



West Daviess County Landfill
Owensboro, Kentucky

LMOP PROJECT EXPO

2009

West Daviess County Landfill

Overview

Open Year

1968

Estimated Closure Year

2060

Waste in Place

2,250,000 tons (2008)¹

Design Capacity

4,400,000 tons

Annual Acceptance

250,000 tons (2008)

Landfill Area

26 acres (45 acres permitted)

Waste Depth

80 feet

Wells in Place

14 wells²

Flare in Place

Yes (currently flaring 375 scfm)

Methane Content of Gas

53.6%

1. Waste in place amount reflects waste collected since 1995 from the Subtitle D portion of the landfill.

2. Landfill plans to install an additional 14 wells in the near future.

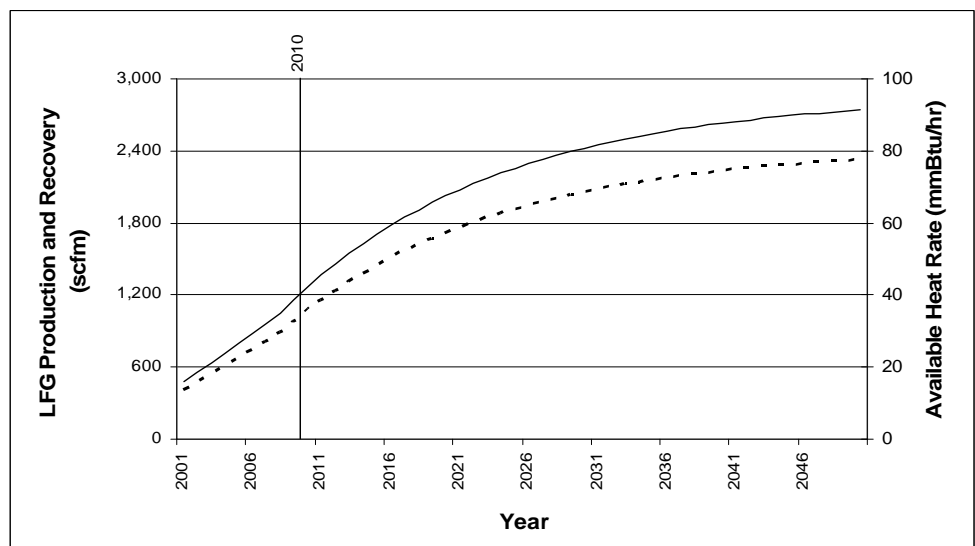
West Daviess County Landfill reports that it is currently required to collect and combust landfill gas under the Landfill NSPS/EG.

Collection and utilization of the landfill gas at an estimated extraction rate of 1,076 scfm in 2010 would result in avoided emissions from conventional electricity sources, equivalent to preventing emissions of **20,000 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 **3,600 passenger vehicles**
- ◆ Carbon sequestered annually by **4,500 acres** of pine or fir forests
- ◆ CO₂ emissions from **2,200,000 gallons of gasoline** consumed
- ◆ CO₂ emissions from **46,700 barrels of oil** consumed

Landfill Gas and Energy Potential



— Gas Generation - - - - Gas and Heat Recovery
LandGEM Peak Recovery Estimation: 2,377 scfm (in 2060)

Incentives for LFG Energy

- ◆ Kentucky's Incentives for Energy Independence Act provides tax credits to companies that build or renovate facilities that use renewable energy. To be eligible, a landfill gas energy facility needs to generate at least 1 MW of energy with the electricity sold to an unrelated party. To qualify for the tax credit, the minimum renewable energy facility investment is \$1 million in capital expenditures. The incentives include a reimbursement of up to 100 percent of the sales and use taxes on property, material, and equipment bought during construction; or a tax credit of up to 100 percent of the income tax and limited liability entity tax owed by the company. The maximum recovery for a single project from all incentives may not exceed 50 percent of the capital investment. More information on the Act can be found at <http://www.thinkkentucky.com/kyedc/pdfs/IEIA.pdf>.

Landfill Location and Potential End Users

