

Groups unite to research energy test in Meridian

By Anne Wallace Allen

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To create partnerships between researchers and businesses, the Idaho National Laboratory and its research partners look for problems needing solutions.

They recently found one at the Meridian water treatment plant, where officials want to find a way to capture some of the natural gas produced in the waste treatment process and use it to replace the power consumed by the treatment plant, which is one of the area's largest power users.

The result: a project that will have Boise-based technology firm Advanced Bio-Energy Systems test its newly developed system at the large Meridian plant. Meridian is supplying space and some staff time, and the Center for Advanced Energy Studies is providing independent evaluation of the program.

The many parties involved hope that the test will lead to a permanent solution for capturing the extra gas that is now burned off in the treatment process. The gas would be used to power the plant, saving the city at least some of the \$450,000 that it spends annually on power there. The wastewater plant is the city of Meridian's largest power user.

The plant is designed for a capacity of 10.2 million gallons per day, and now treats around 6 million gallons per day.

"Our vision is to be leaders in finding ways to do energy conversions, and make us a more sustainable operation in

the long run," said Tracy Crane, the city's wastewater division superintendent.

The concept of generating power from municipal waste has been around for years; the Meridian treatment plant now uses 5 to 10 percent of its gas to power its boilers, said Thomas Barry, the city's director of public works. But it's not yet financially feasible to carry out the program on a large scale, said Barry.

The new ABES technology could enable the wastewater plant to generate more than enough energy for its own operations, said one of the ABES founders, Jerry Sturgill.

Other processes designed to do the same thing are too expensive, and require too much energy to be efficient, said Sturgill, who set up the company with the inventor of the process, William Stewart.

"What this system proposes to do is make the energy readily available and efficient at a reasonable cost," he said.

The system is also designed to reduce the amount of biosolids that end up as a waste product, and cut down on carbon emissions.

ABES is working with the city of Meridian, Boise State University, the University of Idaho, and the CAES on the project.

"This is the way it's supposed to work in Idaho," said Brent Stacey, the INL's director of technology deployment, of the collaboration. "We're looking for problems that need to be solved."