DRAFT PERMIT MODIFICATION

PERMITTEE

Brevard Energy, LLC
29261 Wall Street
Wixom, Michigan 48393

Authorized Representative:
Mr. Scott Salisbury
Managing Member, Energy Section

Air Permit No. 0090069-009-AC
(PSD-FL-378C)
Permit Expires: June 20, 2012
Brevard County Solid Waste
Management Central Disposal Facility
Permit Limit Modification
Landfill Gas Engines

PROJECT

This is the final air construction permit, which modifies emissions limits and compliance testing requirements for carbon monoxide and particulate matter with an aerodynamic diameter of less than 10 micrometers for the landfill gas-fired engines. The Brevard County Solid Waste Management Central Disposal Facility is located at 2250 Adamson Road, Cocoa, Brevard County. The facility's universal transverse mercator (UTM) system coordinates are Zone 17; 516.75 kilometers East; 3140.57 kilometers North.

This final permit is organized into the following sections: Section 1 (General Information); and Section 2 (Permit Revisions). As noted in the Final Determination provided with this final permit, only minor changes and clarifications were made to the draft permit.

STATEMENT OF BASIS

This air pollution construction permit is issued under the provisions of: Chapter 403 of the Florida Statutes (F.S.) and Chapters 62-4, 62-204, 62-210, 62-212, 62-296 and 62-297 of the Florida Administrative Code (F.A.C.). This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is subject to the preconstruction review requirements for major stationary sources in Rule 62-212.400, F.A.C. for the Prevention of Significant Deterioration (PSD) of Air Quality. A copy of this permit modification shall be filed with the referenced permit and shall become part of the permit.

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

Executed in Tallahassee, Florida

(DRAFT)

_____ _____

Jeffery F. Koerner, Program Administrator (Date)
Permitting and Compliance Section
Division of Air Resource Management

CERTIFICATE OF SERVICE

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

Mr. Scott Salisbury, Brevard Energy, LLC. (scott.salisbury@landfillenergy.com)
Mr. Rob Harvey, P.E., Derenzo and Associates, Inc (rharvey@derenzo.com)
Mr. Euripides Rodriguez, Brevard Board of County Commissioners (euripides.rodriguez@brevardcounty.us)
Ms. Caroline Shine, Central District Office (caroline.shine@dep.state.fl.us)
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)
Ms. Vickie Gibson, DEP BAR Reading File (victoria.gibson@dep.state.fl.us)

Clerk Stamp

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

(DRAFT)

_____ _____
(Clerk) (Date)

FACILITY DESCRIPTION

Brevard County Solid Waste Management Central Disposal Facility (Central Disposal Facility) operates a Class I municipal solid waste (MSW) landfill in Cocoa, Brevard County which is allocated for Class I MSW. Landfill gas (LFG) is a product of the microbial decomposition of waste and is extracted by recovery wells that are located in both active and capped cells of the landfill.

PROPOSED PROJECT

This draft permit revises the permitted emissions limits and compliance testing requirements for carbon monoxide (CO) and particulate matter with an aerodynamic diameter of less than 10 micrometers (PM_{10}).

This project affects the following existing emissions units.

EU No.	Emissions Unit Description
004 - 009	Six Caterpillar Model G3520C internal combustion engines and electrical generators that are exclusively fueled with LFG. Each engine has an energy output of 2,233 brake horsepower at 100% load and generates 1,600 kilowatt of power. The LFG is pretreated by filtering, compressing, and dewatering prior to combustion in the engines.

FACILITY REGULATORY CLASSIFICATION

- The facility is not a major source of hazardous air pollutants (HAP).
- The facility does not operate units subject to the acid rain provisions of the Clean Air Act (CAA).
- The facility is a Title V major source of air pollution in accordance with Chapter 213, F.A.C.
- The facility is a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.
- The facility operates units subject to the following applicable New Source Performance Standards (NSPS) in Title 40, Part 60 of the Code of Federal Regulations (40 CFR 60): Subpart A (General Provisions), Subpart WWW (MSW Landfills).
- The facility operates units subject to the following applicable National Emissions Standards for Hazardous Air Pollutants (NESHAP) in Title 40, Part 63 of the Code of Federal Regulations (40 CFR 63): Subpart A (General Provisions), Subpart AAAA (MSW Landfills), and Subpart ZZZZ (Reciprocating Internal Combustion Engines).

Permit Being Modified: Permit No. 0090069-004-AC (PSD-FL-378)

Affected Emissions Units: EU-004 through EU-009

The following permit conditions are revised as indicated. ~~Strikethrough~~ is used to denote the deletion of text. An underline is used to denote the addition of text.

A. FUEL SPECIFICATIONS AND WORK PRACTICES

Add the following new condition:

14. **NESHAP Subpart ZZZZ**: The National Emission Standards for Hazardous Air Pollutants (NESHAP) for Reciprocating Internal Combustion Engines (RICE) to Subpart ZZZZ of Part 63 for Existing Stationary RICE located at area sources states that at a minimum the following maintenance shall be performed:

a) Change oil and filter every 1,440 hours of operation or annually, whichever comes first. Sources have the option to utilize an oil analysis program as described in § 63.6625(i) in order to extend the specified oil change requirement;

b) Inspect spark plugs every 1,440 hours of operation or annually, whichever comes first; and

c) Inspect all hoses and belts every 1,440 hours of operation or annually, whichever comes first, and replace as necessary.

[40 CFR Part 63, Subpart ZZZZ, Rule 62-204.800, F.A.C.; Modifies Permit No. 0090069-004-AC (PSD-FL-378)]

B. EMISSION AND PERFORMANCE REQUIREMENTS

Revise the following conditions:

2. **Carbon Monoxide (CO)**: The emission rate of CO from each engine/generator set exhaust shall not exceed 3.50 grams per brake horsepower hour (g/bhp-hr) with a maximum of 17.23 lb/hr and 75.3 TPY ~~2.75 grams per brake horsepower hour (g/bhp-hr) with a maximum of 13.54 lb/hr and 59.30 TPY~~. **[Rule 62-212.400(BACT~~12~~), F.A.C.; and Modifies Permit No. 0090069-004-AC (PSD-FL-378)]**

3. **Particulate Matter less than 10 microns (PM_{10})**: ~~The emission rate of PM_{10} from each engine/generator set exhaust shall not exceed 0.24 g/bhp-hr and a maximum of 1.18 lb/hr and 5.17 TPY.~~ Particulate matter emissions shall be controlled from each engine/generator set exhaust through the implementation of the following pretreatment and good combustion practices.

a) Operate and maintain a landfill gas pretreatment system to dewater, filter and compress the landfill gas prior to combustion in the engines. During the final stage of pretreatment, the landfill gas shall pass through a coalescing filter of 1 micrometer or less to reduce particulate matter prior to combustion.

b) Implement good combustion practices to minimize particulate matter emissions: lean-burn combustion design, efficient combustion through the air-fuel controller and preventive and periodic maintenance in accordance with the requirements of 40 CFR 63, Subpart ZZZZ.

{Permitting Note: Pretreatment and good combustion practices are expected to result in a maximum PM_{10} emission rate of 0.24 g/bhp-hour, 1.18 lb/hr, and 5.17 TPY.}

[Rule 62-212.400(BACT~~12~~), F.A.C.; and Modifies Permit No. 0090069-004-AC (PSD-FL-378)]

7. **Opacity**: As determined by EPA Method 9, ~~V~~visible emissions from each engine/generator set exhaust shall not exceed 10% opacity. **[Rule 62-212.400(BACT), F.A.C.; and Modifies Permit No. 0090069-004-AC (PSD-FL-378)]**

C. TEST METHODS AND PROCEDURES

Revise the following condition:

2. Performance Test Methods

Initial (I), Annual (A) and permit renewal (R) compliance tests shall be performed in accordance with the following reference methods as described in 40 CFR 60, Appendix A and 40 CFR 51 Appendix M, adopted by reference in Chapter 62-204.800, F.A.C. Initial, annual and renewal compliance tests shall be conducted on only one of the six engines. A different engine shall be tested each year such that all engines are tested during the six-year cycle.

(a) EPA Method 7 or 7E – Determination of NOx Emissions from Stationary Sources (I,A);

(b) EPA Method 9 – Visual Determination of the Opacity of Emissions from Stationary Sources (I,A);

(c) EPA Method 10 – Determination of CO Emissions from Stationary Sources (I,A);

(d) EPA Method 18, 25, 25A or 25C – Measurement of Gaseous Organic Compounds Emissions (I,R);

(e) EPA Method 26 or 26A – Determination of Hydrogen Chloride (HCl) Emissions from Stationary Sources (I,A);

~~(f) EPA Method 201 – Determinations of PM_{10} Emissions (I,A)~~

EPA Methods 1 through 4 shall be used as necessary to support other test methods. No other test methods may be used for compliance testing unless prior DEP approval is received, in writing, from the Department. **[Rule 62-297.310(7), F.A.C.; and Modifies Permit No. 0090069-004-AC (PSD-FL-378)]]**