## Celebrating Success: Southside Sanitary Landfill Indianapolis, Indiana



Superfund
Redevelopment
Initiative



"This truly has been a "win-win-win-win" situation for Rolls-Royce, Granger, Southside Landfill, and the environment."

– Thomas Jennings, Manager of Power & Utilities at Rolls-Royce



"This project is an excellent example of what can be achieved when all parties are working together for a common goal. We hope to use this project as a model for additional new projects."—Joel Zylstra, President of Granger Energy



Innovative thinking on the part of site stakeholders has allowed for the Southside Sanitary Landfill Superfund site to become a leading example of alternative energy, commercial and industrial use.

In addition to continuing to operate as a municipal solid waste landfill, the 312-acre former Superfund site in Indianapolis supports a variety of new land uses. Reuse activities include methane gas production for multiple local businesses, a golf course and an outdoor education center.

The landfill opened in 1971 and in 1989, EPA believed that toxic chemicals were migrating from the landfill and added the site to the Superfund National Priorities List (NPL). EPA required the owners of the landfill to take measures to prevent further migration of the chemicals and to collect the chemicals and treat them. After these measures were taken, EPA determined that the site was safe and in 1997 deleted it from the NPL. Today, more than 100 landfill gas recovery wells and an intricate pipeline system collect and transport methane gas produced by the landfill to businesses around the site.

Since 1989, Crossroads Greenhouses, one of the largest methane-powered greenhouses in the United States, has pulled more the 2.2 million cubic feet of methane gas each day from the landfill. All energy used in the 6.5-acre greenhouse is extracted from the decomposing waste of the adjacent landfill. More than 400,000 poinsettias, bedding plants, and hanging baskets are grown and supplied from the greenhouse each year.

In addition, the Rolls Royce Allison Aircraft Engine Plant signed a multi-year contract with Southside through Granger Energy in 1998 to obtain methane gas from the landfill. Because methane burns much more cleanly than other fuels, the use of this energy source has reduced nitrogen oxide emissions from the Allison plant by 22 tons per year. Some of the landfill gas collected is also used to heat the vehicle maintenance shop and power the landfill's liquid pumping system.

For more information, please contact Melissa Friedland at <u>friedland.melissa@epa.gov</u> or (703) 603-8864 or Frank Avvisato at <u>avvisato.frank@epa.gov</u> or (703) 603-8949.