

## **Golden Triangle Regional Solid Waste Management Authority Landfill Gas to Energy Project**

The Golden Triangle Regional Solid Waste Landfill has the distinction of having Mississippi's first landfill gas to electricity generating facility to support a regional power grid. In this project, gas from the landfill is re-routed through a system of underground piping to an internal combustion engine driven generator set. The power generated is purchased and placed on the local power grid by Tennessee Valley Authority (TVA) as part of their Generation Partners Program.

This regional municipal solid waste landfill, located at 2525 Old West Point Road between the cities of Starkville and West Point, is publicly owned and operated by the Golden Triangle Regional Solid Waste Management Authority (GTRSWMA) consisting of a number of local government entities in Northeast Mississippi. The GTRSWMA project is unique in that, unlike other landfill gas to energy projects in the State at the time, it was supported and conducted solely through public funds and resources. In addition, the project was the result of a successful partnership forged by the GTRSWMA with TVA, local power suppliers, and the state agencies of the Mississippi Department of Environmental Quality (MDEQ), the Mississippi Development Authority (MDA), and the Mississippi Public Utilities Staff (MPUS).



After becoming operational in September of 2011, an official "Flip the Switch" Ceremony was held on October 11, 2011 at which partners in the project, Authority board members, local and state officials and dignitaries, neighbors, and friends gathered to recognize the results of years of planning and work.

The GTRSWMA was honored in January of 2012 by the U.S. Environmental Protection Agency (EPA) with a national award recognizing the Authority's Power Generation Project at the Golden Triangle Municipal Solid Waste Landfill. The project received one of three national Landfill Methane Outreach Program (LMOP) Projects of the Year Awards for 2011 selected from landfill gas energy projects from across the country. The award was presented at the 15<sup>th</sup> Annual LMOP Conference and Project Expo held in Baltimore, Maryland.

In presenting the award, the EPA recognized those projects and partners that showed excellence in innovation and creativity and success in promoting project development and achieving environmental and economic benefits.

In the Golden Triangle Landfill project approximately 360 scfm of landfill gas is processed in one 1,050 kW Jenbacher genset to produce electricity sold on the power grid.



The significant environmental benefits are equivalent to the following:

- Over 8,500 passenger vehicles or
- Carbon sequestered by over 9,500 acres of pine or fir forest or
- CO2 emissions from about 104,000 barrels of oil consumed or
- CO2 emissions from over 5,000,000 gallons of gasoline consumed or
- CO2 emissions from burning over 225 railcars worth of coal.

Electricity produced from this project provides enough power for over 600 Golden Triangle area homes.

**For more information on the Golden Triangle Landfill Gas to Energy project, contact:**

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**For more information on the TVA Generation Partners Program, visit:**

<http://www.tva.com/greenpowerswitch/partners/index.htm>