Florida Department of Environmental Protection

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2600 Blair Stone Road
Tallahassee, Florida 32399-2400

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Governor

Carlos Lopez-Cantera
Lt. Governor

Jonathan P. Steverson
Secretary

PERMITTEE

Republic Services of Florida, Ltd.
2500 West State Route 60
Bartow, Florida 33830

Authorized Representative:
Chris Jones, General Manager

Air Permit No. 1050439-003-AC
Permit Expires: October 15, 2021
Minor Air Construction Permit
Cedar Trail Landfill
Flare Installation Project

PROJECT

This is the final air construction permit, which authorizes the installation of a set of landfill gas flares. The proposed work will be conducted at the existing Cedar Trail Landfill, which is a solid waste landfill categorized under Standard Industrial Classification No. 4953. The existing facility is located in Polk County at 2500 West State Route 60 in Bartow, Florida. The UTM coordinates are Zone 17, 413.4 kilometers (km) East and 3087.6 km North.

This final permit is organized into the following sections: Section 1 (General Information); Section 2 (Administrative Requirements); Section 3 (Emissions Unit Specific Conditions); and Section 4 (Appendices). Because of the technical nature of the project, the permit contains numerous acronyms and abbreviations, which are defined in Appendix A of Section 4 of this permit. 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.). The permittee is authorized to conduct the proposed work in accordance with the conditions of this permit. This project is subject to the general preconstruction review requirements in Rule 62-212.300, F.A.C. and is not 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.

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

David Lyle Read, P.E.

David Lyle Read, P.E.
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For:

Syed Arif, 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 Final Air Construction Permit package 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 the date indicated below to the following persons.

Chris Jones, Republic Services of Florida: chris.jones@republicservices.com
Alyson Dagly, SCS Engineers: adagly@scsengineers.com
Maurice Hogg, P.E., SCS Engineers: rhogg@scsengineers.com
DEP Southwest District Air Permitting: SWD_Air_Permitting@dep.state.fl.us
DEP Southwest District Air Program: SWD_Air@dep.state.fl.us
Lynn Scearce, DEP OPC: lynn.scearce@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.

Lynn Scearce

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FACILITY DESCRIPTION

The existing facility consists of the following emissions units.

Facility ID No. 1050439	
ID No.	**Emission Unit Description**
001	Solid Waste Landfill
002	Fugitive PM Emissions from Roads and Earthmoving
003	Stationary Emergency Generator Compression Ignition RICE

PROPOSED PROJECT

Republic Services of Florida proposes to install a set of flares in order to destroy landfill gas. The flares will be used to combust the collected landfill gas, which reduces emissions of hazardous air pollutants and ozone precursors. Flaring landfill gas is also a proven technique to reduce odors from landfills, by oxidizing hydrogen sulfide (H_2S) to sulfur dioxide (SO_2).

This project will add the following emissions units.

Facility ID No. 1050439	
ID No.	**Emission Unit Description**
004	Landfill Gas Utility Flare
005	Landfill Gas Solar Spark Flares (12)

FACILITY REGULATORY CLASSIFICATION

- The facility is 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 62-213, F.A.C.
- The facility is not a major stationary source in accordance with Rule 62-212.400(PSD), F.A.C.

SECTION 2. ADMINISTRATIVE REQUIREMENTS

1. Permitting Authority: The permitting authority for this project is the Office of Permitting and Compliance in the Division of Air Resource Management of the Department of Environmental Protection (Department). The Office of Permitting and Compliance mailing address is 2600 Blair Stone Road (MS #5505), Tallahassee, Florida 32399-2400.

2. Compliance Authority: All documents related to compliance activities such as reports, tests, and notifications shall be submitted to the Department's Southwest District Office at: 13051 N. Telecom Parkway, Temple Terrace, Florida 33637-0926. The office's telephone number is 813-470-5700.

3. Appendices: The following Appendices are attached as a part of this permit: Appendix A (Citation Formats and Glossary of Common Terms); Appendix B (General Conditions); Appendix C (Common Conditions); and Appendix D (Common Testing Requirements).

4. Applicable Regulations, Forms and Application Procedures: Unless otherwise specified in this permit, the construction and operation of the subject emissions units 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 Chapters 62-4, 62-204, 62-210, 62-212, 62-213, 62-296 and 62-297, F.A.C. Issuance of this permit does not relieve the permittee from compliance with any applicable federal, state, or local permitting or regulations.

5. 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.]

6. Modifications: The permittee shall notify the Compliance Authority upon commencement of construction. No new emissions unit shall be constructed and no existing emissions unit shall be modified without obtaining an air construction permit from the Department. Such permit shall be obtained prior to beginning construction or modification. [Rules 62-210.300(1) and 62-212.300(1)(a), F.A.C.]

7. Construction and Expiration. The expiration date shown on the first page of this permit provides time to complete the physical construction activities authorized by this permit, complete any necessary compliance testing, and obtain an operation permit. Notwithstanding this expiration date, all specific emissions limitations and operating requirements established by this permit shall remain in effect until the facility or emissions unit is permanently shut down. For good cause, the permittee may request that a permit be extended. Pursuant to Rule 62-4.080(3), F.A.C., such a request shall be submitted to the Permitting Authority in writing before the permit expires. [Rules 62-4.070(3) & (4), 62-4.080 & 62-210.300(1), F.A.C.]

8. Source Obligation: At such time that a particular source or modification becomes a major stationary source or major modification (as these terms were defined at the time the source obtained the enforceable limitation) solely by exceeding its projected actual emissions, then the requirements of subsections 62-212.400(4) through (12), F.A.C., shall apply to the source or modification as though construction had not yet commenced on the source or modification. [Rule 62-212.400(12), F.A.C.]

B. EU Nos. 004 and 005, Utility Flare and Solar Spark Flares

This section of the permit addresses the following emissions units.

EU No.	Emission Unit Description
004	Landfill Gas Utility Flare
005	Landfill Gas Solar Spark Flares (Approximately 12)

These flares will be used in conjunction with a landfill gas collection and control system to control the emissions of landfill gas. The solar spark flares are expected to have a stack height of 10 to 12 feet and an exit temperature of 1400 °F. The utility flare is expected to have a stack height of 35 feet, a flow rate of 1,920 actual cubic feet per minute, and an exit temperature of 1400 °F.

{Permitting note: As of the issuance of this permit, these flares are not subject to the provisions for flares in the NSPS General Provisions in 40 CFR 60, Subpart A. If the landfill emissions unit (EU No. 001) becomes subject to the requirement to install and operate a landfill gas collection and control system under a state plan referring to 40 CFR 60, Subpart Cf, or under the NSPS in 40 CFR 60, Subpart WWW or XXX, these flares will become subject to the flare requirements in 40 CFR 60, Subpart A.}

EQUIPMENT

1. Utility Flare (EU No. 004): The permittee is authorized to install a utility flare for the control of emissions of landfill gas. Additional equipment includes a steel blower skid, several blowers to facilitate movement of landfill gas, a flare control panel, moisture separator, and flame arrestor. [Application No. 1050439-003-AC]

2. Solar Spark Flares (EU No. 005): The permittee is authorized to install a set of approximately 12 solar spark flares for the control of emissions of landfill gas. Each flare is powered by a solar panel and possesses an in-line flame arrestor and ball valve. [Application No. 1050439-003-AC]

PERFORMANCE RESTRICTIONS

3. Utility Flare Permitted Capacity (EU No. 004): The maximum permitted nominal capacity of the utility flare is 1,920 standard cubic feet per minute of landfill gas. [Rule 62-210.200(PTE), F.A.C.]

4. Solar Spark Flares Permitted Capacity (EU No. 005): The maximum permitted nominal capacity for the set of solar spark flares is 1,080 standard cubic feet per minute of landfill gas. [Rule 62-210.200(PTE), F.A.C.]

   {Permitting note: This equals approximately 90 scfm per flare.}

5. Restricted Operation: The hours of operation are not limited (*i.e.*, 8760 hours per year). [Rules 62-4.070(3) and 62-210.200(PTE), F.A.C.]

TESTING REQUIREMENTS

6. General Visible Emissions: These emissions units are subject to the general visible emissions limit of 20% opacity in Rule 62-296.320(4)(b), F.A.C. This condition does not impose a specific testing requirement; however, testing in accordance with **Specific Condition 10** could be required if the Department has reason to believe that the general visible emissions rule is being exceeded. [Rule 62-296.320(4)(b), F.A.C.]

7. Landfill Gas Sulfur Content Tests: Upon the commencement of commercial service of the Utility Flare (EU No. 004), the total reduced sulfur (TRS) content of the facility's landfill gas shall be tested semiannually, or more frequently if desired by the permittee. One test shall be performed during the first six months of the year, and the other test shall be performed during the final six months of the year. [Rule 62-4.070(3), F.A.C.]

   {Permitting note: If these tests show little change in sulfur content over time, or if the results of these tests make clear that SO_2 emissions will not approach the PSD major source threshold, the permittee may request a relaxation in required testing frequency.}

8. Test Requirements: The permittee shall notify the Compliance Authority in writing at least 15 days prior to any required tests. Tests shall be conducted in accordance with the applicable requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(9), F.A.C.]

9. Test Methods: Required tests shall be performed in accordance with the following reference methods.

Method	Description of Method and Comments
9	Visual Determination of the Opacity of Emissions from Stationary Sources
ASTM D5504 or D7493	Determination of Sulfur Compounds in Natural Gas and Gaseous Fuels

The above methods are described in Appendix A of 40 CFR 60 and are adopted by reference in Rule 62-204.800, F.A.C. No other methods may be used unless prior written approval is received from the Department. [Rules 62-204.800, F.A.C.; and Appendix A of 40 CFR 60]

10. Special Compliance Tests: When the Department, after investigation, has good reason (such as complaints, increased visible emissions, or questionable maintenance of control equipment) to believe that any applicable emission standard contained in a Department rule or in a permit issued pursuant to those rules is being violated, it may require the owner or operator of the emissions unit to conduct compliance tests which identify the nature and quantity of pollutant emissions from the emission unit and to provide a report on the results of said tests to the Department. [Rule 62-297.310(7)(b), F.A.C.]

MONITORING REQUIREMENTS

11. Landfill Gas Combustion: Upon the commencement of commercial service of the Utility Flare (EU No. 004), the permittee shall monitor and record the quantity of landfill gas combusted on a monthly basis. The permittee shall maintain records of landfill gas combusted on site and available for inspection, in paper or electronic form, by the Department. [Rule 62-4.070(3), F.A.C.]

RECORDS AND REPORTS

12. Test Reports: The permittee shall prepare and submit reports for all required tests in accordance with the requirements specified in Appendix D (Common Testing Requirements) of this permit. [Rule 62-297.310(10), F.A.C.]

13. Annual Operating Report: The estimate of SO_2 emissions to be included in the facility's Annual Operating Report shall be calculated based on the average of all landfill gas TRS measurements (**Specific Condition 6**) taken during the annual reporting period and the amount of landfill gas combustion during the reporting period (**Specific Condition 11**). If calculated SO_2 emissions are greater than or equal to 250 tons per year, the permittee shall notify the Permitting and Compliance Authorities within 15 days of discovery. [Rule 62-4.070(3), F.A.C.; PSD Avoidance]

{Permitting note: If this facility becomes a PSD major source by emitting 250 tons per year or more of a PSD pollutant, such as SO_2, the flare installation project will retroactively become subject to PSD review.}