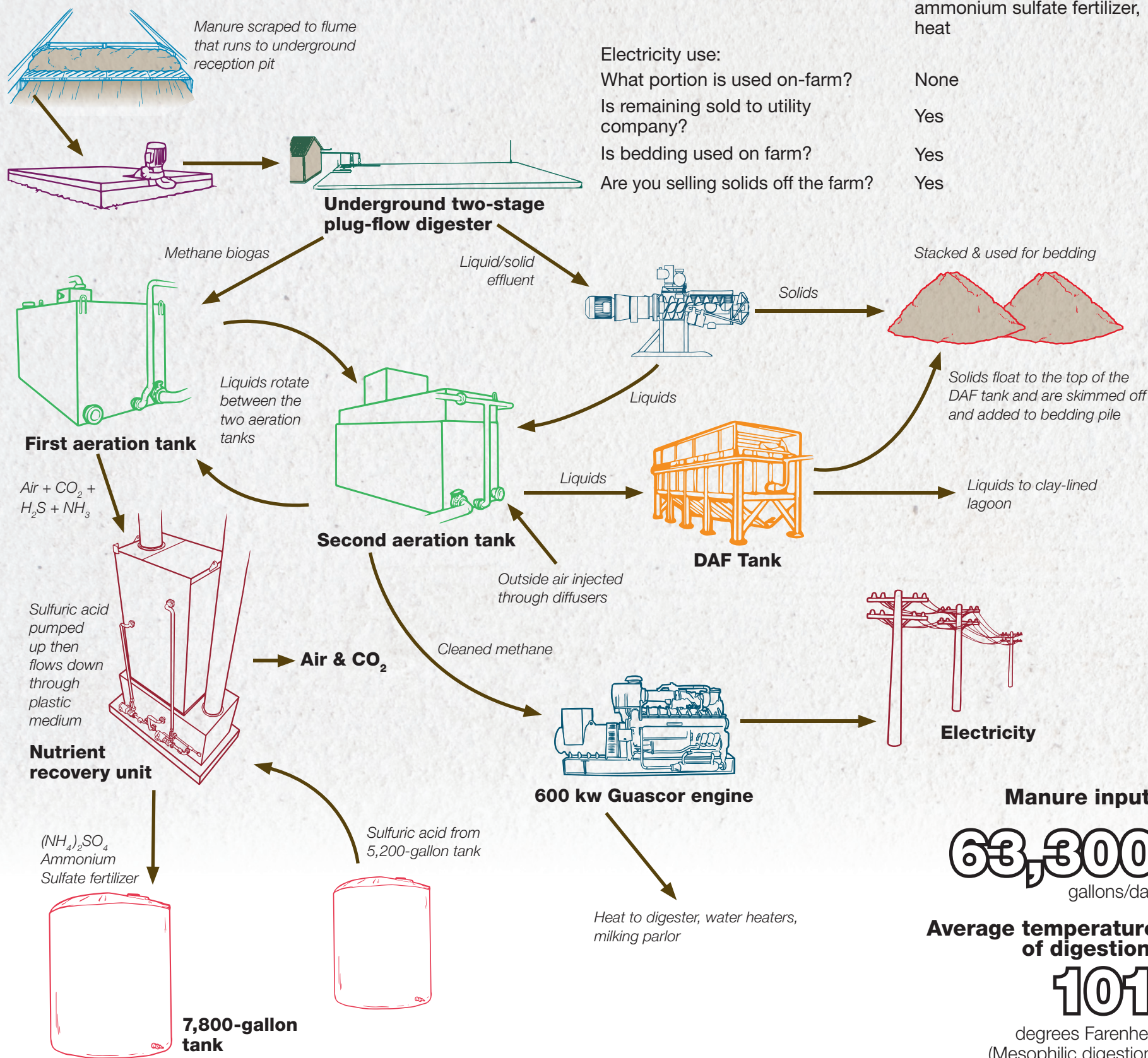


# Dallmann East River Dairy LLC

in Brillion, Wisconsin

**1,900** cows

**Type of digester**  
**Mixed plug-flow**



## Stats

System designer:	DVO, Inc.
Start of operation:	December 2012
Co-products used:	No
Rate of flow through the digester:	22 days
Total capacity of the digester:	80,000 gallons
Total methane captured from digester:	130 cu ft/cow/day
End product from digester:	Electricity, bedding, ammonium sulfate fertilizer, heat
Electricity use:	
What portion is used on-farm?	None
Is remaining sold to utility company?	Yes
Is bedding used on farm?	Yes
Are you selling solids off the farm?	Yes

## New system captures additional nutrients

Progressive Dairyman Editor Karen Lee

The anaerobic digester system at Dallmann East River Dairy in Brillion, Wisconsin, does more than digest waste from the farm. A nutrient-recovery system after the digester not only helps to clean the biogas but also removes excess nitrates and converts them into a saleable fertilizer.

Set up as a research and development site for DVO Inc., it is

one of four nutrient-recovery systems operating in the country. There are two on dairies in Washington and one on a poultry farm in Ohio.

Steve Dvorak, president of DVO Inc., says portions of this technology were developed in partnership with a post-doctoral program at Washington State University.

On this Wisconsin dairy, the

process begins when manure is scraped from four freestall barns into a flume that transfers the manure to a reception pit, where it is agitated prior to entering the two-stage mixed plug-flow anaerobic digester.

It is a two-stage system because of the two forms of bacteria at work,

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**Manure input:**

**63,300** gallons/day

**Average temperature of digestion:**

**101**

degrees Fahrenheit (Mesophilic digestion)

**Peak electricity generation:**

**600**

kilowatts/hour

**Average electricity generation:**

**540**

kilowatts/hour