



2008 LMOP PROJECT EXPO

RIO RICO MSW LANDFILL



RIO RICO, ARIZONA

LANDFILL OVERVIEW

Open Year: 1981

Closure Year: 2013

Waste in Place: 806,130 tons

Design Capacity: 1.2 million tons

Annual Acceptance: 58,810 tons (2006)

Landfill Area: 25 acres

Waste Depth: 75 feet

Wells in Place: Yes, perimeter collection system

Flare in Place: Yes, flaring approximately 145 scfm

Methane Content of Gas: Estimated 50%

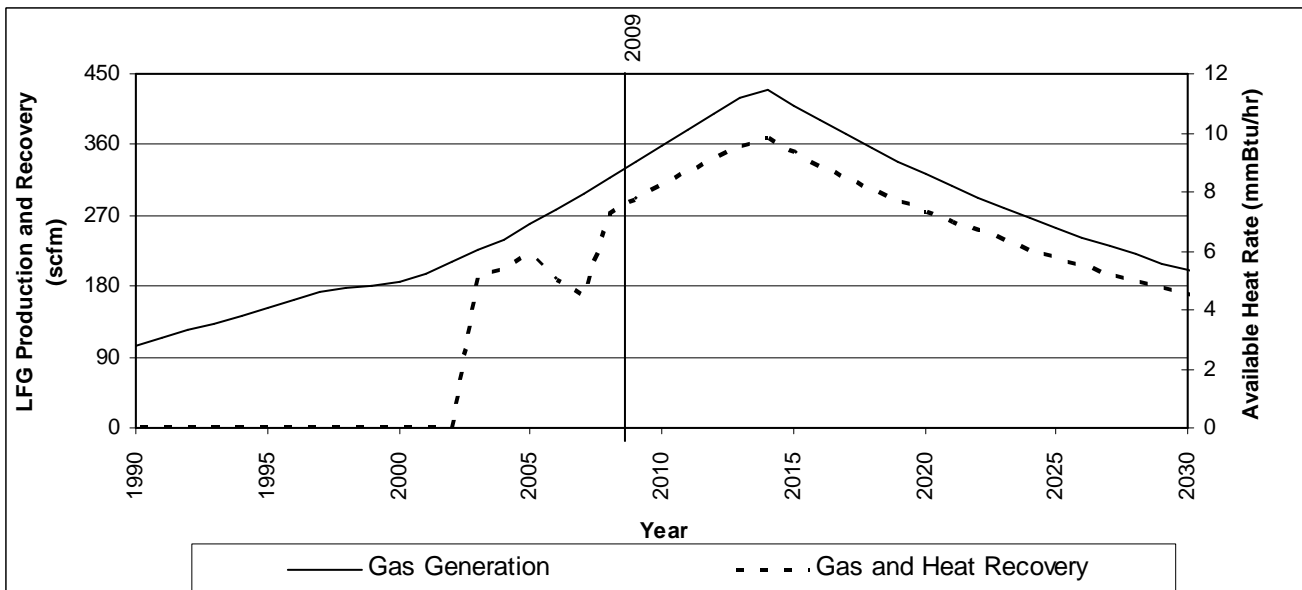
ENVIRONMENTAL BENEFITS

Rio Rico Landfill reports it is not currently required to collect and combust landfill gas under the Landfill NSPS/EG. However, the landfill has a perimeter collection system in place to control the offsite migration of LFG.

Collection and utilization of the landfill gas at an estimated extraction rate of 254 scfm in 2009 would result in direct methane and avoided emissions from conventional electricity sources, equivalent to preventing emissions of **29,000 metric tons of CO₂e per year**. These emission reductions are equivalent to any one of the following annual environmental benefits for 2009:

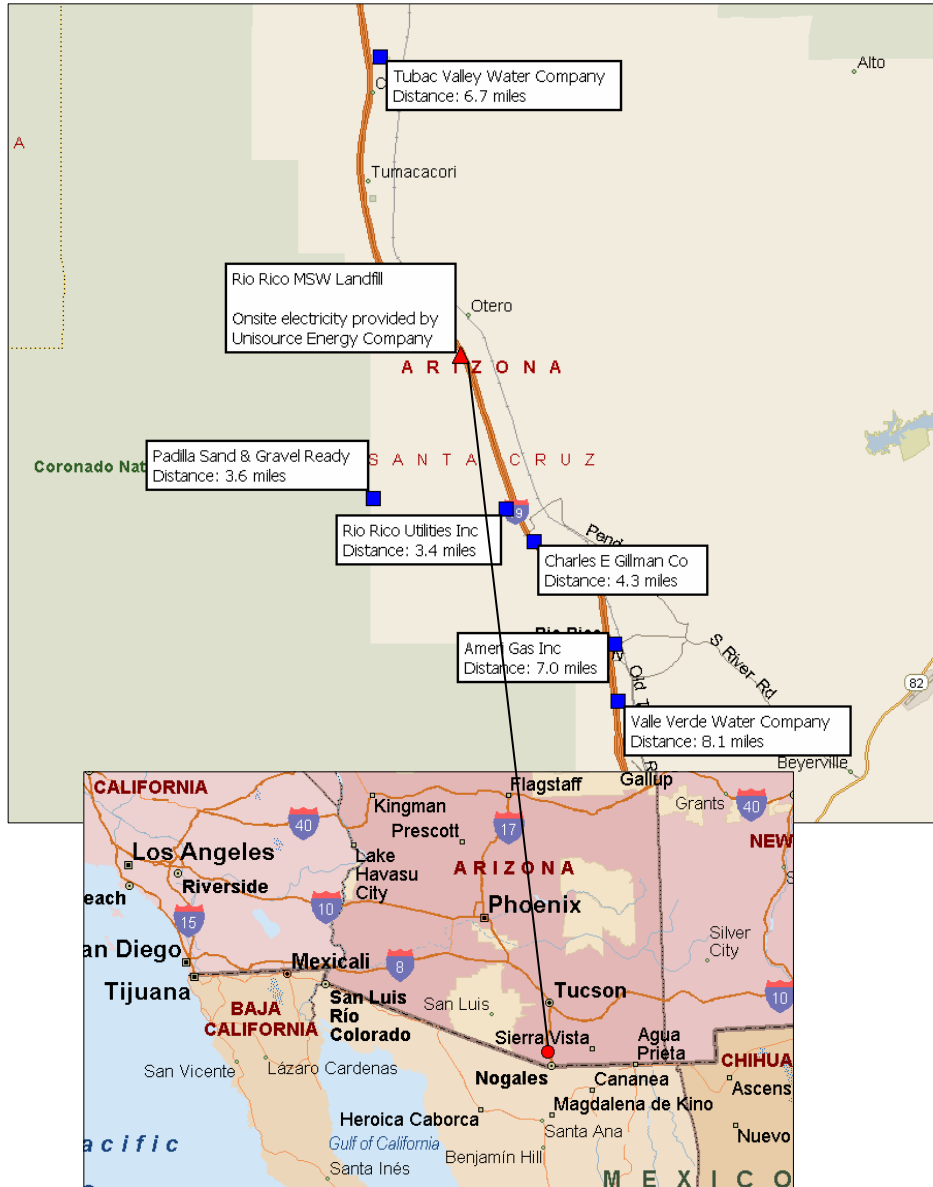
- Annual greenhouse gas emissions from 5,300 passenger vehicles
- Carbon sequestered annually by 6,600 acres of pine or fir forests
- CO₂ emissions from burning 150 railcars' worth of coal
- CO₂ emissions from 67,800 barrels of oil consumed

LANDFILL GAS AND ENERGY POTENTIAL



• LandGEM Peak Recovery Estimation: 323 scfm (in 2014)

LANDFILL LOCATION AND POTENTIAL END USERS



ADDITIONAL INFORMATION

The state of Arizona has a Renewable Energy Standard in place. By 2012, at least 30% of the standard must be derived from distributed renewable energy (4.5% of total electricity sales by regulated utilities); this includes renewable energy derived from landfill gas. More information incentive programs can be found at <http://www.dsireusa.org/index.cfm>.

The Rio Rico landfill may be a suitable candidate for carbon offset project. The landfill is currently not required by the federal Landfill NSPS/EG to collect and control LFG. The landfill is currently collecting LFG through wells located around the perimeter of the landfill to control the offsite migration.

FOR MORE INFORMATION

Rio Rico Landfill
1500 W. Frontage Road
Rio Rico, AZ 85648

Santa Cruz County (owner)
Karl O. Moyers
2150 North Congress Drive
Nogales, AZ 85621
520.604.8150
Kmoyers@co.santacruz.az.us