



Contact: Sarah Libbon, Communications Officer
Southwest Minnesota Foundation
320-587-4848 or 800-594-9480
sarahl@swmnfoundation.org

COLUMN FOR IMMEDIATE RELEASE

March 30, 2006

Just Don't Call It a Waste!

By Dennis Haubenschild, Owner of Haubenschild Farm – Princeton, MN

Haubenschild Farm is a 1,100 acre family-run operation, which began in 1952 when my father bought 160 acres. We started with two cows, and now we're milking around 850 cows and the crops are primarily corn and alfalfa. Now, I and my wife, Marsha, and my two sons, Thomas and Bryan, and their families operate the farm. My Dad and Mom still help out when needed, also.

The sandy acres at Haubenschild Farm require the addition of organic matter supplied by that nonreplicable renewable resource called manure. You can call animal manure anything you want, but please do not call it a waste. Anaerobic digesters have been around since the beginning of time. The one we have had on our farm for the last seven years was developed using pre-World War II technologies. In India, a couple cows, goats, chickens and food byproducts provide the cooking gas. In the 70's, I visited farms where 40 cows provided the electricity for milking. Our digester provides the electricity for our dairy plus the electricity to supply another 70 – 80 homes. One of the nice things about having the digester is that it has not taken any more time to handle the manure. Some of the other benefits we have found is that by applying digested manure to the fields instead of raw manure, we have found an increase in the useable nutrient value of the manure, and thereby have been able to phase out the use of commercial fertilizer. The

best thing, at least for my wife, is the significant decrease in odor and fly problems. I believe it has cut odors by 90 percent.

Electricity is just one of the byproducts of running an engine from the methane produced by an anaerobic digester. Another product generated is hot water. Internal combustion engines are really better suited as hot water heaters, which has many uses on the farm. About half of the hot water we produce is used for heating the digester to maintain metaphysic temperature and the other half is used in the barns for things like heating the floors. We do not have to burn LP gas to obtain hot water.

Manure has always been a valuable asset on our farm; we actually have it on our balance sheet as a short term asset, which is why I started studying anaerobic digesters in the 70's. I was looking for ways to make animal manure more available to the crops the first year of application. Bacteria have to break down the volatile solids before the plant can take up the nutrients, or in other words, the nutrients have to become inorganic before the plant can use them. The anaerobic digester not only does that but also increases the ph to about 7.6 which also helps with the up-take of nutrients and decreases the use of herbicides.

U.S. agriculture can be supplying a third of our domestic energy and it can be done sustainably by using all of Mother Nature's tools. The United States has a cheap food and energy policy, which is being subsidized very heavily. When we start paying the real price for burning our fossil fuels, the cost of renewable energy will look cheap.

Here are some numbers to remember. It takes one acre to produce the forage for one cow and it takes one cow to produce the fertilizer for one acre. The energy produced in one day from the manure of a hundred cows is equal to one barrel of oil!

We all have to lessen the foot print we are leaving on this earth and we will have to use all the tools we were given to achieve this. My grandfather and father's goal was

to give us a better live style than what they had. My goal is to give my grandkids the same live style we enjoy.

Here are some Web links for more information about anaerobic digesters:

www.epa.gov/agstar/ - The AgSTAR Program encourages the use of methane recovery (biogas) technologies. Just a few of the resources located on this site include:

- Experts including designers, project developers, energy service providers, equipment manufacturers and distributors, and commodity organizations for developing anaerobic digestion technologies
- Tools and resources on manure management and assist developing anaerobic digestion projects.
- Workshops and conferences

www.Mnproject.org — a detailed case study of the Haubenschild project as well as others studies and information involving renewable energy

This monthly column is brought to you by the Southwest Minnesota Foundation as part of its initiative to advance renewable energy as an economic asset in southwest Minnesota by branding and promoting the region as The Renewable Energy Marketplace™. For more information on the Renewable Energy Marketplace™, log onto www.renewableenergymarketplace.org and for more information on the Southwest Minnesota Foundation, log onto www.swmnfoundation.org.

###