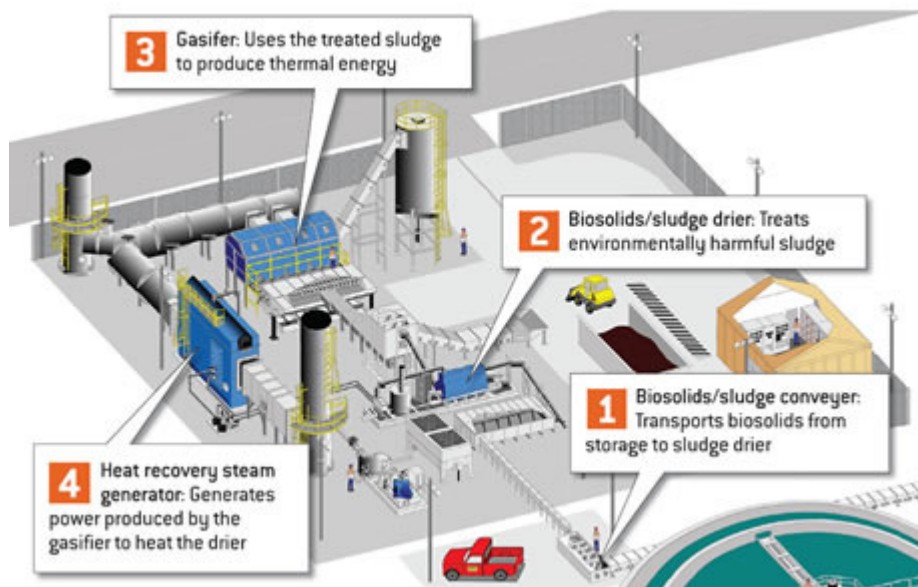


Wastewater Plant Will Power Itself

by Diane Sears



A small wastewater treatment plant in Sanford will become the first in North America to use a new “gasifier” to convert biosolids into clean energy that will help power the facility.

Houston-based MaxWest Environmental Energy is spending \$1.7 million to install equipment at the new plant off State Road 417 near Orlando Sanford International Airport. MaxWest chose the Sanford facility, says William Baker, vice president of marketing for MaxWest, because the plant was already using cutting-edge technology.

In many municipalities, sludge that’s produced during wastewater treatment is trucked to landfills or to remote farmland, where it’s spread over the soil to dry. But sludge carries phosphorus and nitrogen, which can pollute groundwater, and methane gas, identified as a contributor to global warming.

Earlier this year, the Sanford plant installed a drier to treat its sludge. Starting in September, the gasifier will use sludge processed by the drier to produce thermal energy to heat the drier, replacing the natural gas the city now buys. “So we have a closed-loop system, and we can turn off the natural gas,” Baker says.

MaxWest will own and operate the gasifier, and the city will pay the company \$258,000 a year for 20 years for the power it produces.

Initially, the power generated will be used to operate only the drier. Paul Moore, the city's utilities director, says if everything works well, the city and MaxWest will consider other options, such as using the gasifier to produce power for the entire plant; selling off excess capacity in the gasifier to other municipalities; and selling excess power produced in processing the dried sludge.

The city estimates a savings of \$9 million over the life of the contract. MaxWest is working with eight other Florida municipalities to set up similar gasifiers.