

County receives state grant for landfill project

Plan is to use methane now being burned off to create power for use and sale to Baldwin EMC

Thursday, December 18, 2008

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BAY MINETTE — Baldwin County has received the \$40,000 it requested from the state to help the Magnolia Landfill move toward a goal of energy independence.

The Alabama Department of Economic and Community Affairs awarded the funds to be used as part of a \$68,500 project to run a generator with landfill byproducts. The rest of the funding is a local match.

"We want to make this landfill self-sufficient and hopefully a big exporter of energy," county Solid Waste Director Jim Ransom said. "We certainly appreciate the state's assistance and the County Commission has been behind this every step of the way and is very supportive of the department and what we've got going on."

The money will be used to install a 25-kilowatt generator at the landfill that will be operated mostly by natural gas from biodegrading waste. A small amount of biodiesel fuel produced at the landfill will be used as well, officials said.

It's all part of the goal of powering more of the facility's operations from the waste it receives.

"We're working toward making the Magnolia Landfill a green park with renewable energy and this is the second step toward it," Ransom said. "The first step was the landfill gas-collection system. It uses a flare to burn off the methane and keep it out of the atmosphere. It does its job, but now that we've got that power harnessed, we are taking steps to create that into renewable energy."

The "flare" system installed in 2007 addresses the environmental problems and dangers associated with natural gas buildup at a landfill, but using it to run a generator could now be a moneymaker, officials said.

"This is something we can learn with ... to get into a working relationship (with Baldwin EMC) to move forward for bigger projects," Ransom said. "We have a lot of landfill gas capacity, but we don't have the ability to ship it off. So we are kind of starting small with a goal of making the gas-collection system self-sufficient."

"We eventually want to power the landfill."

Ransom credited Buford King, the county's energy conservation program manager, with helping file the successful grant application this summer. King was the county's assistant landfill manager but was given additional responsibilities earlier this year to increase energy efficiency and cost savings across all county departments.

King said the next step for the landfill project will be going out for bids for a generator, which will probably happen in early January. When it's fully functioning, the generator will send excess electricity back through EMC power lines, he said.

"We're estimating it will generate \$1,000 worth of electricity per month," King said. "We will still buy power like we do now, but at the same time sell power to Baldwin EMC."

The generator will run on a combination of about 88 percent methane gas and 12 percent biodiesel, which will be made from waste cooking oil collected at the facility. Powering the entire landfill with the same process would require installing three more similar-sized generators, King said.

Gov. Bob Riley's office announced the decision Wednesday.

"Innovative solutions are needed at every level of government and industry to wean our nation from dependence on fossil fuel," Riley said in a written statement. "By generating energy from waste, this project will serve as an example of how local governments can cut energy costs and stretch taxpayer dollars."

The Alabama Department of Economic and Community Affairs is administering the grant from funds made available to the state by the U.S. Department of Energy.