

Getting to Know Your Maplewood Landfill

Amelia County Department of Environmental Management

October 24, 2014

The Maplewood Recycling and Waste Disposal Facility, or the Maplewood landfill, is owned and operated by Waste Management of Virginia, Inc.(WM), and operates under Virginia Solid Waste Facility Permit #540. The landfill opened for business on May 4, 1993. The landfill encompasses 794.22 acres total. The permitted disposal area includes 34 phases with a total area of 404 acres and provides 43,000,000 cubic yards of solid waste capacity over an originally projected life of 20 years. 13 phases have been constructed to date. Phases range in size from 7.1 to 16 acres each. Due to changes in waste volume received and improved operating practices the current expected remaining permitted life of the landfill is 126.5 years. The landfill is permitted to accept up to 5,000 tons of waste per day. It is currently receiving approximately 1,000 tons of waste per day. Most of this waste originates in Virginia.

The landfill design incorporates a double liner system using 60 mil high density polyethylene (HDPE) in both liners. The liner system consists of (from top to bottom), 18" drainage layer (sand), nonwoven geotextile, 60 mil HDPE primary liner, a bentonite geocomposite (placed under primary liner), 12 inches of granular drainage materials, 60 mil HDPE secondary liner, and a 12 inch layer of compacted soil. Leachate is collected from the liners and pumped to two 260,000 gallon storage tanks until it can be hauled to an authorized wastewater treatment facility. Methane gas is generated from the anaerobic decomposition of the waste and is either burned off at the landfill candle flare or used to generate electricity by INGENCO. INGENCO (Industrial Power Generating Company, LLC) is an on-site 16 megawatt power generating facility using diesel engines to convert landfill gas to electricity. The Maplewood landfill is currently producing 2600 SCFM (standard cubic feet per minute) of methane gas which is collected by a network of 93 gas wells installed into the waste and sent to the candle flare or INGENCO.

WM pays Amelia County a host fee for every ton of out-of-county waste that enters the landfill. Since its opening in 1993, WM has paid Amelia County \$22,060,982.83 in host fees. WM also pays Amelia County a yearly monitoring fee which provides a salary for two county employees to oversee the operations of the Maplewood landfill. For 2013, WM paid personal property and real estate taxes totaling \$111,552.56 to Amelia County.

Page 2

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The Maplewood landfill currently employs a staff of twelve people, most of whom are Amelia County residents. Amelia County residents and companies that were in business when the landfill opened receive free disposal of their waste, as do county government offices, the county schools and county charitable institutions. This free service includes the collection, pick-up, and delivery of all trash and recycled materials from the county convenience centers to the landfill or recycling facility which saves Amelia County approximately \$5,000,000.00 a year in deferred costs (the costs the county would have to pay to own and operate its own landfill and convenience centers).

There are five staffed convenience centers located throughout the county for use by Amelia County residents for disposal of their household trash: The old county landfill at 10200 Epps Lane; Pleasant Grove at 14415 Dykeland Road; Ponton's Store at 5141 Ponton's Circle; Deatonville at 7761 South Genito Road and Mannboro at 6701 Namozine Road. These convenience centers are open 40 hours per week: 7:00 AM to 7:00 PM on Mondays & Saturdays, 3:00 PM to 7:00 PM on Tuesdays & Thursdays, 11:00 AM to 7:00 PM on Fridays and closed on Sundays and Wednesdays.

The Maplewood landfill is open from 7:00 AM to 4:00 PM, Monday through Friday, and is closed on week-ends, New Year's Day, Memorial Day, Fourth of July, Labor Day, Thanksgiving and Christmas. However, the public access area of the landfill is open 24 hours a day, seven days a week for use by Amelia County citizens.