

Compost Aeration and Heat Recovery (CAHR) Open House

Presentations and Agenda – timing and details – May 22, 2018 from 10:30am - 2:30pm

Location: VFW Post 7823, 530 Exchange St, Middlebury, VT

Background:

The Foster Brothers Farm has been an innovator for decades. They opened the first anaerobic digester in Vermont, started the composting enterprise VT Natural Ag Products (VNAP) 25 years ago, and were awarded the U.S. Dairy Sustainability Award in 2016.

VNAP is the state's largest composting facility; it processes dairy, poultry and horse manure, forest product residuals, source-separated food scraps and other biomass into a number of compost and soil products.

The May 22 presentations and open house are intended to share information for farmers, solid waste and energy professionals, agency staff, policy makers and other interested individuals. Attendees will learn about current academic research and operating observations from the field. A guided tour of the compost aeration and heat recovery (CAHR) systems installed at VNAP in 2016 and 2017 will follow the presentations.

Cost-share funding for the projects have been provided by USDA Rural Development – Rural Energy for America Program, VT Clean Energy Development Fund and the Closed Loop Foundation with support of the Walmart Foundation. Site tours are on a guided basis only.

For more information please contact: natasha@compostingvermont.org or brian@agrilabtech.com

To request a disability-related accommodation to participate in this program, please contact Juan at jalvez@uvm.edu or (802) 656-6116 by May 2nd so, we may assist you.

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Event partners include: VT Natural Ag Products; Agrilab Technologies Inc.; UVM Extension; UNH Extension; VT Agency of Agriculture, Food and Markets; and Composting Association of Vermont



Compost windrows on the new VT Natural Ag Products working pad in November 2017 with Agrilab Technologies Hot Box 250-R CAHR unit at left.



Detailed Agenda:

10.30am – Welcome and introductions – Natasha Duarte, Director, Composting Association of Vermont

10.40am – Juan Alvez, Ph.D., Senior Research Associate, University of Vermont Center for Sustainable Agriculture

COMPOST AND SOIL AMENDMENT EFFECTS ON PASTURE FORAGE YIELD AND QUALITY

– Why do farmers make and use compost? Vermont research on compost use in agriculture

11.00 am – Matt Smith, Ph.D., University of New Hampshire Organic Dairy Research Farm

AERATED COMPOSTING AND HEAT RECOVERY ECONOMICS (CAHR), ENERGY AND GHG ASSESSMENTS, FROM CONSTRUCTION THROUGH OPERATION

– Economics of CAHR construction and operation, greenhouse gas (GHG) emissions and carbon life-cycle assessment, net energy efficiency study, leachate and irrigation study and implications for system design.

11.45 am – Robert Foster, President, Foster Brothers Farm and VT Natural Ag Products and Brian Jerose, President, Agrilab Technologies Inc.

DESIGN AND CONSTRUCTION OF CAHR SYSTEMS, PHASES I AND II AT VNAP

– Slides and descriptions of planning, design, construction and operation of site improvements and installation of two Agrilab Technologies Inc., Hot Box 250R CAHR units in 2016 and 2017.

12 noon – Lunch – Catered by Pratt’s Store

12.30 pm – Robert Foster and Brian Jerose

OBSERVATIONS AND PERFORMANCE DATA FROM CAHR SYSTEMS

– Slides on performance data and observations of process efficiency, avoided fuel use for facility heating and product drying, plus lessons learned and upcoming plans.

12.50 pm – Alex DePillis, Senior Agricultural Development Coordinator, Vermont Agency of Agriculture, Food & Markets

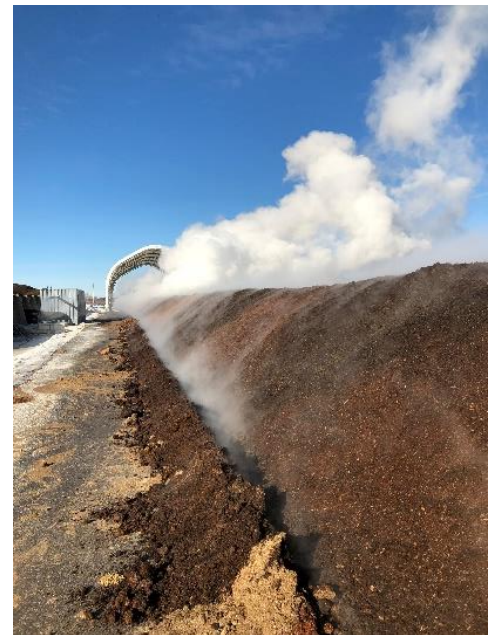
CLOSING COMMENTS: IMPLICATIONS FOR FARMERS, SOLID WASTE AND ENERGY PROFESSIONALS, POLICY MAKERS AND OTHER STAKEHOLDERS

– Brief discussion to wrap up morning presentations, logistics for carpools and details for guided tours at VT Natural Ag Products composting site.

1 pm – Depart to 297 Lower Foote St. and designated parking

1.30pm – 2.30pm – 2 guided groups go through VNAP site

2.30pm Adjourn – thanks!



Steam is released after turning the compost windrows. With CAHR, the majority of steam is drawn by negative aeration into specialized equipment and renewable thermal energy is utilized to heat a building, dry products and accelerate the composting process.