Cutting Through The Red Tape

Cornell Waste Management Institute
http://cwmi.css.cornell.edu
Jean Bonhotal
“...because rinds, limbs, manure, leaves, garden cleanout, etc...are Terrible Things to Waste!!”

Jean Bonhotal
Cornell Waste Management Institute
cwmi.css.cornell.edu
Composting to Reduce the Waste Stream

and…. Make a Great Soil Amendment

REDUCE

REUSE

RECYCLE

Cornell
Waste Management Institute
US Waste Stream

Delaware County Solid Waste comports… Of the 27,000 tons of garbage processed through the digester, 65% was turned into compost, 2010

Composting can also help solve our society's solid waste disposal problem. *Organic residuals can comprise over 60% of our solid wastes nationwide.

Think About Residuals Available to Compost

- Food waste
- Food processing
- Leaf and yard waste
- Garden residuals
- Manure
- Weeds/lake weeds
- Nut Hulls
- Biosolids
- Silage/Haylage
- Mortality
Separation at the Point of Generation

Add small counter top container
Or 2
Schools and Institutions

Regulation:
If you have generated the waste, you can compost without permit or registration.

Cornell Waste Management Institute
http://cwmi.css.cornell.edu
Jean Bonhotal
Considerations

- Use it as part of the Curriculum for Multiple Grades
- Get buy in from the Top & Include different Levels of Staff
- Develop the Plan with Students
  Include a garden if possible
- Explore the Health Related Cautions
- Let parents know
Composting Liquids

Cornell Waste Management Institute
Vermi-Composting

Cornell Waste Management Institute
Institutional Composting
Don’t Get In Over Your Head
Green Mountain Technology

Farm-Crafted Compost™
Champlain Valley Compost Co.

Rotating Cover
Loading Hatch
Discharge Door
Aeration Floor
Cornell Waste Management Institute
Mixing Auger
Intervale Compost Facility
Rotary Drum Composter: in use for Bedding Preparation
Staff Buy In and Training
Foodscrap in Truck Bed

Cornell Waste Management Institute
Get Students Involved-Club? Credit?
Color Coded Containers
Curriculum

- Math
- Science
- Behavior
- Agriculture/Horticulture
- Ecology
- Systems
- Industrial Arts
Health

- People who are Immune Deficient should not be around the composts
- Good Hygiene should be Practiced
- In Planning Make sure Composts are not near Air Intake Vents
Building Greater Capacity

So you have Waste that you want to Divert
Possible Expansion

- Develop Business plan
- Work with Farms
- Encourage Businesses and Institutions
- Add to Municipal composts
  - Leaf/yard waste
  - BioSolids
  - Digesters
Considerations

- Distance to Closest Neighbors/Houses/ Businesses
- Population Density
- Dust
- Traffic/ Noise
- Wind Direction
- Slope
- Ground and Surface Water- potential flooding?
Choosing Compost Technologies

Static Pile-Passively Aerated Windrow
Turned Windrow
Forced Aeration
Rotating Drum
In-vessel

Cornell Waste Management Institute
Compost Management

- Conditions and Ingredients
- Recipe 25-30 : 1 Carbon/Nitrogen
- 50-60% Moisture
- Minimum 4 Cu.Ft.
- Temperature 120-150 degrees F
Leaf and Yard Waste
Auger Type
Compost Covers, Columbia County
NYS Prisons
42 Compost Sites
During Construction

- Maturation
- Storage
- Screening Area
- Biofilter
- Bioreactor

Summer 2004
Facility Site Plan
Design by Groupe Comporec, Inc. and S&W Services, Inc.

- Centralized separation of organic wastes.
- Fully enclosed tip floor and process buildings.
- Odor control.
- Aerated indoor product storage.
- Multiple material quality control.
- Process and stormwater controls – No SPDES.

Delaware County, New York
Forced Aeration, Bion
Horse, Poultry, Woodchuck, Dairy, Crop Residuals, Cafeteria, etc. Compost
Organic Dairy + Lake Weed
Straddle Turner with Tank
Rotary Drum Composter: in use for Bedding Preparation
Butcher Waste Compost
Highland Road Kill Compost
Remember

Garbage input = Garbage Output
Don’t Get In Over Your Head
Vermi-Composting