

Complementary System

New ethanol production technology was unveiled Oct. 27, 2005, at Mead Cattle Co. near Mead, Neb. The E3 BioFuels Complex is a cutting-edge, closed-loop system that combines ethanol production, livestock production and waste management.

“Major advancements have been made in ethanol production technology over the past two decades, but this new closed-loop system is truly a revolution for the future of ethanol production in the U.S.,” said Brian Jennings, executive vice president for the American Coalition for Ethanol (ACE). ACE is a national nonprofit association that promotes ethanol production and use.

David Hallberg, began developing the system in the mid-1990s and secured a patent for the system in March 2002. In 2005, Hallberg formed a partnership with Earth, Energy and Environment LLC, a

Kansas-based company that has owned and operated energy projects since the 1970s.

Learn more about the company and this project at www.e3biofuels.com. For

more information about ethanol, visit www.ethanol.org.



Editor's Note: This article was provided by the American Coalition for Ethanol.

Biofuels facility

**combines beef cattle,
waste management and
ethanol production in a
closed-loop system.**

The system incorporates a dairy or feedlot, an ethanol production process, and an anaerobic digester into a self-sustaining, closed-loop system. The manure from the livestock is handled by an on-site waste management facility and turned into biogas. This biogas powers the ethanol production process, eliminating fossil fuel costs. Wet distillers' grain — a coproduct of the ethanol production process — is fed to the livestock, completing the loop.

The E3 BioFuels Complex has been designed around the existing Mead Cattle Co. feedlot, which has a capacity for 30,000 head of cattle. The ethanol production component was tailored to fit the size of the feedlot and will produce approximately 24 million gallons (gal.) of fuel-grade ethanol annually. The ethanol plant will process more than 8 million bushels (bu.) of corn annually and produce 100,000 tons of wet distillers' grain.

“In these times of high oil and gas prices and record imports of these products, ethanol is a critically important way for America to diversify its energy portfolio and shield itself against price spikes and supply disruptions,” Jennings said. “Today, 91 ethanol plants are operating across the nation and more than 20 additional plants are under construction. This new closed-loop technology allows ethanol production to partner with other ag businesses, presenting even more opportunities for further growth.”

Based in Omaha, Neb., E3 BioFuels LLC holds the patent for this unique technology. The company's president and chief executive officer (CEO),