall maintain a file of all measurements, including continuous monitoring systems performance evaluations; monitoring systems or monitoring device calibration; checks; adjustments and maintenance performed on these systems or devices; and, all other information required by this permit recorded in a permanent form suitable for inspection. (60.7(d))

#### TO:

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 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. (40 CFR 60.7(c)(1))
- (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. (40 CFR 60.7(c)(2))
- (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. (40 CFR 60.7(c)(3))
- (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)(4))
- (5) 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))
- 13. and 17. The first request is to include a permit amendment (AC35-115379/PSD-FL-113(D)) clerked June 22, 1995. The second request is to change the "Project Description" to reflect the current operations for fuel. The requests are acceptable and will require changes to the generic definition of MSW established in Response 2 b., above, for Specific Condition 1.e. (AC35-115379/PSD-FL-113(A)) and will be as follows (see sections (1), (3), (5), (7) and (9 (new)) for the changes being made):

#### FROM:

## Methods of Operation - Fuels.

- (1) Municipal Solid Waste. The primary fuels for each combustor are MSW or wood chips.
- (2) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only natural gas or propane. The auxiliary burners may be used at startup during the introduction of any approved MSW fuel or wood chips until design furnace gas temperature is achieved; at shutdowns; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of any approved MSW fuel or wood chips.
- (3) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW, which are described in categories (5), (6) and (7), below. However, the facility
  - (a) shall not burn:
    - (1) those materials that are prohibited by state or federal law;
    - (2) those materials that are prohibited by this permit;
    - (3) hazardous waste;
    - (4) nuclear waste;
    - (5) radioactive waste;

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- (6) sewage sludge;
- (7) used oil, except for what is generated on site; or,
- (8) explosives; and;
- (b) shall not knowingly burn:
  - (1) untreated biomedical waste <u>from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C.</u>, and from other similar generators (or sources);
  - (2) segregated loads of biological waste;
  - (3) lead acid batteries; or,
  - (4) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- (4) 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 a percentage weight limitation, below [see (6) and (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.

- (5) 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:
  - (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.
- (6) <u>Waste Tires</u>. 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 <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
- (7) Other Solid Waste/Segregated Loads. 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, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
  - (a) Construction and demolition debris.
  - (b) The maximum percentage of oil-contaminated solid waste (non-hazardous solid waste contaminated with virgin or used oil products) defined as oil spill clean-up debris and absorbing media, including oil filters, fired in each combustor is 20%, by weight, of the total solid waste input, determined as a daily average on a calendar monthly basis. All "used oil" shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. The used oil shall not have a polychlorinated biphenyl (PCB) content equal to or greater than 50 ppm, by weight.

- (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 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.
- (8) Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of the Department of Environmental Protection.

#### TO:

#### Methods of Operation - Fuels.

- (1) <u>Municipal Solid Waste</u>. Each municipal waste combustor shall be fueled with municipal solid waste (MSW), which includes wood chips (made from virgin or clean wood), waste tires, internally generated used oil, non-hazardous waste contaminated with oil, and other solid waste/segregated loads, as defined below.
- (2) <u>Auxiliary Burners</u>. The auxiliary burners are permitted to fire only natural gas or propane. The auxiliary burners may be used at startup during the introduction of any approved MSW fuel until design furnace gas temperature is achieved; at shutdowns; and, at other times when necessary and consistent with good combustion practices. All air pollution control and continuous emissions monitoring equipment shall be operational and functioning properly prior to the incineration or ignition of any approved MSW fuel.
- (3) <u>Unauthorized Fuel</u>. Subject to the limitations contained in this permit, the authorized fuels for the facility also include the other solid wastes that are not MSW, which are described in categories (5), (6) and (7), below. However, the facility
  - (a) shall not burn:
    - (1) those materials that are prohibited by state or federal law;
    - (2) those materials that are prohibited by this permit;
    - (3) hazardous waste;
    - (4) nuclear waste;
    - (5) radioactive waste;
    - (6) sewage sludge;
    - (7) used oil, except for what is generated on-site (no used oil in liquid form from outside generators); or,
    - (8) explosives; and,
  - (b) shall not knowingly burn:
    - (1) untreated biomedical waste <u>from biomedical waste generators regulated pursuant to Chapter 64E-16, F.A.C., and from other similar generators (or sources)</u>;
    - (2) segregated loads of biological waste;
    - (3) lead acid batteries; or,
    - (4) beryllium-containing waste, as defined in 40 CFR 61, Subpart C.
- (4) 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 a percentage weight limitation, below [see (6) and (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.

(5) 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:

## SOLID WASTE FROM ON-SITE OPERATIONS

## Used Oil from on-site operations

(a) The constituents and properties of the *on-spec used oil* generated from on-site operations shall comply with the following allowable concentration levels, as stipulated and defined in 40 CFR 279.10 (July 1, 1998 version), which is adopted by reference in Rule 62-730.181, F.A.C.

Constituent/Property	Allowable Concentration
Cadmium	2 ppm maximum
Arsenic	5 ppm maximum
Chromium	10 ppm maximum
Lead	100 ppm maximum
Total Halogens	4000 ppm maximum
Flash Point	100°F minimum
Polychlorinated Byphenyls (PCBs)	Less than 2 ppm

NOTE: Used oil containing more than 1000 ppm halogens is presumed to be a hazardous waste under the rebuttable presumption provided under 40 CFR 279.10(b)(1). Such oil is subject to subpart H of Part 266 of this chapter rather than this part when burned for energy recovery unless the presumption of mixing can be successfully rebutted.

- (b) On site generated on-specification used oil, oily water, oily sludge, spent greases and oily solid waste (such as rags) burned at this facility shall not be a hazardous waste as defined by Rule 62-730.030, F.A.C., or 40 CFR Part 261 (July 1, 1999 version). These materials shall conform to the standards of 40 CFR 279.11 and 40 CFR 761.20(e). It shall not include fuels or blended fuels consisting in whole or in part of hazardous waste or which include mixture of any solid waste generated from the treatment, storage, or disposal of hazardous waste. The onspec used oil shall be burned in compliance with Section 403.769(3), F.S. Records shall be maintained showing the tonnages of internally-generated used oil fired.
- (c) The on-site generated *on-specification* used oil samples (representative of the material disposed of) shall be analyzed by EPA Recommended Analytical Procedures for Used Oil for the following constituent/property, associated unit, and using the test methods indicated:

Constituent/Property	Unit	Test Method
Cadmium	ppm	EPA SW-846(6010)
Arsenic	ppm	EPA SW-846(6010)
Chromium	ppm	EPA SW-846(6010)
Lead	ppm	EPA SW-846(6010)
Total Halogens	ppm	EPA SW-846(9252)
Sulfur	percent	ASTM D129 or ASTM D1552
Flash Point	degree F	EPA SW-846(1010)
Heat of Combustion	Btu/gal	ASTM D240
Density	lbs/gal	
Polychlorinated Byphenyls (PCB's)	ppm	EPA SW-846(0010) and EPA 680
Ash		

NOTE: Other test methods may be used only after receiving prior written approval from the Department.

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#### SOLID WASTE FROM OFF-SITE OPERATIONS

- (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.
- (6) <u>Waste Tires</u>. 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 <u>segregated loads</u> and burned at the facility shall not exceed 3%, by weight, of the facility's total fuel. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
- (7) Other Solid Waste/Segregated Loads. 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, unless otherwise stated. Compliance with this limitation shall be determined as a daily average on a calendar monthly basis.
  - (a) Construction and demolition debris.
  - (b) The maximum percentage of oil-contaminated solid waste (non-hazardous solid waste contaminated with virgin or used oil products) defined as oil spill clean-up debris and absorbing media, including oil filters, fired in each combustor is 20%, by weight, of the total solid waste input, determined as a daily average on a calendar monthly basis. All "used oil" shall comply with the definition stated in 40 CFR 260.10 and shall not exceed the specification levels for arsenic, cadmium, chromium, lead, and total halogens contained in Table 1 of 40 CFR 279.11, or contain any hazardous waste as defined in 40 CFR 261.3. The used oil shall not have a polychlorinated biphenyl (PCB) content equal to or greater than 50 ppm, by weight.
  - (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 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.
- (8) Other fuels or wastes shall not be burned without prior specific written approval of the Secretary of the Department of Environmental Protection.

- (9) Other Solid Waste/Segregated Loads Recordkeeping. The following records shall be made and kept to demonstrate compliance with the other solid waste/segregated non-MSW percentage limitations of Specific Condition 1.e.:
  - (a) Each segregated load of non-MSW materials, that is subject to the percentage weight limitations of specific condition 1.e, 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 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 resulting 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 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 5% limitation.
  - (d) Each day, the total weight of other solid waste 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 other solid waste 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 oil-contaminated waste generator's written certification that the waste is non-hazardous. Documentation requirements shall include a written description of the waste, a material characterization form, and the applicable material safety data sheets for the waste components. Tonnages of oil-contaminated solid 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.

14. The request to increase the timeframe for excess emissions resulting from startup, shutdown, or malfunction contained in Rule 62-210.700(1), F.A.C., from two (2) hours to three (3) hours is acceptable. The referenced SIP rule was not contained in permit AC35-115379/PSD-FL-113(A). Therefore, the Specific Condition will be included in the Title V Operation Permit, 0690046-001-AV, as follows:

Excess emissions 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 three (3) hours in any 24 hour period unless specifically authorized by the Department for longer duration.

- 15. See response #6, above.
- 16. Since the emission limitations in 40 CFR 60, Subpart Cb, are in stated in terms of "corrected to 7%  $O_2$ " and not "corrected to 12%  $CO_2$ ", then the requirement to have and maintain a  $CO_2$  monitor is obsolete. Specific Conditions 5. and 5.f. in AC35-115379/PSD-FL-113(A) are changed as follows:

### FROM:

- 5. Continuous Emission Monitoring
- Continuous emission monitors for opacity, oxygen, carbon monoxide, carbon dioxide, and sulfur dioxide shall be installed, calibrated, maintained and operated for each unit.
- f. Average CO and SO<sub>2</sub> emission concentration, corrected for CO<sub>2</sub>, shall be computed in accordance with the appropriate averaging time periods included in Condition No. 3.

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TO:

5. Continuous Emission Monitoring

Continuous emission monitors for opacity, oxygen, carbon monoxide, and sulfur dioxide shall be installed, calibrated, maintained and operated for each unit.

- f. Average CO and SO<sub>2</sub> emission concentration, corrected for O<sub>2</sub>, shall be computed in accordance with the appropriate averaging time periods included in Condition No. 3.
- 17. See combined Response 13. and 17., above.
- 18. The request is to establish the emissions limitations from 40 CFR 60, Subpart Cb, and where more stringent, Rule 62-296.416, F.A.C., Waste-to-Energy Facilities. The request is acceptable and the following limitations from Specific Condition 3. in AC35-115379/PSD-FL-113(A) are changed as follows (the changes will reflect any changes made previously by earlier Responses):

#### FROM:

Flue gas emissions from each unit shall not exceed the following:

a. Particulate

0.0150 grains/dscf corrected to 12% CO<sub>2</sub>.

b. Sulfur Dioxide

60 ppmdv corrected to 12% CO2, 6-hour rolling average;

or

70% reduction of uncontrolled SO<sub>2</sub> emissions, 6-hour rolling average. Not to exceed 120 ppmdv

corrected to 12% CO<sub>2</sub>, 6-hr rolling average.

c. Nitrogen Oxides

385 ppmdv corrected to 12% CO<sub>2</sub>.

d. Carbon Monoxide 200 ppmdv as carbon corrected to 12% CO<sub>2</sub>.

e. Reserved. (see Response 9, above, for VOC).

f. Lead

3.1 x 10<sup>-4</sup> gr/dscf corrected to 12% CO<sub>2</sub>.

g. Reserved. (see Response 10, above, for Fluoride).

h. Reserved. (see Response 8, above, for Beryllium).

i. Mercury

3.4 x 10<sup>-4</sup> gr/dscf corrected to 12% CO<sub>2</sub>.

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TO:	
a. Particulate	The maximum emission limit for particulate matter contained in the gases discharged to the atmosphere is 27 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
b. Sulfur Dioxide	The maximum emission limit for sulfur dioxide contained in the gases discharged to the atmosphere is:
	(1) 29 parts per million by volume, corrected to 7 percent oxygen (dry basis), and based on a 24-hour daily geometric mean; or,
	(2) 25 percent of the potential sulfur dioxide emission concentration (75-percent reduction by weight or volume), corrected to 7 percent oxygen (dry basis), and based on a 24-hour daily geometric mean, whichever is less stringent.
c. Nitrogen Oxides	The maximum emission limit for nitrogen oxides contained in the gases discharged to the atmosphere is 205 parts per million by volume, corrected to 7 percent oxygen, dry basis.
d. Carbon Monoxide	The maximum emission limit for carbon monoxide contained in the gases discharged to the atmosphere 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, and based on a 4-hour block average.
e. Reserved.	
f. Lead	The maximum emission limit for lead contained in the gases discharged to the atmosphere is 0.44 milligrams per dry standard cubic meter, corrected to 7 percent oxygen.
g. Reserved. h. Reserved.	- · · · · · · · · · · · · · · · · · · ·
i. Mercury	The maximum emission limit for mercury contained in the gases discharged to the atmosphere is:  (1) 70 micrograms per dry standard cubic meter, corrected to 7 percent oxygen; or,

This permit (letter) is issued pursuant to Chapter 403, Florida Statutes (F.S.). Any party to this order 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.

corrected to 7 percent oxygen, whichever is less stringent.

Executed in Tallahassee, Florida.

Sincerely

Howard L. Rhodes

Director

Division of Air Resources Management

(2) 15 percent of the potential mercury emission concentration (85-percent reduction by weight),

## CHF/BM/m

#### Enclosure

cc: Mr. Gregg Worley, Region 4, U.S. EPA

Mr. Len Kozlov, DAPA, CD

Mr. William Robert Crellin, Jr., P.E., CLI

Mr. Cecil Boatwright, CLI, Facility Manager

Mr. Brian Bahor, QEP, V.P. - Environmental Permitting, CECI (Application Contact)

Mr. Welton Cadwell, Chairman, Lake County BCC

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<ul> <li>Complete items 1, 2, and 3. Also complete item 4 if Restricted Delivery is desired.</li> <li>Print your name and address on the reverse so that we can return the card to you.</li> <li>Attach this card to the back of the mailpiece, or on the front if space permits.</li> </ul>	A. Received by (Please Print Clearly)  B. Date of Delivery  C. Signature  Agent  Addressee
1. Article Addressed to: Mr. Leon Brasowski Vice President, Environmental Permitting Covanta Energy Corporation,	D. Is delivery address different from item 19-
O Lane Road airfield, N.J. 07004	3. Service Type  X Certified Mail
/ :	4. Restricted Delivery? (Extra Fee)
2. Article Number (Copy from service label) 7000 0520 0020 9371 1731	