

2008-09 PROGRAM WORK TEAM ANNUAL REPORT

Managing Wastes: Composting and Land Application

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Activities, Accomplishments, Outcomes and Impacts:

The Managing Wastes PWT continues to engage diverse stakeholders including government agency personnel who are responsible for managing waste residuals, regulating wastes and nutrients, assisting the agricultural community and funding waste-related research and outreach; livestock farmers; compost producers; government agencies, other universities and colleges, NGOs, private consultants, waste management companies as well as Cornell Cooperative Extension educators and Cornell faculty and departments. We also participate in other related PWT's to see if there are other collaborations and waste related needs that we can assist with.

Effectively managing and reducing waste can turn unwanted waste products into resources while avoiding disposal costs. Waste management is part of every industry; waste produced by one business can be a resource to another. One of the important roles Cornell Waste Management Institute (CWMI) plays is convening and connecting people interested in waste related topics. New goals were identified by stakeholders in the 2009 PWT meeting. As always, diverting more waste from landfills for use as a resource was on the top of the list. Different ideas were discussed to accomplish that, such as waste exchanges for organic residuals. Another need was to try to develop written resources to encourage people to compost at home and to promote proper separation of organics in communities that have organic recycling programs. As we operate on grants and contracts we will secure funds to accomplish these things. The following accomplishments are and were actions that were completed or ongoing to fulfill past PWT goals:

CWMI provided assistance to 2575 people in 34 events including NY farm personnel, agriculture advisors, and businesses and municipalities that compost manure, mortality, yard and food waste helping to improve water quality & economics. Extension educators, veterinarians, agency staff and composters were reached with research-based information, which helps to set direction for research, policy and outreach. Programs included research to help farmers answer questions related to use of dairy manure solids as a bedding, work with USDA APHIS, EPA NYSDEC and NYS Ag & Markets on composting of mass animal casualty in disasters, NYSDEC food scrap workshops, policy around sewage sludge, NYS Dept of Health and NYSDEC soil clean-up standards, and work with contamination in garden soils.

The research results of use of dried manure as dairy barn bedding reached 290 farmers and industry leaders in workshops and demonstrations. Research included using a composted bedded pack and how to best manage dairy manure solids. Study results have been presented at conferences, 5 articles have been published and results posted on CWMI web site.

Three 2-day workshops trained 62 people who then educated 1121 people in 15 states. To better reach those with limited travel capabilities and to communicate with trainers, 5 webinars on special topics were convened reaching 800 people. Topics included risk communication, environmental effects of burial and composting, poultry management, butcher waste, unwanted horses and policy related to disposal. CWMI helps with policy development and assists with interpretation of rules in three main areas: mortality disposal, solid waste disposal and organic residual use to generate energy.

In ten venues, 440 people received information to better divert and manage food scrap. In roundtables and workshops, participants included regulators, industry, food banks, universities and composters. This

input will be used to set policy, recover value from waste, and set future programming direction. CWMI is lending assistance to DEC in revising the NYS Solid Waste Management Plan to better manage waste.

A new program at CWMI will help gardeners make informed decisions to manage contamination in soils. Two fact sheets have been developed to help gardeners understand contamination in gardens and residential soils, with suggestions for measures to protect human health. A National Institutes of Health grant was secured to assess and address contaminants in urban community gardens through a community-research partnership. Soil test results and interpretation will inform garden management and education programs to minimize impacts to human and soil health.

Managing human and industrial sludges continues to demand attention in communities where they are managed and land spread. Requests from ten communities were answered and stakeholders were reached in presentations. Four radio and newspaper interviews were also given.

CWMI has started a new compost research project to assess the persistence and fate of drugs in livestock mortality and manure. This is a collaboration with the School of Veterinary Medicine and findings will ensure water quality and health of wildlife, livestock and humans that could be affected.

CWMI's regularly updated web pages (cwmi.css.cornell.edu) received over 570,000 visits in 2009. CWMI replies to 240 requests for information per month via e-mail and phone. We share key information via e-mail with a 5200-person mailing list. Forty videos and documents are archived on eCommons@Cornell where 3,794 people visited.