

FIRST OF ITS KIND GASIFICATION OF DIGESTATE TO RENEWABLE ENERGY AND CERTIFIED ORGANIC FERTILIZER



“I applied the product to a few of my fields and was completely satisfied with the results... by my observations, the plants seemed to be more productive and healthier.”

- Pat Knipp, Commercial Soybean Grower in Missouri

CHALLENGES

In 2012, Hampton Feedlot in central Missouri had a problem. The on-site methane digester converted manure from 2,500 cattle to biogas for onsite electricity generation but the 17 tons per day of wet digestate was an operational and environmental liability.

OUR SOLUTION

The Ecoremedy® advanced gasification process uses a fraction of the digestate as the sole energy source to dry the wet digestate to organic alternative peat moss with macro- and micronutrient value.

SUMMARY

Ecoremedy applied cutting-edge technology perfected at our R&D facility in Harrisburg to solve a common problem for methane digesters: what to do with the solids? This commercial project proved Ecoremedy as the leader in advanced gasification of challenging waste streams.

Our system can complement existing anaerobic digesters as a post-processor of waste or replace the digester altogether with continuous and unattended operations. Ecoremedy outperforms anaerobic digesters for recovering energy and nutrients from waste in terms of capital expense, operating expense, footprint, waste volume reduction, odor reduction, and the range of finished products with broad market options.

ECOREMEDY IMPACT

This Ecoremedy project has the annual capacity to convert 5,610 wet tons of cattle manure digestate to:

- 1.57 million Btus per hour of renewable thermal energy, replacing 134,300 gallons of propane
- 4,135 tons of water evaporated with no fossil fuel
- 1,475 tons of USDA and OMRI organically certified peat moss alternative