



Tazewell County Landfill North Tazewell, Virginia

LMOP PROJECT EXPO

2009



Tazewell County Landfill

Overview

Open Year

1994

Estimated Closure Year

2038

Estimated Waste in Place

652,700 tons (2008)*

Design Capacity

3,800,000 cubic yards*

Annual Acceptance

56,500 tons (2008)*

Landfill Area

23 acres

Landfill Depth

80 feet

Wells in Place

No

Flare in Place

No

Methane Content of Gas

Estimated at 50%

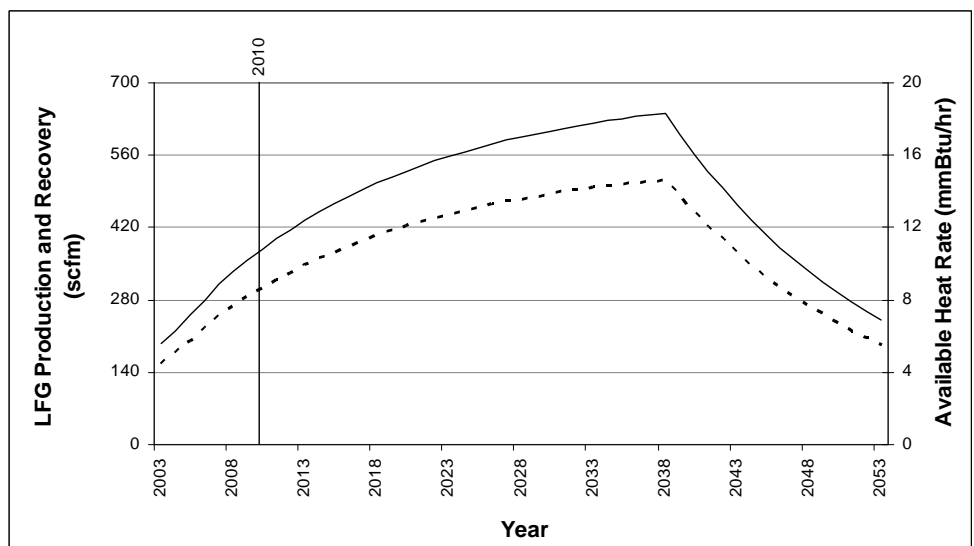
Tazewell County Landfill reports that it is not currently required to collect and combust landfill gas under the Landfill NSPS/EG.

Collection and utilization of the landfill gas at an estimated extraction rate of 322 scfm in 2010 would result in direct methane reductions and avoided emissions from conventional electricity sources, equivalent to preventing emissions of **37,000 metric tons of CO₂e per year**.

These emission reductions are equivalent to any one of the following annual environmental benefits for 2010:

- ◆ Annual greenhouse gas emissions from **6,700 passenger vehicles**
- ◆ Carbon sequestered annually by **8,300 acres** of pine or fir forests
- ◆ CO₂ emissions from **4,180,000 gallons of gasoline** consumed
- ◆ CO₂ emissions from **85,700 barrels of oil** consumed

Landfill Gas and Energy Potential



— Gas Generation - - - - Gas and Heat Recovery
LandGEM Peak Recovery Estimation: 546 scfm (in 2038)

*Waste composed of approximately 96% municipal solid waste, 3% other organics, and 1% construction and demolition waste.

Incentives for LFG Energy

The state of Virginia currently offers the following incentives for LFG energy:

- ◆ Certified pollution control equipment and facilities consisting of equipment used in collecting, processing, distributing, or generating electricity from landfill gas may be exempt or partially exempt from local property taxation. Additionally, the Virginia Retail Sales and Use Tax Act provides an exemption for pollution control equipment that is primarily used for the abatement or control of water or air pollution. Landfill gas recovery systems qualify if placed into service on or after July 1, 2006. More information about these property and sales tax exemptions can be found at <http://www.deq.virginia.gov/waste/rtaxinc.html>.
- ◆ Virginia has enacted a voluntary renewable portfolio goal (RPG), under which investor-owned utilities are encouraged to procure a percentage of their power from eligible renewable energy resources. The Virginia State Corporation Commission allows for renewable portfolio standard (RPS) program cost recovery to participating utilities and provides a performance incentive for each RPS goal attained. More information can be found at <http://www.mme.state.va.us/>.

Landfill Location and Potential End Users

