

Charlotte County Solid Waste

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Charlotte County residents have a tremendous solid waste resource in the Zemel Road Landfill. In 1975, Charlotte County opened its first, and only, municipal solid waste sanitary landfill adjacent to Zemel Road, south Punta Gorda, with a disposal area of approximately 100 acres; shortly thereafter, the County purchased additional acreage so that we now have a total of 290 acres of land that can be used for the future disposal needs of our community. Based on population growth projections and the continuation of current disposal practices, the County's landfill has disposal capacity for our community's refuse needs that is projected to last until the year 2066.

Charlotte County is extremely fortunate to have this sufficient disposal capacity; this resource provides our citizens, the Board of County Commissioners, and County staff with the necessary time to evaluate and consider future options.

Charlotte County buries our community's solid waste; burying waste is the least expensive method of handling refuse. The County has invested capital funds to minimize the landfill's environmental impact by installing a leachate containment, collection, and processing system. (Leachate is the term used to describe the liquids that have passed through buried solid waste; leachate is considered a pollutant.) The County's leachate treatment facility uses activated carbon to filter out the pollutants; thereby, keeping these pollutants out of our ground water.

Charlotte County's Solid Waste staff continually monitors our nation's solid waste industry and regulatory activities. The state has recently adopted a state wide recycling goal of 75% by the year 2020. The more that is recycled means that much less being put into the landfill each day. This is a challenging goal and will certainly require a change in our community's business and household solid waste management practices.

Currently, there are a couple of solid waste process methods available with today's technology: waste-to-energy incinerators, which produce electricity; in-vessel composting which composts the garbage into a soil type product; bio-reactor landfills which speeds up the decomposition of the waste buried in the landfill and in theory generates more disposal space; and a newer and evolving technology called plasma-arc incineration method which vaporizes garbage into a gas, producing less than 10% residue and generates electricity. The new technologies require careful evaluations and will need to demonstrate a proven ability to process solid waste efficiently, economically, and in an environmentally safe manner.

Today, the County is negotiating a contract to have the landfill's methane gas collected and processed into electricity. This improvement will capture and remove the landfill's methane gas, which is a greenhouse gas, from our atmosphere; the process will be generating electricity in an environmentally friendly manner.

Charlotte County is also testing the manufacturing of compost by mixing the landfill's shredded yard waste with Charlotte County Utilities' waste water domestic sludge. The landfill would use the compost to cover the garbage buried in the landfill thereby helping to reduce the use of purchased soils as well as helping the Utilities Department reduce their handling costs.

It is the Solid Waste staff's desire to reach out to our community in developing a long-term strategy: exploring current, new, and future technologies; setting goals and objectives on how we will process our waste and recyclable materials in the coming years. We look forward to the challenges and opportunities to maximize our resources, protect our environment, and ensure we have long-term solid waste solutions for the residents and businesses of Charlotte County.