



Thermal Manure-to-Energy Systems for Farms: Technical and Environmental Feasibility

September 18, 2015

2:30 pm (eastern), 1:30 pm (central), 12:30 pm (mountain), 11:30 am (pacific)

The Farm Manure-to-Energy Initiative is regional, collaborative effort focused on demonstrating and evaluating the performance of thermal, poultry litter-fueled technologies capable of producing energy and facilitating the transport of excess nutrients out of high-density animal production areas. Results of performance evaluations, including technical and environmental feasibility will be presented, along with results from field trials where ash and biochars were compared side-by-side in row crop and vegetable production with commercial fertilizer and untreated poultry litter. Presenters will discuss challenges and opportunities associated with using thermal poultry litter-fueled technologies at the farm-scale. *An application for continuing education credit for Certified Crop Advisors (CCAs) and members of the American Registry of Professional Animal Scientists (ARPAS) has been submitted.*



Kristen Hughes Evans is the Executive Director for Sustainable Chesapeake, a non-profit environmental organization that cultivates prosperity through innovative solutions that benefit farms, communities and the Chesapeake Bay. She leads efforts to demonstrate and expand the adoption of innovative and financially attractive approaches to reducing pollution from farms and urban landscapes. She facilitates collaborative partnerships such as the Farm Manure-to-Energy Initiative, a regional effort to demonstrate and evaluate the performance of thermal manure-to-energy technologies on farms in the Chesapeake Bay region. Ms. Evans holds an M.Eng.Sc. in Agricultural Engineering from the National University of Ireland as well as an M.S. in Marine and Estuarine Environmental Science. Phone: (804) 477-7683. Email: Kristen@susches.org

John Ignosh works as an Area Specialist with Virginia Cooperative Extension and Virginia Tech's Dept. of Biological Systems Engineering. Previously, John performed air quality research with UC – Davis related to aerosols associated with agricultural production in the San Joaquin Valley, as well as nationally regarding the contribution of fine aerosols to regional haze and public health in protected environments. He has also worked in international development and served as a resource extension agent with the U.S. Peace Corps. John is a Certified Energy Manager and Distributed Generation Certified Professional by the Association of Energy Engineers, and a Certified Nutrient Management Planner. He holds an M.S. in forest resource management with a minor in water resource science from the University of Minnesota. Phone: (540) 432-6029; Email: jignosh@vt.edu



Preston Burnette is an engineer for Farm Pilot Project Coordination, Inc. He graduated from North Carolina State University with a B.S. in Mechanical Engineering. He worked in the Animal and Poultry Science Department where he focused on technologies to address manure from CAFOs. He transitioned to FPPC in 2009 to work on manure to energy projects nationwide. While at NC State and FPPC, he has provided engineering support for projects investigating ways to generate energy from manure. He has worked on gasification and other thermo-chemical technologies in order to find on-farm solutions to generate energy from animal manures. He also developed a patent pending machine to process agriculture biomass, including manure, into biochar. Phone: (813) 385-7734; Email: Preston.Burnette@fppcinc.org

How Do I Participate?

On the day of the webcast, go to www.extension.org/58813 to download the speaker's power point presentations and connect to the virtual meeting room. First time viewers should also follow the steps at: www.extension.org/8924.

For More Information

* Thermal Manure-to-Energy Systems for Farms – www.extension.org/68455

* Manure to Energy: Sustainable Solutions for the Chesapeake Bay Region – <http://www.chesbay.us/Publications/manure-to-energy-report.pdf>

* Manure-to-Energy Initiative: Financial Template for Delaware, Maryland, Pennsylvania, Virginia, and West Virginia – http://efc.umd.edu/assets/m2e_ft_9-11-12_edited.pdf