



Organization transforms trash into fuel using Utah's first food waste digester



By Cara MacDonald, KSL.com | Posted - Feb 8th, 2019 @ 11:02am

NORTH SALT LAKE — A renewable biomethane power plant built in Utah is expected to produce enough power to fuel a city the size of Bountiful in the coming years.

The facility, built by Wasatch Resource Recovery, will be able to successfully capture renewable energy from food waste in order to produce natural gas. Not only that, it is constructed to prevent methane, a very potent greenhouse gas, from being produced as a byproduct. According to a Wasatch Resource Recovery press release, that could mean the equivalent of taking more than 75,000 cars off the highway annually.

Utilizing Anaerobic Digestion, Wasatch intends to divert food waste from landfills and convert it into usable natural gas fuel. Anaerobic digestion is a natural process in which microorganisms break down waste like animal manure, food scraps, and human sewage to create biogas and biosolids. Those are generally natural gas and fertilizer.

“Organic waste makes up nearly 30 percent of our landfills,” Morgan Bowerman, Wasatch Resource Recovery’s sustainability manager, said in the press release. “This

new process can use that waste and bring considerable cost savings for businesses, institutions and service providers throughout the state.”

The organization, in partnership with a few other energy and water companies, held an open house to view the anaerobic food waste digester on Thursday in North Salt Lake. Officials explained how it's able to convert organic waste into renewable resources to interested members of the public.

Thursday's visitors got to see highly technical equipment grind and liquefy materials to create a slurry suitable for the digester and remove contaminants, according to the press release. After the food was broken down and converted into methane, it was then demonstrated to attendees how the methane is collected and turned into natural gas that can be transported through pipes.

“We held the open house today because we wanted to invite people to come see it before we start using it,” Bowerman explained. “On Tuesday, we will take our very first load of food waste. We will spend February ramping up slowly, taking smaller amounts of food waste and trying to get the digester up and running.”

Wasatch plans to spend March and April running the digester slowly and steadily, just making sure everything is running correctly.

“We'll make sure that the digester is happy and that the organisms within the digester are doing what they should be doing,” Bowerman explained. “Then, we hope that by May we will be fully operational.”

A renewable biomethane power plant built in Utah is expected to produce enough power to fuel a city the size of Bountiful in the coming years. (Photo: Meghan Thackery, KSL TV)

Not only is the project environmentally friendly, Wasatch Resource Recovery also believes it is intelligent economically. Local businesses will be able to pay fewer fees in waste disposal if they divert food waste to the digester instead. Further, they plan to create multiple new jobs in sustaining the contraption.

“This process can generate enough natural gas from previously landfilled materials to continuously supply a community with a population of 40,000,” Bowerman said in the press release. “To start, we will employ up to 12 new full-time positions.”

She added that the facility is built with two digesters that each hold 2.5 million gallons. Wasatch is expecting to process between 500 and 700 tons of food waste per day.

“I'm hoping, personally, that within the first year, we would bring in that much food waste,” Bowerman said. “If that's the case, then we will build two more digesters that are the same size and double our capacity.”

The land that Wasatch Resource Recovery is utilizing is right on Center Street in North Salt Lake, and the Dominion Energy Pipeline runs right underneath it. They were easily able to connect to the pipeline, and the natural gas being produced is piped and sold to British Petroleum (BP) for use.

“It’s a big deal,” Bowerman concluded. “There’s not really anything else in Utah or in neighboring states that’s able to do quite what we’re able to do here. If anybody is interested in signing up, contact us. We’d love to have you participate.”

Businesses or individuals interested in sending their food waste to Wasatch Resource Recovery can visit the website about signing up.