STATEMENT OF BASIS

Brevard County Board of County Commissioners
Central Disposal Facility
Facility ID No. 0090069
Brevard County

DRAFT/PROPOSED Permit Project No. 0090069-010-AV
Revision of Title V Air Operation Permit 0090069-008-AV

This Title V Air Operation Permit **Revision** is issued under the provisions of Chapter 403 Florida Statutes (F.S.), and the Florida Administrative Code (F.A.C.) Chapters 62-4, 62-210 and 62-213. The above named permittee is hereby authorized to perform the work or operate the facility shown on the application and approved drawing(s), plans, and other documents, attached hereto or on file with the permitting authority, in accordance with the terms and conditions of this permit.

This facility consists of a municipal solid waste landfill that has been in operation since 1972. The Central Disposal Facility serves the entire County's Class I disposal needs as well as the Class III disposal needs of the northern and central parts of the County. The site has a total area of 674 acres with the footprint of the landfill covering approximately 180 acres. An additional 482-acre area provides for the related solid waste management activities and buffers. The landfill is underlain by a naturally occurring clay layer that together with man-made clay slurry walls form a bowl in which the landfill sits. The landfill has a gas collection system installed in the sideslopes of the closed lower lift. The collection system has been in operation since 1994. The electrical generation system contains six electrical generators that are individually powered by landfill gas-fired, spark ignition, reciprocating internal combustion engines. The generation bypass system includes a flaring station that consists of three blowers and three candlestick flares

The subject of this permit 0090069-010-AV is the revision of Title V Air Operation Permit No. 0090069-008-AV for the purpose of incorporating the revised emissions limits and compliance testing requirements in the concurrent air construction permit No. 0090064-009-AC for the emissions of carbon monoxide (CO) and particulate matter with an aerodynamic diameter of less than 10 micrometers (PM_{10}) for the landfill gas-fired engines. The project revises the current Best Available Control Technology (BACT) determinations for these pollutants as further described in Permit No. 0090069-009-AC/PSD-FL-378C.

REVISED TITLE V PERMIT CONDITIONS

B2. NSPS and NESHAP Requirements: 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).
[Rules 62-204.800 and 62-210.300, F.A.C.

B13. Carbon Monoxide (CO): The emission rate of CO from each engine/generator set exhaust shall not exceed 3.50 g/bhp-hr and a maximum of 17.23 lb/hr and 75.3 TPY.
[Rule 62-212.400(12), F.A.C. and permit No. 0090069-009-AC/PSD-FL-378C]

B14. Particulate matter emissions shall be controlled from each engine/generator set exhaust through the implementation of the following pretreatment and good combustion practices.

- 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.
- 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, F.A.C. and Permit Being Modified: Permit No. 0090069-004-AC (PSD-FL-378**)]**

B20. 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 HCl Emissions from Stationary Sources (I,A);
(f) EPA Reference Method 6, 6C or 19 – Determinations of SO_2 Emissions (I, A).