

CLEAN, RENEWABLE, SAFE AND ECONOMICAL

Lee County's Waste To Energy (WTE) facility began operations in 1994 with two 600 ton per day waste combustion units. The operation of these two units has provided a safe and economical disposal of the garbage generated in unincorporated Lee County, its municipalities, and the garbage generated in neighboring Hendry County.



At the turn of the 21st Century, Florida, particularly Southwest Florida, experienced rapid population growth and an all time high in new residential construction and the sale of new homes. It soon became apparent that Lee County's Waste To Energy facility needed to be expanded in order to keep up with the rising garbage volumes being generated in the County.

In 2004, after a complex and lengthy permitting process, the Florida DEP issued a Prevention of Significant Deterioration (PSD) permit and the Board of County Commissioners decided to proceed with the expansion of the WTE facility.

SOLID WASTE (S.W.) FEED STOCK FOR ENERGY

The original facility was built with future expansion capabilities in mind, and several key elements were already in place. These included a stack with space available for a third flue pipe and a tipping floor, waste pit, and a crane with sufficient capacity to support a third combustion unit.



A look at the three flue pipes 275 feet above ground

The grapple operator first mixes the material by redistributing the garbage evenly. Once the "right mix", optimal for combustion, is produced, the claw picks up the garbage mix and drops it into the furnace feed hopper. This grapple picks up approx. 13,000 lbs. per lift.



STABLE S.W. ASSESSMENTS & DISPOSAL CHARGES

The new combustion unit is the first Municipal Waste Combustor permitted and constructed under the EPA's New Source Performance Standards (NSPS) in the United States since they were promulgated in the 1990's.

Site construction activities commenced in late 2005 with the addition of a new flue in the existing stack. The mobilization of the General Contractor commenced December 19, 2005. Installation of over 300 concrete piles for support occurred over the following 3 months for major boiler steel, air pollution control system, and the turbine building.

LEE
COUNTY'S
OWN



WASTE TO ENERGY FACILITY



LEE COUNTY'S OWN ENERGY SOURCE

Thousands of feet of piping, and almost 80 miles of cable were installed. Major components including the turbine generator, boiler, transformer, pumps, fans, and control panels were delivered and installed or field fabricated and erected. At the peak of construction close to 500 construction workers worked on the expansion project. Over 55 different contractors and major equipment vendors were utilized by the County.



First fire for combustion unit no. 3 occurred on August 18, 2007. This event culminated intense construction activity during the previous 19 months.

August 29, 2007, the WTE facility's operating staff successfully synchronized the new electric generator to the electric grid with a gross output of over 18 megawatts of electric power. Combined with the original turbine generator, the expanded WTE facility can now burn more than 1,800 tons per day of garbage while producing enough electricity to supply approximately 36,000 homes.



Generator Step-Up Transformer, purchased from General Electric



Lee County, was founded May 12, 1887 and named in honor of General Robert E. Lee. The County is located on the West coast of Florida and encompasses about 811 square miles, including several small islands in the Gulf of Mexico.

The Solid Waste Department and its facilities service the garbage needs of approx. 650,000 people in Lee County (2013 population estimate).

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Providing, Economic and Environmentally
Responsible Recycling & Disposal Services

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