



# Florida Department of Environmental Protection

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

Rick Scott  
Governor

Jennifer Carroll  
Lt. Governor

Herschel T. Vinyard Jr.  
Secretary

August 19, 2011

*Sent by Electronic mail – Received Receipt Requested*

Ms. Kerri Stewart, Chief Administrative Officer  
City of Jacksonville  
Public Works Department  
117 West Duval Street, St. James Building, 4<sup>th</sup> Floor  
Jacksonville, FL 32202

Re: Trail Ridge Landfill, Trail Ridge Energy, LLC  
Landfill Gas-to-Energy Expansion  
Draft Permit No. No. 0310358-012-AC/PSD-FL-374C, Air Construction Permit Revision  
Draft Permit No. 0310358-013-AV, Title V Air Operation Permit Revision

Dear Ms. Stewart:

On March 17, 2011 you submitted an application and on June 20, 2011, you submitted additional information requesting authorization for installation and operation of four new Caterpillar Model No. G3520C engine generator sets and to modify the CO emissions standard as Best Available Control Technology (BACT) for the proposed and existing engine/generator sets. In addition, you requested a concurrent revision of the Title V air operation permit. The existing facility is located in Duval County at 5110 US Highway 301 South, Baldwin, Florida. The permit package includes the following documents:

- The Written Notice of Intent to Issue Air Permits provides important information regarding: the Permitting Authority's intent to issue air permits for the proposed project; the requirements for publishing a Public Notice of the Permitting Authority's intent to issue air permits; the procedures for submitting comments on the draft Title V air operation permit revision and the draft air construction permit revision; the process for filing a petition for an administrative hearing; and, the availability of mediation.
- The Public Notice of Intent to Issue Air Permits is the actual notice that you must have published in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The Public Notice of Intent to Issue Air Permits must be published as soon as possible and the proof of publication must be provided to the Department within seven days of the date of publication. Because this permit is being processed a combined draft permit in order to reduce processing time, a duplicate copy of the proof of publication must also be transmitted by electronic mail within seven days of the date of publication to Ms. Ana Oquendo at EPA Region 4 at the following address: [oquendo.ana@epamail.epa.gov](mailto:oquendo.ana@epamail.epa.gov).
- The Statement of Basis, which summarizes the facility, the equipment, and the primary rule applicability.
- The draft Title V air operation permit revision, which includes the specific permit conditions that regulate the emissions units covered by the proposed project. Only the appendices that were changed are included, all of the remaining appendices will be provided in the final permit.
- The Technical Evaluation and Preliminary Determination, which explains the revisions to underlying construction permit conditions.
- The draft air construction permit revision.

Please submit any written comments you wish to have considered concerning the permitting authority's proposed action to Mr. Syed Arif, P.E., Environmental Administrator, at the above letterhead address. If you have any questions, please contact the project engineer, Christy DeVore, by telephone at 850/717-9085 or by email at [christy.devore@dep.state.fl.us](mailto:christy.devore@dep.state.fl.us).

Sincerely,

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

Enclosures

JFK/scd

## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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*In the Matter of an  
Application for Air Permit by:*

City of Jacksonville  
Public Works Department  
117 West Duval Street, St. James Building, 4<sup>th</sup> Floor  
Jacksonville, FL 32202

Draft Construction Permit No. 0310358-012-AC/PSD-374C  
Draft Title V Permit No. 0310358-013-AV  
Trail Ridge Energy, LLC  
Landfill Gas-to-Energy Expansion  
Duval County, Florida

*Authorized Representative:*

Ms. Kerri Stewart, Chief Administrative Officer

**Facility Location:** City of Jacksonville operates the existing Trail Ridge Landfill where Trail Ridge Energy is located. The landfill is located in Duval County at 5110 US Highway 301 South, Baldwin, Florida.

**Project:** The Trail Ridge Landfill is an existing municipal solid waste landfill. The applicant proposes to install and operate four lean-burn reciprocating internal combustion engine/generator sets as part of the existing landfill gas-to-energy plant at the Trail Ridge Landfill. In addition, the applicant has requested a modification to the CO emissions standard as Best Available Control Technology (BACT) for the existing engine/generator sets. The landfill gas will be used to fuel the proposed four and existing six lean-burn reciprocating internal combustion engine/generator sets. The plant will have the potential to generate an additional 6.4 megawatts (MW) of electricity for a combined nominal 16 MW of power to the electrical grid. In addition, the applicant requested a concurrent revision of the Title V air operation permit. The two existing flares will be retained as additional combustion devices for the landfill gas. The landfill gas will be routed through a landfill gas treatment system and then to the engines. As necessary, residual landfill gas will be routed to the flares. The project is subject to the preconstruction review requirements of Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality for the following pollutants: carbon monoxide (CO), nitrogen oxides (NO<sub>x</sub>), total particulate matter (PM) and particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>). Details of the project are provided in the application and the enclosed Technical Evaluation and Preliminary Determination.

**Permitting Authority:** Applications for air construction permits and Title V air operation permits are subject to review in accordance with the provisions of Chapter 403, Florida Statutes (F.S.) and Chapters 62-4, 62-210, 62-212 and 62-213 of the Florida Administrative Code (F.A.C.). The proposed project is not exempt from air permitting requirements and an air permit is required to perform the proposed work. The Office of Permitting and Compliance is the Permitting Authority responsible for making a permit determination for this project. The Permitting Authority's physical address is: 111 South Magnolia Drive, Suite #4, Tallahassee, Florida. The Permitting Authority's mailing address is: 2600 Blair Stone Road, MS #5505, Tallahassee, Florida 32399-2400. The Permitting Authority's telephone number is 850/717-9000.

**Project File:** A complete project file is available for public inspection during the normal business hours of 8:00 a.m. to 5:00 p.m., Monday through Friday (except legal holidays), at address indicated above for the Permitting Authority. The complete project file includes the draft Title V air operation permit revision, the Statement of Basis, the draft construction permit, the Technical Evaluation and Preliminary Determination, the application, and the information submitted by the applicant, exclusive of confidential records under Section 403.111, F.S. Interested persons may contact the Permitting Authority's project review engineer for additional information at the address or phone number listed above.

**Notice of Intent to Issue Permit:** The Permitting Authority gives notice of its intent to issue an air construction permit and concurrent draft Title V to the applicant for the project described above. The applicant has provided reasonable assurance that operation of the proposed equipment will not adversely impact air quality and that the project will comply with all appropriate provisions of Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. The Permitting Authority will issue a Final Permit in accordance with the conditions of the



## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

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proposed Draft Permit unless a timely petition for an administrative hearing is filed under Sections 120.569 and 120.57, F.S. or unless public comment received in accordance with this notice results in a different decision or a significant change of terms or conditions.

**Public Notice:** Pursuant to Section 403.815, F.S. and Rules 62-110.106 and 62-210.350, F.A.C., you (the applicant) are required to publish at your own expense the enclosed Public Notice of Intent to Issue Air Permit (Public Notice). The Public Notice shall be published one time only as soon as possible in the legal advertisement section of a newspaper of general circulation in the area affected by this project. The newspaper used must meet the requirements of Sections 50.011 and 50.031, F.S. in the county where the activity is to take place. If you are uncertain that a newspaper meets these requirements, please contact the Permitting Authority at above address or phone number. Pursuant to Rule 62-110.106(5) and (9), F.A.C., the applicant shall provide proof of publication to the Permitting Authority at the above address within 7 days of publication. Failure to publish the notice and provide proof of publication may result in the denial of the permit pursuant to Rule 62-110.106(11), F.A.C.

**Comments:** The Permitting Authority will accept written comments concerning the draft Title V air operation permit revision and the draft air construction permit revision for a period of 30 days from the date of publication of the Public Notice. Written comments must be received by the close of business (5:00 p.m.), on or before the end of this 30-day period by the Permitting Authority at the above address. If timely received written comments result in a significant change to the draft Title V air operation permit revision or the draft air construction permit revision, the Permitting Authority shall issue a revised draft Title V air operation permit revision or a revised draft air construction permit and require, if applicable, another Public Notice. All comments filed will be made available for public inspection. For additional information, contact the Permitting Authority at the above address or phone number.

**Petitions:** A person whose substantial interests are affected by the proposed permitting decision may petition for an administrative hearing in accordance with Sections 120.569 and 120.57, F.S. The petition must contain the information set forth below and must be filed with (received by) the Department's Agency Clerk in the Office of General Counsel of the Department of Environmental Protection, 3900 Commonwealth Boulevard, Mail Station #35, Tallahassee, Florida 32399-3000. Petitions filed by the applicant or any of the parties listed below must be filed within 14 days of receipt of this Written Notice of Intent to Issue Air Permit. Petitions filed by any persons other than those entitled to written notice under Section 120.60(3), F.S., must be filed within 14 days of publication of the attached Public Notice or within 14 days of receipt of this Written Notice of Intent to Issue Air Permit, whichever occurs first. Under Section 120.60(3), F.S., however, any person who asked the Permitting Authority for notice of agency action may file a petition within 14 days of receipt of that notice, regardless of the date of publication. A petitioner shall mail a copy of the petition to the applicant at the address indicated above, at the time of filing. The failure of any person to file a petition within the appropriate time period shall constitute a waiver of that person's right to request an administrative determination (hearing) under Sections 120.569 and 120.57, F.S., or to intervene in this proceeding and participate as a party to it. Any subsequent intervention (in a proceeding initiated by another party) will be only at the approval of the presiding officer upon the filing of a motion in compliance with Rule 28-106.205, F.A.C.

A petition that disputes the material facts on which the Permitting Authority's action is based must contain the following information: (a) The name and address of each agency affected and each agency's file or identification number, if known; (b) The name, address, and telephone number of the petitioner; the name, address and telephone number of the petitioner's representative, if any, which shall be the address for service purposes during the course of the proceeding; and an explanation of how the petitioner's substantial interests will be affected by the agency determination; (c) A statement of when and how each petitioner received notice of the agency action or proposed decision; (d) A statement of all disputed issues of material fact. If there are none, the petition must so state; (e) A concise statement of the ultimate facts alleged, including the specific facts the petitioner contends warrant reversal or modification of the agency's proposed action; (f) A statement of the specific rules or statutes

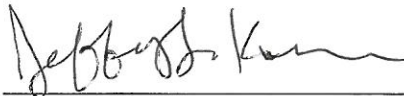
## WRITTEN NOTICE OF INTENT TO ISSUE AIR PERMIT

the petitioner contends require reversal or modification of the agency's proposed action including an explanation of how the alleged facts relate to the specific rules or statutes; and, (g) A statement of the relief sought by the petitioner, stating precisely the action the petitioner wishes the agency to take with respect to the agency's proposed action. A petition that does not dispute the material facts upon which the Permitting Authority's action is based shall state that no such facts are in dispute and otherwise shall contain the same information as set forth above, as required by Rule 28-106.301, F.A.C.

Because the administrative hearing process is designed to formulate final agency action, the filing of a petition means that the Permitting Authority's final action may be different from the position taken by it in this Written Notice of Intent to Issue Air Permit. Persons whose substantial interests will be affected by any such final decision of the Permitting Authority on the application have the right to petition to become a party to the proceeding, in accordance with the requirements set forth above.

**Mediation:** Mediation is not available in this proceeding.

Executed in Tallahassee, Florida.



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

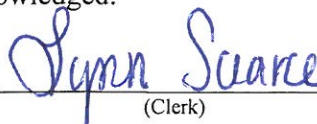
### CERTIFICATE OF SERVICE

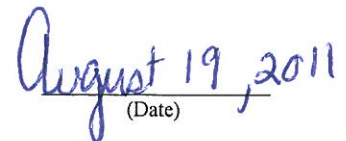
The undersigned duly designated deputy agency clerk hereby certifies that this Written Notice of Intent to Issue Permits package (including the Public Notice, the Statement of Basis, the Draft Title V Permit, the Technical Evaluation and Preliminary Determination and the Draft Construction Permit with Appendices) 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 8-19-11 to the persons listed below.

Ms. Kerri Stewart, City of Jacksonville(kstewart@coj.net)  
Mr. Scott Salisbury, Trail Ridge Energy, LLC (scott.salisbury@landfillenergy.com)  
Mr. Robert Harvey, P.E., Derenzo and Associates, Inc. (rharvey@derenzo.com)  
Mr. Chris Kirts, Northeast District (christopher.kirts@dep.state.fl.us)  
Mr. Richard Robinson, Duval County Environmental Resources Management (robinson@coj.net)  
Ms. Kathleen Forney, EPA Region 4 (forney.kathleen@epa.gov)  
Ms. Heather Abrams, EPA Region 4 (abrams.heather@epa.gov)  
Ms. Ana Oquendo, US EPA Region 4 (oquendo.ana@epa.gov)  
Ms. Barbara Friday, DEP OPC (barbara.friday@dep.state.fl.us) (for posting with U.S. EPA, Region 4)  
Ms. Lynn Searce, DEP OPC Reading File (lynn.searce@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.

  
(Clerk)

  
(Date)



## P.E. CERTIFICATION STATEMENT

### PERMITTEE

City of Jacksonville  
Public Works Department  
117 West Duval Street, St. James Building, 4<sup>th</sup> Floor  
Jacksonville, FL 32202

Draft Construction Permit No. 0310358-012-AC/PSD-374C  
Draft Title V Permit No. 0310358-013-AV  
Trail Ridge Energy  
Landfill Gas-to-Energy Expansion  
Duval County, Florida

### PROJECT DESCRIPTION

The Trail Ridge Landfill is an existing municipal solid waste landfill. The applicant proposes to install and operate four lean-burn reciprocating internal combustion engine/generator sets as part of the existing landfill gas-to-energy plant at the Trail Ridge Landfill. In addition, the applicant has requested a modification to the CO emissions standard as Best Available Control Technology (BACT) for the existing engine/generator sets. The landfill gas will be used to fuel the proposed four and existing six lean-burn reciprocating internal combustion engine/generator sets. The plant will have the potential to generate an additional 6.4 megawatts (MW) of electricity for a combined nominal 16 MW of power to the electrical grid. The two existing flares will be retained as additional combustion devices for the landfill gas. The landfill gas will be routed through a landfill gas treatment system and then to the engines. As necessary, residual landfill gas will be routed to the flares. The project will result in the following potential emissions increases at the existing landfill: 284.7 tons/year of carbon monoxide (CO); 51.7 tons/year of nitrogen oxides (NO<sub>x</sub>); 20.7 tons/year of particulate matter (PM), particulate matter with a mean particle diameter of 10 microns or less (PM<sub>10</sub>) and particulate matter with a mean particle diameter of 2.5 microns or less (PM<sub>2.5</sub>); 16.6 tons/year of sulfur dioxide (SO<sub>2</sub>); and 24.2 tons/year of volatile organic compounds (VOC).

The proposed project is subject to preconstruction review pursuant to Rule 62-212.400, Florida Administrative Code (F.A.C.) for the Prevention of Significant Deterioration (PSD) of Air Quality for emissions of CO, NO<sub>x</sub>, PM and PM<sub>10</sub>. In accordance with this rule, the Department is required to make a determination of the Best Available Control Technology (BACT) for CO, NO<sub>x</sub>, PM and PM<sub>10</sub> emissions. The draft permit includes the following preliminary BACT determinations: emissions of CO and NO<sub>x</sub> will be minimized by the lean-burn combustion design combined with good operating and maintenance practices; and emissions of PM/PM<sub>10</sub> will be controlled by filtration in the landfill gas treatment system prior to combustion.

***I HEREBY CERTIFY** that the air pollution control engineering features described in the above referenced application and subject to the proposed permit conditions provide reasonable assurance of compliance with applicable provisions of Chapter 403, Florida Statutes, and Florida Administrative Code Chapters 62-4 and 62-204 through 62-297. However, I have not evaluated and I do not certify any other aspects of the proposal (including, but not limited to, the electrical, civil, mechanical, structural, hydrological, geological, and meteorological features).*



S. Christine DeVore, P.E.  
Registration Number 63119

8-19-11

(Date)