

Brevard Energy, LLC

29261 Wall Street, MI 48393

August 8, 2008

8/8/08
3PM EST
FAXED
TO: SYED ARIF: 850-921-9533

Ms. Trina Vielhauer, Bureau Chief
Bureau of Air Regulation
Department of Environmental Protection
STATE OF FLORIDA
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

RECEIVED

AUG 11 2008

BUREAU OF AIR REGULATION

Subject: Brevard Energy, LLC 007-AC
DEP File No. 0090069-004-AC (PSD-FL-378)
Request for Construction Permit Extension

Dear Ms. Vielhauer,

Brevard Energy, LLC (Brevard Energy) is submitting this document to request that the Florida Department of Environmental Protection, Bureau of Air Regulation (FDEP-BAR) issue an extension to Air Construction Permit No. PSD-FL-378 (File No. 0090069-004-AC).

Air Construction Permit No. PSD-FL-378 (Construction Permit):

1. Was issued to Brevard Energy on March 6, 2007;
2. Allows Brevard Energy to build and operate a landfill gas (LFG) fueled internal combustion (IC) engine electricity generation facility at the Brevard County Solid Waste Management Central Disposal Facility (Central Disposal Facility) in Cocoa, Brevard County; and
3. Has an expiration date of October 1, 2008.

Air Construction Permit No. PSD-FL-378 is attached for reference.

Analyses performed by Brevard Energy during the air permit review and approval process indicated that the fuel quality (Btu value) of the LFG recovered from the Central Disposal Facility was low relative to that observed at other similar LFG fueled power plant operations. Therefore, Brevard Energy expended significant time and effort immediately after the air permit was issued to investigate and implement improvements to the existing Central Disposal Facility LFG collection system in order to ensure that sufficient quantities of high quality fuel would be available to support its IC engine generator sets operations. Completion of the LFG collective system (wellfield) analyses and improvements was necessary prior to making considerable capital investments on the permitted power plant (i.e., the power plant construction activities were delayed until sufficient quantities and supplies of appropriate fuel were established).

Brevard Energy commenced commercial operation of four (4) of the permitted six (6) IC engine generator sets on approximately May 2, 2008, which is approximately fourteen (14) months following the issuance date of the Construction Permit.

Section III - Emission Unit(s) Specific Conditions, Condition 4 of the Construction Permit specifies that emission compliance testing is required *Within 60 days of achieving permitted capacity, but not later than 180 days following initial startup*. Brevard Energy has contracted a Florida source testing company to perform the required compliance tests during the week of September 22, 2008, which is within 180 days following facility startup date (October 29, 2008 deadline). A notification for the compliance tests is being prepared for submittal to the FDEP-BAR Central District Office.

Section II - Emission Unit(s) Administrative Requirements, Condition 6 of the Construction Permit specifies that *the permittee shall apply for a Title V operation permit at least 90 days prior to expiration, but no later than 180 days after commencing operations. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results and such additional information as the Department may by law require*.

Brevard Energy is requesting an extension of the issued Construction Permit (which is scheduled to expire on October 1, 2008) to allow for the completion of the initial compliance demonstration (stack tests) and submittal of these results with the Title V operation permit application. Based on guidance provided by the FDEP-BAR on August 7, 2008, the requested Construction Permit expiration date should be sufficient for preparation of the Title V operation application with the stack test results and allow 90 days for an administrative completeness check by the regulatory agency (which allows for the permit shield to take effect prior to the Construction Permit expiration date).

Based on the information that is presented in this document, Brevard Energy requests that the expiration date of Air Construction Permit No. PSD-FI.-378 be extended from October 1, 2008 to April 1, 2009. The 6-month extension of the Construction Permit will provide an amount of time that is sufficient to:

1. Complete the initial compliance demonstration scheduled for the week of September 22, 2008;
2. Review the stack test results and incorporate this information into the Title V operation permit application;
3. Provide the landfill owner / operator (Brevard County) with the opportunity to review and approve the Title V operation permit application documents; and
4. Submit a technically and administratively complete Title V operation permit application to the FDEP-BAR (i.e., a request to modify the existing Title V Permit issued the Central Disposal Facility) by December 31, 2008.

Ms. Trina Vielhauer
FDEP Bureau of Air Regulation

August 8, 2008
Page 3

Brevard Energy, LLC appreciates FDEP-BAR consideration and approval of its request for a 6-month extension to the expiration date of Air Construction Permit No. PSD-FL-378.

Please contact us at (248) 380-3920 or our authorized agent Derenzo and Associates, Inc. (David Derenzo at 734-464-3880) if you have any questions or require additional information.

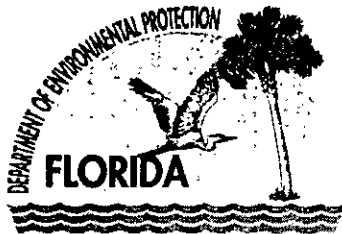
Sincerely,

BREVARD ENERGY, LLC

Handwritten signature of Scott Salisbury in cursive script.

Scott Salisbury
Managing Member

c: Gary Kuberski, FDEP Central District Office
Syed Arif, FDEP Headquarters
Bill Owen, Brevard Energy
Mike Laframboise, Brevard Energy
attachment



Florida Department of Environmental Protection

Bob Martinez Center
2600 Blair Stone Road
Tallahassee, Florida 32399-2400

Charlie Crist
Governor

Jeff Kottkamp
Lt. Governor

Michael W. Wolf
Secretary

PERMITTEE:

Brevard Energy, LLC
29261 Wall Street
Wixom, Michigan 48393

File No.	0090069-004-AC
Permit No.	PSD-FL-378
SIC No.	4953
Project:	Brevard County Solid Waste Management Central Disposal Facility Modification -- Landfill Gas Engines
Expires:	October 1, 2008

Secondary Responsible Official (Energy Section):

Mr. Scott Salisbury, Managing Member

Primary Responsible Official (Brevard County Solid Waste Management Central Disposal Facility):

Mr. Euripides Rodriguez, Director
Solid Waste Management Department – Brevard County

PROJECT AND LOCATION:


This permit covers the installation and operation of six (6) Caterpillar, Model G3520C, 2,233 brake-horsepower landfill gas-fired engines for the generation of up to a total of 9.6 megawatts (nominal rating) of electricity. The project is located at the Brevard County Solid Waste Management Central Disposal Facility at 2250 Adamson Road, Cocoa, Brevard County. UTM coordinates are Zone 17; 516.75 km E; 3140.57 km N.

STATEMENT OF BASIS:

This construction permit is issued under the provisions of Chapter 403 of the Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-204, 62-210, 62-212, 62-296, and 62-297. The above named permittee is authorized to modify the facility in accordance with the conditions of this permit and as described in the application, approved drawings, plans, and other documents on file with the Department of Environmental Protection (Department).

ATTACHMENTS MADE A PART OF THIS PERMIT:

Appendix BD	BACT Determination
Appendix GC	Construction Permit General Conditions



Joseph Kahn, Director
Division of Air Resource Management

STATE OF FLORIDA
DEPARTMENT OF ENVIRONMENTAL PROTECTION
NOTICE OF FINAL PERMIT

In the Matter of an
Application for Permit

Mr. Scott Salisbury, Managing Member
Brevard Energy, LLC
29261 Wall Street
Wixom, Michigan 48393

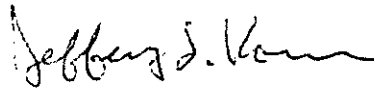
DEP File No. 0090069-004-AC
PSD-FL-378

Enclosed is the FINAL Permit Number PSD-FL-378 for the installation of six (6) lean burn Caterpillar Model G3520C landfill gas fueled internal combustion engines at the Brevard County Solid Waste Management Central Disposal Facility in Cocoa, Brevard County. This permit is issued pursuant to Chapter 403, Florida Statutes (F.S.) and Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality.

Any party to this order (permit) has the right to seek judicial review of the permit 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 Order is filed with the Clerk of the Department.

Executed in Tallahassee, Florida.

FOI



Trina L. Vielhauer, Chief
Bureau of Air Regulation

CERTIFICATE OF SERVICE

The undersigned duly designated deputy agency clerk hereby certifies that this NOTICE OF FINAL PERMIT (including the FINAL permit) and all copies were sent electronically (with Received Receipt) before the close of business on 3/6/07 to the person(s) listed:

Scott Salisbury, Trail Ridge Energy, LLC (scott.salisbury@landfillenergy.com)

Euripides Rodriguez, Director, SWMD (dgregory@seminolecountyfl.gov)

Gregg Worley, EPA (worley.gregg@epa.gov)

Dee Morse, NPS (dee_morse@nps.gov)

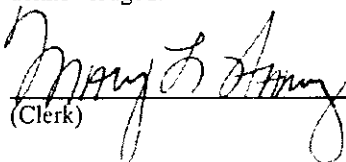
Len Kozlov, DEP-CD (leonard.kozlov@dep.state.fl.us)

Jeff Pope, P.E., Clayton Group Services, Inc. (jeff.pope@us.bureauveritas.com)

David Derenzo, Derenzo & Associates, Inc. (dderenzo@derenzo.com)

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)

3/6/07
(Date)

SECTION I – FACILITY INFORMATION

FACILITY DESCRIPTION

Brevard County Solid Waste Management Central Disposal Facility (Central Disposal Facility) operates a municipal solid waste (MSW) landfill in Cocoa, Brevard County which is allocated for Class I MSW. Methane-rich landfill gas produced from the decomposition of disposed waste materials is being collected by a gas recovery system. The collected gas is currently being diverted to the flaring system for control. Brevard Energy, LLC plans to construct and operate an electrical generation plant at the Central Disposal Facility. In order to reduce the amount of landfill gas (LFG) wasted by flaring, all available LFG from the landfill will be supplied to Brevard Energy, LLC for use as fuel to power the proposed internal combustion (IC) engine electrical generation plant. As a result of these changes, significant emission increases will occur for carbon monoxide (CO), particulate matter with an aerodynamic diameter of 10 microns or less (PM₁₀) and nitrogen oxides (NO_x).

REGULATORY CLASSIFICATION

The Central Disposal Facility is classified as a Major or Title V Source of air pollution because emissions of at least one regulated air pollutant, such as particulate matter (PM/PM₁₀), sulfur dioxide (SO₂), NO_x, CO, or volatile organic compounds (VOC) exceed 100 tons per year (TPY). The landfill facility is also classified as a Title V source since the design capacity of the landfill is greater than 2.5 million cubic meters and megagrams.

The facility is subject to the following Code of Federal Regulations (CFR):

- 40 CFR 60, Subpart A, General Provisions;
- Subpart WWW, Standards of Performance for Municipal Solid Waste Landfills;
- 40 CFR 63, Subpart A, General Provisions;
- 40 CFR 63, Subpart AAAAA, National Emission Standards for Hazardous Air Pollutants (NESHAP) for Municipal Solid Waste Landfills; and
- 40 CFR 63, Subpart ZZZZ, NESHAP for Stationary Reciprocating Internal Combustion Engines.

The proposed landfill gas-fueled IC engine electrical generation plant will be subject to Prevention of Significant Deterioration (PSD) review with respect to Rule 62-210.200(164)(a)2, F.A.C. due to its potential CO emissions being greater than 250 TPY. Best Available Control Technology (BACT) determinations are required for each pollutant emitted in excess of the Significant Emission Rates listed in Rule 62-210.200(242), F.A.C. For this project, the permit specifies BACT emissions standards for CO, NO_x and PM₁₀ emissions.

RELEVANT DOCUMENTS:

The documents listed below are specifically related to this permitting action and form the basis of the permit. They are on file with the Department:

- Application received 06-05-2006
- Department letters dated 07-03-2006 and 07-31-2006
- Applicant's letters received 07-26-2006 and 08-15-2006
- Modeling information received 11-06-2006
- Technical Evaluation and Preliminary Determination dated 01-16-2007
- Best Available Control Technology determination (issued concurrently with permit)

SECTION II – EMISSION UNIT(S) ADMINISTRATIVE REQUIREMENTS

1. **Regulating Agencies:** All documents related to applications for permits to operate, reports, tests, minor modifications and notifications shall be submitted to the Department's Central District Office, 3319 Maguire Boulevard, Suite 232, Orlando, Florida 32803-3767. All applications for permits to construct or modify emissions unit(s) subject to the PSD or Nonattainment (NA) review requirements should be submitted to the Florida Department of Environmental Protection (FDEP), Bureau of Air Regulation (BAR), 2600 Blair Stone Road, MS 5505, Tallahassee, Florida 32399-2400 (phone number 850/488-0114).
2. **General Conditions:** The owner and operator are subject to and shall operate under the attached General Permit Conditions G.1 through G.15 listed in Appendix GC of this permit. General Permit Conditions are binding and enforceable pursuant to Chapter 403 of the Florida Statutes. [Rule 62-4.160, F.A.C.]
3. **Terminology:** The terms used in this permit have specific meanings as defined in the corresponding chapters of the F.A.C.
4. **Applicable Regulations, Forms and Application Procedures:** Unless otherwise indicated in this permit, the construction and operation of the subject emissions unit shall be in accordance with the capacities and specifications stated in the application. The facility is subject to all applicable provisions of Chapter 403, F.S. and F.A.C. Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296, 62-297 and CFR Title 40, Parts 60 and 63, adopted by reference in the F.A.C. regulations. The permittee shall use the applicable forms listed in Rule 62-210.900, F.A.C. and follow the application procedures in Chapter 62-4, F.A.C. Issuance of this permit does not relieve the facility owner or operator from compliance with any applicable federal, state, or local permitting or regulations. [Rules 62-204.800, 62-210.300 and 62-210.900, F.A.C.]
5. **Expiration:** The permittee may, for good cause, request that this construction permit be extended. Such a request shall be submitted to the BAR prior to 60 days before the expiration of the permit. However, the permittee shall promptly notify the Department's Central District Office of any delays in completion of the project which would affect the startup day by more than 90 days. [Rule 62-4.090, F.A.C.]
6. **Application for Title V Permit:** This permit authorizes construction of the permitted emissions units and initial operation to determine compliance with Department rules. A Title V operation permit is required for regular operation of the permitted emissions unit. The permittee shall apply for a Title V operation permit at least 90 days prior to expiration, but no later than 180 days after commencing operation. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results, and such additional information as the Department may by law require. The application shall be submitted to the appropriate Permitting Authority with copies to the Compliance Authority. [Rules 62-4.030, 62-4.050, 62-4.220, and Chapter 62-213.420, F.A.C.]
7. **Source Obligation:** Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. This provision does not apply to the time period between constructions of the approved phases of a phased construction project except that each phase must commence construction within 18 months of the commencement date established by the Department in the permit. [Rule 62-212.400(12)(a), F.A.C.].
8. **BACT Determination:** For phased construction projects, the determination of best available control technology shall be reviewed and modified as appropriate at the latest reasonable time which occurs no later than 18 months prior to commencement of construction of each independent phase of the project. At such time, the owner or operator of the applicable stationary source may be required to demonstrate the adequacy of any previous determination of best available control technology for the source. [40 CFR 52.21(j)(4)]
9. **Annual Reports:** Pursuant to Rule 62-210.370(2), F.A.C., Annual Operation Reports, the permittee is required to submit annual reports on the actual operating rates and emissions from this facility. Annual operating reports using DEP Form 62-210.900(4) shall be sent to the DEP's Central District office by March

SECTION II – EMISSION UNIT(S) ADMINISTRATIVE REQUIREMENTS

1st of each year.

10. Stack Testing Facilities: Stack sampling facilities shall be installed in accordance with Rule 62-297.310(6), F.A.C.
11. New or Additional Conditions: For good cause shown and after notice and an administrative hearing, if requested, the Department may require the permittee to conform to new or additional conditions. The Department shall allow the permittee a reasonable time to conform to the new or additional conditions, and on application of the permittee, the Department may grant additional time. [Rule 62-4.080, F.A.C.]

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

SUBSECTION A. SPECIFIC CONDITIONS

The Specific Conditions listed in this section apply to the following emission units:

EMISSION UNIT NO.	EMISSION UNIT DESCRIPTION
004 - 009	Six Caterpillar Model G3520C landfill gas-fueled internal combustion engines and electrical generators. Each engine has a power generation rating of 2,233 brake horsepower at 100 percent load. The generator has a power output rating of 1,600 kilowatt. The engines will be fueled exclusively with LFG generated by and received from the Central Disposal Facility. The landfill gas will go through a gas treatment system prior to combustion in the engines.

A. FUEL SPECIFICATIONS AND WORK PRACTICES

1. This permit authorizes the installation and operation of six (6) Caterpillar, Model G3520C, 2,233 brake-horsepower landfill gas-fired engines for the generation of up to a total of 9.6 megawatts (nominal rating) of electricity. The maximum power generation rating of each engine shall be 2,233 brake horsepower (bhp). Authorization to construct shall expire if construction is not commenced within 18 months after receipt of the permit, if construction is discontinued for a period of 18 months or more, or if construction is not completed within a reasonable time. **[Rule 62-212.400, F.A.C.]**

{Permitting Note: The power generation rating of 2,233 bhp is based on a minimum fuel heating value requirement of 467 British thermal units per standard cubic foot (BTU//scf) and landfill gas usage of 580 standard cubic feet per minute (scfm) per engine.}
2. This permit authorizes the installation of a LFG Treatment System including gas compression (via blowers), liquids removal (via knock-out and chilling), and particulate removal (via 1 micron primary and polishing filters). The gas treatment system shall not be equipped with atmospheric vents. **[Rule 62-212.400, F.A.C., 40 CFR 60.752 and Appendix J of the application]**
3. Emissions Units Nos. 004-009 are subject to 40 CFR 60 Subpart WWW and certain sections of 40 CFR 63 Subparts AAAA and ZZZZ adopted by the Department at Rule 62-204.800(8)(b) and 62-204.800(11)(b), F.A.C. **[Rules 62-204.800 and 62-210.300, F.A.C.]**
4. Unless otherwise indicated, the modification/construction and operation of the Caterpillar internal combustion engines shall be in accordance with the capacities and specifications stated in the application. **[Rule 62-210.300, F.A.C.]**
5. No person shall cause, suffer, allow, or permit the discharge of air pollutants which cause or contribute to an objectionable odor. **[Rule 62-296.320, F.A.C.]**
6. No person shall circumvent any air pollution control device, or allow the emission of air pollutants without the applicable air pollution control device operating properly. **[Rule 62-210.650, F.A.C.]**
7. Fuel fired in the engines is limited to LFG. The use of any other fuel will require an amendment to this permit. **[Rule 62-212.400, F.A.C.]**
8. The permittee shall operate each engine at the air-to-fuel ratio that the tested engine demonstrated compliance during the performance test required by Specific Condition C.2 or the most recent performance test if a subsequent performance test is conducted. **[Rule 62-212.400, F.A.C.]**
9. The permittee shall operate each engine within 0.5% of the Oxygen (O₂) content in the exhaust gas at the air-to-fuel ratio that the tested engine demonstrated compliance during the performance test required by Specific

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

Condition C.2 or the most recent performance test if a subsequent performance test is conducted. [Rule 62-212.400, F.A.C. and Appendix F of the application]

10. The permittee shall install and maintain an automatic fail-safe block valve on each engine. The fail-safe block valve must stop the flow of LFG in the event of an engine failure. [Rule 62-4.070, F.A.C.]
11. Excess LFG not used as fuel in an engine must be flared in accordance with the requirements of 40 CFR 60 Subpart WWW. [Rule 62-4.070, F.A.C.]
12. Each engine/generator set may operate up to 8,760 hours per year. [Rule 62-210.200(232), F.A.C.]
13. The emissions units shall be subject to the following:
 - a. Excess emissions resulting from startup, shutdown or malfunction of any source shall be permitted providing (1) best operational practices to minimize emissions are adhered to and (2) the duration of excess emissions shall be minimized but in no case exceed two hours in any 24 hour period unless specifically authorized by the Department for longer duration. [Rule 62-210.700, F.A.C.]
 - b. Excess emissions which are caused entirely or in part by poor maintenance, poor operation, or any other equipment or process failure which may reasonably be prevented during startup, shutdown, or malfunction shall be prohibited. [Rule 62-210.700, F.A.C.]
 - c. In case of excess emissions resulting from malfunctions, each source shall notify the Department in accordance with Rule 62-4.130, F.A.C. A full written report on the malfunctions shall be submitted in a quarterly report, if requested by the Department. [Rule 62-210.700, F.A.C.]

B. EMISSION AND PERFORMANCE REQUIREMENTS

1. **Nitrogen oxides (NO_x):** The emission rate of NO_x from each engine/generator set exhaust shall not exceed 0.60 gram per brake horsepower hour (g/bhp-hr) and a maximum of 2.95 pounds per hour (lb/hr) and 12.94 TPY. [Rule 62-212.400(12), F.A.C.]
2. **Carbon Monoxide (CO):** The emission rate of CO from each engine/generator set exhaust shall not exceed 2.75 g/bhp-hr and a maximum of 13.54 lb/hr and 59.30 TPY. [Rule 62-212.400(12), F.A.C.]
3. **Particulate Matter less than 10 microns (PM₁₀):** The emission rate of PM₁₀ 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. [Rule 62-212.400(12), F.A.C.]
4. **Volatile Organic Compound (VOC):** The emission rate of total VOC from each engine/generator set exhaust shall not exceed 0.28 g/bhp-hr and a maximum of 1.37 lb/hr and 5.99 TPY. [Rule 62-212.400(12), F.A.C.]
{Permitting Note: Project avoids PSD review for VOC based on emission limits.}
5. **Hydrogen Chloride (HCl):** The emission rate of HCl from each engine/generator set shall not exceed 10.9 lb/MMscf and 1.66 TPY. [Rule 62-210.200(184), F.A.C.]
{Permitting Note: Facility remains a minor source of HAP's emissions based on permit limits.}
6. **Sulfur Dioxide (SO₂):** The emission rate of SO₂ from each engine/generator set shall not exceed 27.5 pound per million standard cubic feet (lb/MMscf). [Rule 62-212.400(12), F.A.C.]
{Permitting Note: Project avoids PSD review based on permit limits.}

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

7. Visible emissions from each engine/generator set exhaust shall not exceed 10% opacity. **[Rule 62-212.400, F.A.C.]**

C. TEST METHODS AND PROCEDURES

1. Sampling Facilities

The permittee shall design the internal combustion engine stack to accommodate adequate testing and sampling locations in order to determine compliance with the applicable emission limits specified by this permit. **[Rule 62-297.310(6), F.A.C.]**

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 NO_x 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 PM₁₀ 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.]**

3. The permittee shall comply with the following requirements to monitor the sulfur and chlorine content of the landfill gas:
- a. At least 180 days prior to commercial startup of the engines, the permittee shall sample and analyze the landfill gas for sulfur and chlorine content. The gas sample collected for the analyses shall be a composite sample and collected under normal operating conditions (i.e., with valves open for all operating cells). The gas sample collection and analyses for sulfur and chlorine content shall be done semi-annually. Based on the sampling results and Rule 62-297.310(7)(b), F.A.C., the Department may request additional gas sampling and analyses. Results shall be reported as SO₂ and HCl emission factors in terms of lb/MMscf of landfill gas.
 - b. During each required compliance test conducted for HCl, the permittee shall sample and analyze the landfill gas for the chlorine content. Results for the compliance test shall be reported in terms of HCl emissions in lb/hr and the sample analysis result shall be reported as HCl emission factor in terms of lb/MMscf of landfill gas.

SECTION III – EMISSION UNIT(S) SPECIFIC CONDITIONS

- c. Analysis of the chlorine content shall be used to track changes in the landfill gas. Based on the analysis, the Compliance Authority may require additional stack testing for HCl emissions to determine compliance with the emissions standard.
- d. Compliance with the fuel sulfur specification shall be determined based on each analysis for the sulfur content of the landfill gas.

[Rules 62-210.200(184), 62-210.200(232) and 62-212.400(12), F.A.C.]

- 4. Within 60 days of achieving the permitted capacity, but no later than 180 days after initial startup, and annually, the subject emissions units as described in Specific Condition C.2 shall be tested for compliance with the applicable emission limits. For the duration of all tests the emission units shall be operating at permitted capacity. Permitted capacity is defined as 90-100 percent of the maximum operating rate allowed by the permit. If it is impracticable to test at permitted capacity, then the emission unit may be tested at less than permitted capacity (i.e., 90% of the maximum operating rate allowed by the permit); in this case, subsequent emission unit operation is limited to 110 percent of the test load until a new test is conducted. Once the emission unit is so limited, then operation at higher capacities is allowed for no more than 15 consecutive days for the purposes of additional compliance testing to regain the permitted capacity in the permit. **[Rule 62-297.310, F.A.C.]**

D. RECORDKEEPING, REPORTING AND MONITORING REQUIREMENTS

- 1. Total landfill gas flow to the engines shall be continuously measured and recorded. **[Rule 62-210.200 (232), F.A.C.]**
- 2. Gross electrical power generation (kw-hrs) shall be continuously measured and recorded for each engine individually and for the six engines combined. **[Rule 62-210.200(232), F.A.C.]**
- 3. Each engine/generator set shall be equipped with a non-resettable elapsed time meter to indicate, in cumulative hours, the elapsed engine operating time. **[Rule 62-210.200(232), F.A.C.]**
- 4. The permittee shall maintain the following records on a monthly basis:
 - a. The hours of operation of each engine/generator set, including any start-up, shutdown or malfunction in the operations of the engine/generator set.
 - b. The total landfill gas flow to each engine.
 - c. Gross electrical power generation in kw-hr for each engine and the six engines combined.**[Rule 62-210.200(232), F.A.C.]**
- 5. The permittee shall submit the results and the corresponding data of the site-specific HCl emission factor and the SO₂ emission factor within 45 days of gas sampling to BAR. The results shall also be submitted to the Central District Office. **[Rules 62-210.200(232) and 62-210.200(264), F.A.C.]**

Brevard Energy, LLC
29261 Wall Street, MS 48393

August 8, 2008

FAX

TO: SYED ARIF: 850-921-9333

Ms. Trina Vielhauer, Bureau Chief
Bureau of Air Regulation
Department of Environmental Protection
STATE OF FLORIDA
2600 Blair Stone Road, MS 5505
Tallahassee, FL 32399-2400

Subject: Brevard Energy, LLC
DEP File No. 0090069-004-AC (PSD-FL-378)
Request for Construction Permit Extension

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Air Construction Permit No. PSD-FL-378 (Construction Permit):

1. Was issued to Brevard Energy on March 6, 2007;
2. Allows Brevard Energy to build and operate a landfill gas (LFG) fueled internal combustion (IC) engine electricity generation facility at the Brevard County Solid Waste Management Central Disposal Facility (Central Disposal Facility) in Cocoa, Brevard County; and
3. Has an expiration date of October 1, 2008.

Air Construction Permit No. PSD-FL-378 is attached for reference.

Analyses performed by Brevard Energy during the air permit review and approval process indicated that the fuel quality (Btu value) of the LFG recovered from the Central Disposal Facility was low relative to that observed at other similar LFG fueled power plant operations. Therefore, Brevard Energy expended significant time and effort immediately after the air permit was issued to investigate and implement improvements to the existing Central Disposal Facility LFG collection system in order to ensure that sufficient quantities of high quality fuel would be available to support its IC engine generator sets operations. Completion of the LFG collective system (wellfield) analyses and improvements was necessary prior to making considerable capital investments on the permitted power plant (i.e., the power plant construction activities were delayed until sufficient quantities and supplies of appropriate fuel were established).

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Brevard Energy commenced commercial operation of four (4) of the permitted six (6) IC engine generator sets on approximately May 2, 2008, which is approximately fourteen (14) months following the issuance date of the Construction Permit.

Section III - Emission Unit(s) Specific Conditions, Condition 4 of the Construction Permit specifies that emission compliance testing is required *Within 60 days of achieving permitted capacity, but not later than 180 days following initial startup*. Brevard Energy has contracted a Florida source testing company to perform the required compliance tests during the week of September 22, 2008, which is within 180 days following facility startup date (October 29, 2008 deadline). A notification for the compliance tests is being prepared for submittal to the FDEP-BAR Central District Office.

Section II - Emission Unit(s) Administrative Requirements, Condition 6 of the Construction Permit specifies that *the permittee shall apply for a Title V operation permit at least 90 days prior to expiration, but no later than 180 days after commencing operations. To apply for a Title V operation permit, the applicant shall submit the appropriate application form, compliance test results and such additional information as the Department may by law require.*

Brevard Energy is requesting an extension of the issued Construction Permit (which is scheduled to expire on October 1, 2008) to allow for the completion of the initial compliance demonstration (stack tests) and submittal of these results with the Title V operation permit application. Based on guidance provided by the FDEP-BAR on August 7, 2008, the requested Construction Permit expiration date should be sufficient for preparation of the Title V operation application with the stack test results and allow 90 days for an administrative completeness check by the regulatory agency (which allows for the permit shield to take effect prior to the Construction Permit expiration date).

Based on the information that is presented in this document, Brevard Energy requests that the expiration date of Air Construction Permit No. PSD-FI.-378 be extended from October 1, 2008 to April 1, 2009. The 6-month extension of the Construction Permit will provide an amount of time that is sufficient to:

1. Complete the initial compliance demonstration scheduled for the week of September 22, 2008;
2. Review the stack test results and incorporate this information into the Title V operation permit application;
3. Provide the landfill owner / operator (Brevard County) with the opportunity to review and approve the Title V operation permit application documents; and
4. Submit a technically and administratively complete Title V operation permit application to the FDEP-BAR (i.e., a request to modify the existing Title V Permit issued the Central Disposal Facility) by December 31, 2008.

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Brevard Energy, LLC appreciates FDEP-BAR consideration and approval of its request for a 6-month extension to the expiration date of Air Construction Permit No. PSD-FL-378.

Please contact us at (248) 380-3920 or our authorized agent Derenzo and Associates, Inc. (David Derenzo at 734-464-3880) if you have any questions or require additional information.

Sincerely,

BREVARD ENERGY, LLC



Scott Salisbury
Managing Member

c: Garry Kuberski, FDEP Central District Office
Syed Arif, FDEP Headquarters
Bill Owen, Brevard Energy
Mike Laframboise, Brevard Energy
attachment