

Managing Organic Residuals
Program Work Team – Tour and Workshop Summary
Cornell Waste Management Institute
<http://cwmi.css.cornell.edu>

Date: August 2 - 3, 2012

Location: Compost Facilities in Western NY and Genesee County Fairgrounds in Batavia, NY

Purpose: The purpose of the PWT is to gain guidance from participants on what direction CWMI should take in research and outreach to be able to answer stakeholders' questions, as well as to provide updates on current programs and share newly developed resources. As a result of interest generated at the annual meeting held in March, this additional PWT tour and workshop was conducted.

Meeting Summary: On August 2 and 3, Cornell Waste Management Institute (CWMI), in conjunction with Cornell Cooperative Extension Northwest NY Dairy, Livestock & Field Crops Program, Cornell ILR School and the Environmental Finance Center (EFC) at Syracuse University, hosted a compost facility tour and compost workshop in Western, NY. Thirty-seven participants from around the state toured 5 facilities that are managing organic residuals in a variety of ways. The following day, a workshop was held at the Genesee County Fairgrounds in Batavia.

Tour: Forty (40) citizens and stakeholders boarded the bus on August 2, 2012 and toured five facilities in Western NY:

1. Backyard Compost Education and Demonstration Site at Genesee County Park:

- a. Contact: Peggy Grayson, Recycling Administration, GLOW Region Solid Waste Management Committee, Batavia, NY <http://glowsolidwaste.org>.
- b. The Backyard Compost Education and Demonstration Site at Genesee County Park is one of three education and demonstration sites on composting sponsored by GLOW Region Solid Waste Management Committee. The demonstration area includes 10-11 manufactured and homemade composters, signage showing the composting process, examples of composting implements (screen, pitch fork and thermometer) and a take one box that contains a packet of instructions and information.

2. Synergy Biogas, LLC:

- a. Contact: John Noble, President, Synergy, LLC, Linwood, NY, <http://www.synergyag.com/files/synergy%>.
- b. Synergy Biogas, LLC has built and is operating a Bigadan co-digester next to the Synergy Covington dairy site. The project's innovative "digestion" technology blends cow manure with cheese whey, school lunch leftovers and other food waste to make methane that powers a 1.4 mW generator, and turns it into electricity. The Synergy's is the largest on-farm digester in NY! Synergy Biogas owned by CH4 Biogas will produce more than 10,000 MWh/year (electricity to power more than 1,000 homes) —and is the first independently owned and operated biogas plant located on a NY dairy farm. The project captures methane that would otherwise be released into the environment and burns it to power the generator and harness its energy in the form of electricity. The project improves

the stewardship of the dairy operation by reducing emissions and potential for water and air pollution.

3. Worm Power:

- a. Contact: Tom Herlihy, Avon, NY, <http://www.wormpower.net>
- b. This vermicomposting facility is integrated with a 4th generation family "Dairy of Distinction". Worm Power produces 2.5 million pounds of vermicompost a year using separated dairy manure as their feedstock. Organic materials (manure and bedding) are processed in a short thermophilic composting step (high heat) that ensures that Worm Power's compost products are free of weed seeds and that it is certified to meet all USDA and EPA standards for possible pathogen destruction. The process occurs in barns and takes about 75 days to completion. Next, over 8 million earthworms (commonly referred to as red worms) process the material under specific and controlled conditions to give WORM POWER its outstanding soil fertility building properties. Because the dairy manure is a relatively consistent feedstock and this vermicomposting process is controlled, RT Solutions has been recognized and acknowledged by leaders in the vermicomposting industry as having the premier earthworm composting production facility in North America.

4. Helmer Nature Center at West Irondequoit Central School District:

- a. Contact: Barbara Carlson, Director of Environmental Services, Rochester, NY, <http://www.westirondequoit.org/helmer.htm>.
- b. West Irondequoit School District's Earth Bin, renamed Earth Flow by its manufacturer Green Mountain Technology, is located at the district's Helmer Nature Center. Positioned west of a baseball field, the compost facility is surrounded by a wooden fence, screened by the surrounding woods. WICSD uses it to compost kitchen prep scraps, wood chips, and the leaves gathered from district properties. They are experimenting adding post plate lunch waste from their 4th through 6th grades, first treating the material in an Earth Tub at those schools and then transferring the still hot product to the Earth Flow for finishing. The school district incorporates the compost facility in the Helmer Nature field trip programs and uses the finished compost product on landscaping and athletic fields.

5. Monroe County Yard Waste Composting Facility:

- a. 6 Avion Dr., Rochester, NY
- b. Monroe County composts 10,000 cy of leaves from the City of Rochester at its Avion Drive site on an asphalt road millings pad. A recent (2010) waste characterization study of Monroe County garbage found that almost 20 percent of the material going to local landfills was yard waste (which is banned from the landfill). The material is processed in thermophilic windrows and turned about 10-12 times a year with a Komptech X53 windrow turner depending on moisture and weather conditions. A Doppstadt 720 Rotary Trommel screen is used to remove litter, stones and larger woody pieces from the compost. Finished compost is given to municipalities and used in public give back sites. Elephant & rhino (zoo herbivores) manure from Seneca Park Zoo is composted off site at an exempt location. Monroe County residents recycle their Christmas trees. Residents save a valuable resource by having trees chipped into landscape mulch instead of disposing of them in local landfills. Compost is available to be picked up at the County's EcoPark location in the Town of Chili and the City of Rochester Operations on Colfax St./Ferrano St.

Workshop: Thirty-nine (39) citizens and stakeholders attended the workshop on Aug 3. There were sessions on the basics of composting, compost quality, troubleshooting common compost problems and mortality composting by CWMI. In addition, Jared Spokowsky from NYS Ag and Markets gave a presentation on composting with ash wood chips and Nellie Brown (Cornell ILR) spoke about health and safety issues for the compost worker. There was a lot of discussion, questions and answers and networking that created a very successful workshop. As stated by one of the participants on evaluation “Great two days! There were lots of good people with in-depth knowledge.”

List of Attendees – Tour Only

Affiliation

Buffalo State College
 Center for Environmental Information
 Citizen
 Citizen
 Citizen
 Citizen
 Citizen
 Cornell University Agriculture Experiment Station
 Devine Gardens
 Environmental Finance Center
 Popejoy Solutions
 Skidmore College
 Skidmore College
 Skidmore College
 Skidmore College
 Skidmore College
 WeCare Organics
 WeCare Organics

Name

Richard Saddleson
 George Thomas
 Charlotte MacGowan
 Heidi Gee
 Joel Teidman
 Mary Eisenhard
 Patty Murphy
 Glenn Evans
 Tina Jacobs
 Brad DeFrees
 Robert Popejoy
 Cindy Ford
 Dan Rodecker
 Margie Pfeffer
 Michael West
 Riley Neugebauer
 Charles Deprey
 Jeff Budzich

List of Attendees – Workshop Only

Affiliation

CCE of Erie County
 CCE of Wayne County
 Citizen
 Citizen
 Citizen
 Citizen
 Citizen
 Cornell ILR Extension – Buffalo
 Genesee County SWCD
 Modern Recycling
 Monroe County Department of Environmental Services
 NYS Department of Environmental Conservation
 NYS Department of Environmental Conservation
 The Tot Spot Child Care Centers
 USDA APHIS
 Western NY Crop Management
 Cornell Waste Management Institute
<http://cwmi.css.cornell.edu/pwt.htm>

Name

Sharon Bachman
 Laurie VanNostrand
 Barbara Cummings
 Devin Kamholtz
 Julie Laczkowski
 Mary Grace Schmidt
 Michael Lee
 Nellie Brown
 Elizabeth Bently-Huber
 Katy Duggan-Haas
 Tina Stevens
 Gary Maslanka
 John Thompson
 Wendy Mendola
 Anna Draisey
 Lori Whittington

List of Attendees – Tour and Workshop

Affiliation

Buffalo State College
CCE of Genesee County
CCE of Wyoming County
Citizen
Citizen
Citizen
Citizen
Citizens Environmental Coalition
Compost International
Cornell Waste Management Institute
Cornell Waste Management Institute
Farmer Pirates Cooperative
Green Policy Task Force
Maryland Department of the Environment
Monroe County Department of Environmental Services
Newfane Wastewater Treatment Plant
Newfane Wastewater Treatment Plant
Onondaga County Resource Recovery Agency
Red Creek Farm
Stearns and Wheeler GHD
Terra Viva, Inc
Zoological Society of Buffalo

Name

Lauren Bostaph
Jan Beglinger
Joan Petzen
Marla Tschieder
Nicholas Hall
Susan Wiater
William Reinhardt
Tim Truscott
Elizabeth Whitehouse
Jean Bonhotal
Mary Schwarz
Mike Raleigh
MJ Wilson
Kaley Laleker
Edward Harding
James Strickland
Martin Enselett
Greg Gelewski
Paul Wawrzyniak
Beth Ann Smith
Hand Duwe
Mike Shanahan