

For immediate release

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HR Green works to turn wastewater into clean energy at Amana Farms

HR Green offers specialty resources in Industrial Water and Wastewater Treatment. We assist clients with studies, design, permitting, and construction. We work with clients to provide treatment solutions that comply with corporate procedures and policies while offering sustainable solutions that add to the bottom line.

Amana Farms consists of 6,750 acres of crops, a 2,400-head cow/calf herd, a 4,000-head cattle feed lot, and a 1.69 million gallon anaerobic digester that is set up at the feedlot to digest manure generated at the farm, combined with waste from local industries.

The facility was designed to generate 2,600 kW electricity but biogas production was below expectations and electrical power generation ranged from 300 kW to 1,100 kW. HR Green was asked to determine the cause(s) of the low gas production and provide recommendations to improve performance.

HR Green first recommended analysis of the ingredients being fed to the digester. Test results revealed that carbon content was severely deficient; the digester was overloaded with ammonia; no toxins were present in sufficient quantities to adversely impact the digester; and the industrial wastes were not high enough in carbon content to warrant the volumes being fed.

HR Green recommended that new substrates should be identified, tested and if the results are acceptable be introduced to the digester. HR Green recommended the parameters that should be tested and provided guidelines with regard to interpreting test results. Amana Farms has since identified multiple potential substrates and full scale testing of these substrates is continuing.

Originally founded in 1913, HR Green has offices throughout the United States. HR Green offers specialty resources in Industrial Water and Wastewater Treatment. We understand the differences in industrial wastewater and water treatment and are accustomed to high strength waste. We provide viable, successful and sustainable solutions to all of our clients. For more information go to www.hrgreen.com.