Regulation in New York State:

Anaerobic Digestion

NEWMOA Staff Workshop
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Regulation of Anaerobic Digestion and Digestate
Big Issues for AD

• PR & VAR? Required?
• Digestate stability
• Analyses of digestate?
• Storage of digestate?
• Digestate use
  • Sufficient market
  • Management
• Contaminants in waste food
Part 360: Regulation of AD and Digestate depends on:

- Waste inputs to the AD
- Digestate use
- Location of the AD
Food Scraps → Agricultural Use
Manure → Composting -> Compost
Food Processing Waste → Animal Bedding
Biosolids → Topsoil Blending
FOG → Gasification -> Biochar
Slaughter Waste → MSW (with lots of pre-processing)

LOCATION
- At site of generation
- Wastewater treatment plant
- Farm
- Regional
AD located at the site of generation (no off-site inputs)

Part 360: AD is exempt from regulation

Digestate:
- Food processing waste: Registration for land application (except for CAFO)
  Registration for composting
- Manure: Exempt
AD Located on a Farm

- Manure
- Food Processing Waste
- FOG
- Food Scraps
- Others

SANITARY WASTE
AD: Is it a CAFO?

Is non-manure < 50% by volume?

- YES
  - Exempt
  - < 50 tpd?
    - YES
      - Permit
    - NO
      - Registration
  - NO

- NO
  - Accepts only manure & other farm waste?
    - YES
      - Exempt
    - NO
      - < 50 tpd?
        - YES
          - Permit
        - NO
          - Registration
AD on a Farm: Digestate Use

Only farm waste accepted
Use of digestate for land application, bedding, composting: Exempt

Farm waste & other wastes (other waste < 50% by volume):
Use of digestate for land application, bedding, composting: Exempt
AD on a Farm: Digestate Use

Registered AD ( < 50 tpd, > 50% by volume off-site waste):
  Bedding – exempt
  Land application – registration unless CAFO
  Composting – registration

Permitted AD ( > 50 tpd, > 50% by volume off-site waste):
  Bedding – exempt
  Land application – registration
  Composting – registration
AD at Wastewater Treatment Plants (POTWs)

AD: Exempt under Part 360 (covered by SPDES)

Digestate (Whether AD takes off-site organics or not): handled under biosolids regulations (360-4&5)
AD: Regional Facility

ANY biosolids, etc: AD is permitted under 360-5
Digestate: Regulated as biosolids (360-4&5)
AD: Regional Facility

SANITARY WASTE

< 50 tpd --> Registration
> 50 tpd --> Permit

Digestate:

Registered AD:  land application – registration unless CAFO
bedding – exempt
composting – registration

Permitted AD:  land application – registration
bedding – exempt
composting – registration
Regulation of Anaerobic Digesters under Part 360

Revisions Effective 6/17/2013
American Organic Energy

Long Island

600 tons per day
### Waste to Landfill Table

<table>
<thead>
<tr>
<th></th>
<th>Tons per Year</th>
<th>Tons per Day</th>
<th>Yards per Year</th>
<th>Gallons per Year</th>
<th>Gallons per Day</th>
<th>Max Duration (Days)</th>
<th>Max (Tons)</th>
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</thead>
<tbody>
<tr>
<td>Rigid Plastics</td>
<td>8,225</td>
<td>33</td>
<td>11</td>
<td>13</td>
<td>3</td>
<td>5</td>
<td>2.497</td>
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<tr>
<td>Ferrous</td>
<td>2,725</td>
<td>10</td>
<td>15</td>
<td>3</td>
<td>128</td>
<td>3</td>
<td>216 (BALED)</td>
</tr>
<tr>
<td>Non-Ferrous</td>
<td>3,980</td>
<td>13</td>
<td>23</td>
<td>13</td>
<td>128</td>
<td>3</td>
<td>50 (BALED)</td>
</tr>
</tbody>
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