Overview—NH’s Current Regulations and Practices

Organics and Composting

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What is Organic Waste?

- Biodegradable material from plants & animals
- Includes, for example:
  - vegetation (leaf & yard waste, farming residuals)
  - food scraps
  - paper
  - sludge from water and waste water treatment, e.g., biosolids and short paper fiber
- Also referred to as “wet waste”
Organic waste regulated by NHDES

- **Sludge**
  - Env–Wq 800, “Sludge Management Rules”
  - Administered by NHDES Water Division, Residual Management Section

- **Other Organic Waste**
  - Env–Sw 100 – 2000, “Solid Waste Rules”
  - Administered by NHDES Solid Waste Bureau

- When sludge and organic solid waste are combined, both sets of rules may apply—or not—depending on various factors. See hand out.
Organic Waste Management Methods

Non-sustainable Methods
- Landfilling
- Incineration

Sustainable Methods
- Anaerobic Digestion
- Composting
  - Aerated (turned) windrow
  - Aerated static pile
  - In-Vessel
  - Vermicomposting
Current NH Practices for Managing Organic Solid Waste

- Leaf & yard waste—banned from landfills & incinerators
- No permitted solid waste anaerobic digesters
- No large scale composting facilities
- Operating composting facilities
  - 5 permitted small food & yard waste composting facilities, including 2 town transfer stations
  - UNH—dining hall waste (on site)
  - Unidentified number of other “on-site” facilities
What can we do to move toward more sustainable practices for managing NH’s organic solid waste?

In particular, what can we do to increase composting in NH?

Can we do this with available resources?
NH Solid Waste Composting Regulations

- Why regulate composting and compost?
- What are the current regulations / rules?
Benefits of Regulating

- Minimize & control nuisances
  - Odors
  - Vectors—rats, birds, maggots, insects

- Maintain health & safety
  - Bacterial issues—Pathogens
  - Standing Water/ Nutrient Run-off
  - Heavy metals
  - Fire potential

- Assure product quality
Rules for Composting Solid Waste (Env–Sw 600)

- Siting and Design requirements
- Operating requirements
  - Process requirements to meet pathogen reduction requirements of 40 CFR 503
  - QA/QC to assure product quality
  - General requirements to control nuisances
- Product quality specifications & use limitations
  - Class AA—unlimited use
  - Class A—not for use on crops for human consumption
  - Off-spec—manage as a residual waste
- Facility closure requirements
NH’s Tiered Permit System

- 3 Tiers
  1. Permit Exempt
  2. Permit-by-Notification
  3. Standard Permit

- Established in 1997

- Minor modifications in 2014

- Additional modifications are an option
Tier 1: Permit Exemptions

- Manure, when used as fertilizer (RSA 149-M:9,1)

- Certain “Site of Generation Facilities”, not including meat and dairy
**Tier 2: Permit–by–Notification (“PbN”)**

- Applies to certain limited scale operations, per Rules
- Obtained by filing a notice with NHDES & town, certifying:
  - <30 TPD (by law, b/c no hearing or public review of PbNs)
  - Facility meets all other operating requirements & limitations
  - Written “Operating Plan” & “Closure Plan” are available at facility
- Info provided in notice is subject to verification/audit
- Does not expire
- Does not
- No application fee
- Currently: Two PbN options for composting food waste
PbN Option #1: “Small Food Waste Composting Facility”

- Allows up to 20% food waste in a mixture of leaf & yard waste, manure, farm residuals, sludge, and/or approved bulking agent

- Food waste sources
  - Retail food sales outlets
  - Commercial / industrial kitchens
  - Food processing operations

- No meat and dairy
PbN Option #2: “Composting Food Waste at Publicly Owned Transfer Stations”

- Applies to town owned transfer stations that currently operate under a “Transfer Station PbN”
- Allows source separated food waste to be composted with leaf & yard waste, as per Option #1
- No meat and dairy
- Notify NHDES & integrate the operating procedures into facility’s written Operating Plan
Tier 3: Standard Permit
All other composting operations

- Applies to all other operations, including but not limited to:
  - > 30 TPD
  - Meat & dairy allowed
  - In-vessel
  - Static pile
- Standard Permits are “customized” to the particular type, size, and other operational variables
- Operating & Closure Plans are submitted for review with the application, vs. being subject to audit
- Abutter and town notification
- Public hearing required if >30 TPD
- Transferable
- Does not expire
- Can be modified
- Application Fee
Moving Forward…

- Listen to stakeholder concerns & recommendations
  - Barriers?
  - Incentives?
  - Markets?
  - Other?

- Identify next steps/action items to promote composting
  - Stakeholder Workgroup for rule updates
  - Other

- Facilitate communication between & support the work of other groups—
  - NRRA
  - NERC
  - NEWMOA
  - Regional Planners /USDA grant recipients
  - Others