#### Regulatory Barriers to Organics Diversion & Composting

#### **Pennsylvania/ Regional Perspective**

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## **The Presentation**

- What Drives Us to Divert Organics?
- How We Are Doing w/ Recycling/
- Organics?
- Look at PA, Other Regs, Local Laws
- Barriers to Organics Recycling
- How to Encourage More Organics Diversion and Composting?



#### Are Regulations a Big Problem?



# Why Divert More Organics?

- Everyone Wants to Be "Green" (but as Kermit says, "It's not easy being green")
  - Corporate sustainability
  - More recycling, less waste
  - More resource reclamation, reuse
  - Less pollution, carbon footprint
  - Environmental benefits models
- Economic Sustainability
  - More efficient ops., value-added services
  - Avoided hauling and disposal costs



# Why Divert More Organics?

#### Zero Waste Goal

- Generate/ discard less, divert more
- Is it achievable? We'll see in CA
- How Well Do We Recycle in NE US?
  - Metals, Plastics, Fiber Recycling? Good
    - 15-40% recycling rates are typical (40% max?)
    - Some areas better than others (rural is tough)
  - Yard Waste Diversion/Composting? Good

Iow-tech yard waste compost sites common

To Do More, We Need a New Plan



## So What's The Next Low-Hanging Fruit?

#### What is "low-hanging fruit" anyway?

- Measurable quantities; proven technology; implementable; good markets; cost-effective
- Food Waste/ Other Organics?
- 1/2 to 2/3 of wastestream is biodegradable
- But always look at best and highest use
  e.g. high-quality paper should be reused
- Est. 15-30% +/- of wastestream is food waste, low value organics (e.g. soiled fiber)
- Can measurably reduce wastestream



## Are Food Waste/ Other Organics the Low Hanging Fruit?

#### Quantity?

- Yes one of larger components of waste
- Pre-consumer vs. post-consumer quality
- Large-volume vs. small-volume generators quantity, ease of collection and cost
- Feasibility/Technology?
  - Yes Windrow, ASP, in-vessel systems
- Cost?
  - Can be cost-effective vs. alternatives
  - Avoided cost of disposal



## Are Food Waste/ Other Organics the Low Hanging Fruit?

- Markets for the Compost?
  - Yes soil amendment, mulch, organic component of blended soil, erosion-control treatment, top-dressing, etc.
  - Regional variations
- Implementable?
  - Regulations often affect implementability
  - Regs may also affect cost and materials use
- Final Answer? Yes, but Regs. CRITICAL to Expanding Organics Programs

# **Recycling Law in PA**

- Act 101 of 1988 PA's recycling law
  - "Mandated" Communities (2/3 of pop.) must curbside-collect 3 items + leaves
  - No loads of leaves to landfills
  - 35% statewide recycling goal (25% initial)
- Success to Date
  - In 67 counties, 15-40% recycling rates now
  - Statewide, 35% attained (?)
  - 450+ windrow leaf compost sites
  - 30 +/- sites that compost food waste



## **PA Composting Regulations**

#### Regulated by Feedstock, Source, Size

- Siting Criteria applies to all types
- Full Permit (Chapt. 281) MSW, biosolids onerous
- Permit by Rule (PBR) yard waste (technology, acres (5 ac.), quantity (3,000 cy/ac.) caps); food waste with/extra OK
- General Permits (GP) New, or "DOA"
  - GP 30 Yard Waste sites up to 15 acres
  - GP 17 On Farm Composting 5 acres, 1,000 cy/y food waste, no post-consumer, no bond (5+/- in PA w/ food)
  - GP 25 MSW/ Residual higher tons and types, pre & post-consumer waste, bonding req'd (5+/- in PA w/ food)
- Demonstration Permits 3 yrs typ. (5+/- in PA w/ food)
- Captive Site own/op. site + waste (14 in PA w/ food) &

#### **PA Local Restrictions on Organics**

- 2,600 +/- local municipalities (fiefdoms)
  - Health, safety & welfare, police powers
  - Can regulate and restrict nuisances
  - Local zoning and LD permit powers
  - Permitted, Special Exception, or Conditional Uses controlled
  - For ag. operations (PA's largest industry), right to farm protections - ACRE Law
  - On-farm composting protected w/ ACRE?
  - Odors, nuisances can be issues



## PA Regs - The Good, Bad (and Ugly)

#### Good

- Siting criteria, setbacks good, if not too restrictive
- GP-17 allows small organics ops. with minimal restrictions
- Many different permit options, fit many situations

#### Bad

- GPs based on who applied first, feedstocks and restrictions
- GPs not standardized, coordinated; req'ts vary, complicated
- Bonding and product testing req'ts can be onerous
- Often not regulated as a sustainable, farm-type operation
- GP-17 size and tons limits make the "business" side tough
- Captive Facility is overly restrictive on feedstock sources
- Even if meet state req'ts, local (x 2,600) can stop a project
- GP reviews not streamlined 3 yrs for a GP-17 (Ugly!)

Other Pressures (+ & -) on Organics Management in PA

- PADEP Staff Down (budget) changes come slower, but more willing to work together?
- Rendering Plants new restrictions on accepting mortalities (mad cow), cost to farmer
- Road Kill Deer Mortalities liability of chronic wasting disease
- Poultry Disease Control Ag. Security
- Organic Farm Certification types of organic feedstocks restricted
- Landfill Organics Bans? none yet in PA (other than leaves), but the protocol is here

#### Landfill Bans and Carbon Credits, "+" or "-"?

#### Landfill Bans on Organics

- Encourages diversion, composting, etc.
- But who enforces?
- Must have alt. programs in place first!
- Impact on carbon credit eligibility?
- Carbon Credits
  - Additionality Requirement (beyond the regs)
  - If LF organics ban or required, then no CC?
  - Existing good practices "penalty" also?

# **Regs In A State Of Flux**

- PA Major Regs Overhaul Stalled
  - Planning, Composting Regs may advance
  - Opportunities to work cooperatively?
- NY Allows Small Facility Exemptions
  - Permit Exemptions manures, 3,000 cy yd waste
  - Registration to 10,000 cy/y yd waste, 1,000 cy food waste; other FW; revisions considered
- MD Strong WTE Push Politically
  - Grassroots sustainability effort, composting
- VA New Regs Drafted, Under Review



#### Can We Work Together On This?



## How Can We Improve the Regs?

- Standardize the Permitting Process
  - Registration/ PBR; GPs; Full Permit (logical range)
  - Practical design/operating criteria (BMP concept)
  - Limit bonding/ testing/ app. req'ts, bigger projects
  - Offer standard state model regs. (USCC)? (1 vs. 50)
  - Will streamline reviews (esp. w/ short staff)
  - But recognize local/regional needs & variations (e.g. air basins & VOCs)
  - State Organics Orgs. working w/ regulators (PA)
- Consider Standard Training/Cert.
  - Regs trng. tied to permit type, like Ohio
  - Many Orgs. offer Compost Opr. Training



#### How Can We Improve the Regs?

- Higher Feedstock Site Volume Limits
  - To make on-farm composting more competitive
- Relax Some Feedstock Type, Source Limits
  - E.g. pre-consumer vs. post-consumer food waste
  - E.g. MSW vs. residual; on-site vs. off-site sources
- Promote Good Local Model Regs.
- Advocate Sustainability
- The timing is good!

The Goal - A New Mindset - Managing A Natural Resource vs. Regulating An Organic Waste

## Let's Think Outside the Box!





## **Contact Information**

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