

Meet An Anaerobic Digester Operator

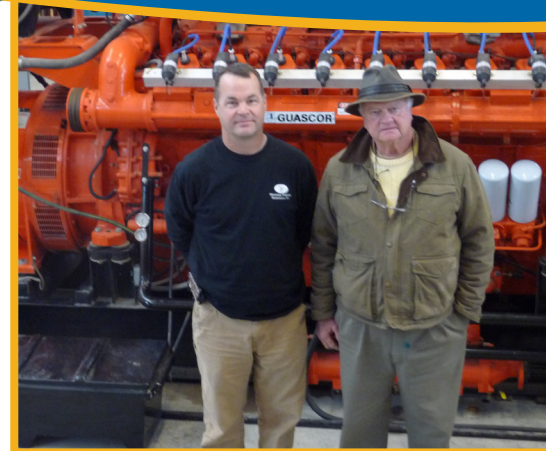
STORMS FARM
Blandeboro, North Carolina

Let's Meet...

Billy Storms (Owner/Operator) & Don Britt (Operator)

Anaerobic Digester Type: Farm-Scale; Mixed Plug Flow

Operating Since: October 2013



Why did you build a digester?

We have a lot of waste to manage with 28,000 hogs and 200,000 chickens – and a lot of phosphorus building up on the land. It is important to be a good farmer and support the next generation; this means addressing the phosphorus issue now. A digester coupled with nutrient recovery will get the phosphorus out of the waste.

What comes out of it?

We will separate solids to bag and sell/spread on other farms. Biogas is converted to electricity in an engine set with a biological hydrogen sulfide scrubber. The electricity that is generated is sold to the NC Electric Membership Co-Op that sells to all of the co-ops in the state (on the Four County Grid). Renewable Energy Credits are sold to Duke Power and carbon credits are sold through Camco.

What are your biggest challenges?

It took about six months to get the feedstock and gas production we wanted. The mix of feedstock is important. It takes 21 days to see the impact of what you feed the digester, so we had to learn to wait, which is not something that usually happens on a farm.

Also, converting our barns from a flush to scrape system was challenging because there were no other farms using a scraper system nearby.

What are the biggest benefits?

We have more control of our waste and reduced disease and cost. We use the digester to manage mortalities, which saves money and reduces disease for our livestock operation. Also, the hog houses don't smell since waste is moved quickly and there is no methane building up in the hog house. This makes for a healthier environment for the hogs. Our needs will be fully met once we apply a nutrient recovery system and recover the phosphorus and some of the nitrogen.

Do you have any advice for other farmers?

- Make sure you have a good source of feedstock to feed the digester.
- Get everything planned and financing lined up before you start.
- Do your homework and be realistic about the timing.
- Be prepared to wait! In other areas of farming, you see immediate results with changes. With the digester, you have to let the system build up in order to see the benefits. But, the results come.



"Everyone involved with the system wants to see it succeed because it has the potential to change the hog industry in the US if it is successful."

