OUTSTANDING DAIRY PROCESSING & MANUFACTURING SUSTAINABILITY

Foremost Farms USA and Schreiber Foods Inc.

Richland Center, Wisconsin







Dairy companies partner to turn wastewater into energy

Foremost Farms USA and Schreiber Foods Inc. might, under certain circumstances, be considered competitors. Each produces dairy products at plants in Richland Center, Wisconsin. However, in late 2011, the two companies jointly began construction on Richland Center Renewable Energy (RCRE), a state-of-the-art water-treatment facility that generates renewable energy from the dairy plants' wastewater.

The facility, which can treat up to 1.4 million gallons of water per day, uses anaerobic digesters to break down organic material coming from the plants and produces biogas that is mostly methane. Using the biogas to fuel its generators, RCRE has the capacity to produce 1.7 megawatts of power, which can be sold back to the electric grid.

Prior to building RCRE, Foremost Farms and Schreiber Foods each was discharging its industrial wastewater to the municipal treatment plant. While this is common practice nationwide, the volume of waste brought the treatment plant to capacity and made plans to expand operations at Foremost Farms and Schreiber Foods more challenging. By creating a private plant, the two companies reduced stress on the municipal infrastructure. The collaboration also resulted in the elimination of waste-hauling truck traffic in the local community, as wastewater is now delivered directly to RCRE via an underground pipeline.

The partnership between
Foremost Farms and Schreiber
Foods proactively addressed
wastewater management and
has resulted in a number of very
tangible business, community
and environmental benefits.

- RCRE produces an average of 667,000 kilowatt-hours per month, the equivalent of powering 830 homes.
- The first two years of operations saved more than 14,000 metric tons of carbon-dioxide-equivalent emissions.
- An average of 24 waste-hauling trucks per day have been removed from the roads.

Community involvement was a priority for Foremost Farms and Schreiber Foods. RCRE has welcomed hundreds of people to tour the site, and went so far as to solicit feedback from adjacent property owners about exterior lighting and the color of the digester dome.

The RCRE project model serves as a road map for dairy production facilities seeking to manage waste streams in an effective, efficient and sustainable manner.