SUPPORT OF THE STATE BAN OF MATERIALS FROM LANDFILLS

Mecklenburg County Solid Waste

April 29, 2013
WHAT MATERIALS ARE INCLUDED IN THE STATE LANDFILL BAN?

BACKGROUND INFORMATION

The 1989 Solid Waste Management Act banned (Senate Bill 111) certain recyclable materials from disposal in municipal solid waste landfills. The bans that took effect in the early 1990s were supplemented by local ordinances that discouraged the disposal of additional materials. State Statue N.C.G.S. 130A-309.10 (f) reads…”No person shall knowingly dispose of the following solid wastes in landfills:

- Used motor oil (March 1990)
- Scrap Tires (Whole) (March 1990)
- Antifreeze (October 1991)
- Yard waste (Early 1990s)
- White goods (1993)
- Aluminum Cans (July 1994)
- Lead Acid Batteries (January 1991)
- Oyster Shells (January 2007)
- Beverage containers from ABC permitted facilities (January 2008)
- Plastic Bottles (October 2009)
- Motor vehicle oil filters (October 2009)
- Wooden Pallets (October 2009)
- Electronics (laptops, desktops, monitors, video displays, printers, scanners, televisions) (January 2011)
- Fluorescent light bulbs (July 2011)
- Thermostats that contain mercury (July 2011)
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

Solid Waste Management Plan Recommended
Residential Strategies

Short Term (2013 – 2017)

- Ordinance enforcing NC landfill bans
- Implement volume based rates
- Provide incentive programs
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

- Support of The State of NC ban of materials from landfills
  - Protection of water supply (Tires, electronics, automotive fluids)
  - Job creation in the community (ABC Beverage Container Ban)
  - Value of materials (plastic bottles, aluminum cans)

- Diversion Potential

- Achieve Waste Reduction Goals

- Current Infrastructure in place to receive materials
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTainers?

- Almost every state has at least “something” banned from disposal in its solid waste facilities.
- *Nineteen (19) States have mandatory recycling requirements in at least one community. Although it is not technically a "ban", designated items must be recycled and cannot be disposed.

*Northeast Recycling Council Inc.*
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

- City of Seattle instituted its mandatory recycling effort in January 2005 by banning all recyclables from garbage containers. A year later, the city adopted a rule where residents who put too many recyclables (10%) in the garbage found their carts left full at the curb.
- In 2003, the City of Seattle had a recycling rate of 38%. The recycling rate is currently 60% with a goal of 70% by 2025. Per Seattle officials, there is also a profoundly high measure of compliance and not very many fines have been issued.
Why should we ban these materials from our trash containers?

<table>
<thead>
<tr>
<th>Position/Item</th>
<th>Number</th>
<th>Units</th>
<th>Time Frame</th>
<th>Cost</th>
</tr>
</thead>
<tbody>
<tr>
<td>Staff Time dedicated to ordinance</td>
<td>16</td>
<td>Hours</td>
<td>One Time</td>
<td>$577</td>
</tr>
<tr>
<td>Legal review/ordinance revision</td>
<td>8</td>
<td>Hours</td>
<td>One Time</td>
<td>$1600</td>
</tr>
<tr>
<td>Total Annual Costs</td>
<td></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Total One Time Costs</td>
<td></td>
<td></td>
<td></td>
<td>$2177</td>
</tr>
</tbody>
</table>

*Limited cost to implement

These costs are associated with Mecklenburg County Staff time spent assessing the practicality of a disposal ban on residential generators County-Wide.
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

<table>
<thead>
<tr>
<th>RESIDENTIAL</th>
<th>Source Reduction</th>
<th>Recycling</th>
<th>Composting</th>
<th>Total</th>
<th>Cumulative Emissions</th>
</tr>
</thead>
<tbody>
<tr>
<td>No New Programs</td>
<td>(117,993)</td>
<td></td>
<td></td>
<td></td>
<td>(117,993)</td>
</tr>
<tr>
<td>Short Term Programs</td>
<td>(76,692)</td>
<td>(107,113)</td>
<td>(6,883)</td>
<td>(193,688)</td>
<td>(311,621)</td>
</tr>
</tbody>
</table>

*short term strategies include: landfill ban, volume based rates, incentive programs

Carbon emissions shown represent emissions generated throughout the life of the materials handled including: extraction and processing of raw materials; manufacture of products; transportation of materials and products to market; use by consumer; and end of life management. End of life management includes factors such as transportation to an appropriate facility for disposal or processing, use of equipment during disposal or processing, production of methane following disposal, avoided utility emissions due to landfill gas to energy and landfill carbon storage.

Support of State Ban
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

Based on tonnage projections for FY 16-17, a 10% diversion of banned materials from residential generators would result in 6,214 tons materials that would be kept out of the landfill.
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

### Overall Waste Reduction Short-Term and Long-Term Goals

<table>
<thead>
<tr>
<th></th>
<th>Baseline FY98/99*</th>
<th>Current FY10/11*</th>
<th>Short-Term Plan Year FY16/17</th>
<th>Long-Term Plan Year FY21/22</th>
</tr>
</thead>
<tbody>
<tr>
<td>Population</td>
<td>618,853</td>
<td>923,944</td>
<td>1,027,829</td>
<td>1,114,398</td>
</tr>
<tr>
<td>Disposal tons with NO new programs</td>
<td>1,214,764</td>
<td>1,089,624</td>
<td>1,356,734</td>
<td>1,471,005</td>
</tr>
<tr>
<td>Disposal tons with PROPOSED programs</td>
<td>N/A</td>
<td>N/A</td>
<td>1,034,619</td>
<td>912,332</td>
</tr>
<tr>
<td>Proposed rate tons/person/year</td>
<td>1.96</td>
<td>1.18</td>
<td>1.01</td>
<td>0.82</td>
</tr>
<tr>
<td>Rate reduction % of baseline year</td>
<td>N/A</td>
<td>40%</td>
<td>49%</td>
<td>58%</td>
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<tr>
<td>Proposed tons diverted from disposal</td>
<td>N/A</td>
<td>N/A</td>
<td>322,115</td>
<td>558,673</td>
</tr>
</tbody>
</table>

* Actual, not proposed or forecasted. N/A = not applicable

Achieve Waste Reduction Goals
### Residential Waste Reduction Short-Term and Long-Term Goals

<table>
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<th>Baseline FY98/99*</th>
<th>Current FY10/11*</th>
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<td>1,027,829</td>
<td>1,114,398</td>
</tr>
<tr>
<td><strong>Disposal tons if NO new programs</strong></td>
<td>258,558</td>
<td>380,882</td>
<td>474,857</td>
<td>514,852</td>
</tr>
<tr>
<td><strong>Disposal tons with PROPOSED Short Term programs</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>364,342</td>
<td>395,029</td>
</tr>
<tr>
<td><strong>Proposed rate tons/person/year</strong></td>
<td>0.42</td>
<td>0.41</td>
<td>0.35</td>
<td>0.27</td>
</tr>
<tr>
<td><strong>Rate reduction % of baseline year</strong></td>
<td>N/A</td>
<td>2%</td>
<td>16%</td>
<td>35%</td>
</tr>
<tr>
<td><strong>Proposed tons diverted from disposal</strong></td>
<td>N/A</td>
<td>N/A</td>
<td>110,515</td>
<td>209,977</td>
</tr>
</tbody>
</table>

* Actual, not proposed or forecasted. N/A = not applicable

Achieve Waste Reduction Goals
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

The infrastructure to receive the banned materials from residents is currently in place.

Curbside Collection or Self Recycling Drop Off Centers

- Aluminum Cans
- Plastic Bottles
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

The infrastructure to receive the banned materials from residents is currently in place.

Full Service Recycling Drop Off Centers

- Batteries
- Automotive fluid and filters
- Yard waste
- Fluorescent lights
- Electronics
- Pallets
- Current infrastructure
WHY SHOULD WE BAN THESE MATERIALS FROM OUR TRASH CONTAINERS?

The infrastructure to receive the banned materials from residents is currently in place.

Metals & Tire Recovery Center

*Bulky Item pick up available in most municipalities

White Goods

Tires
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

In the past several years, the State of North Carolina has passed legislation banning materials from landfills. Including: plastic bottles, ABC beverage containers, electronics and fluorescent light bulbs. In all cases, education by the State has been a major tool in engaging those that were going to be directly effected by the new laws.
 HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

Targeted education of all stakeholders

- Work sessions to educate elected officials (Town/County Boards and City Council) prior to seeking their support of the residential ban
- Engaging and educating the staff of the municipalities, solid waste haulers, businesses and organizations that have shown a committed interest in environmental stewardship
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

A multi-faceted approach to public education and outreach to get the message to the citizens of Mecklenburg County

- Mainstream Media (radio, print, television ads, PSA's and press releases)
- Social/Online Media (Facebook, Twitter, Websites)
- Targeted Outreach (Town/City and HOA newsletters)
- Direct Mail (Water Bill insert)
- Public Meetings
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

A County-Wide, uniform approach to implementing the residential ban would be ideal. However, understanding that there are specific and varying dynamics within each municipality, a determination must be made whether full-scale implementation or implementation in stages/phases is the most practical.
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

Compliance...What could enforcement look like?

- Heavy enforcement (fines, cancellation of service)
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

Compliance...What could enforcement look like?

Moderate enforcement (non-compliance notice, Non collection, written notice of violation-NOV)

Non-Collection Notice (Example)
Jamestown Town staff could not collect your yard waste or household refuse for the following reason(s):

- Item banned from landfill was found
- Yard waste must be in clear plastic bags or cardboard boxes
- Limbs, logs, and brush are too large to collect
- Contractor must remove debris
- Excessive waste or material
- Other:

Non-collectible items include: paint, tires, automobiles parts, car bodies, dirt, ashes, construction materials, computers and televisions, used oil, oil filters, appliances, yard waste, antifreeze, aluminum cans, scrap tires, lead-acid batteries, beverage containers from ABC permit holders, and plastic bottles.
HOW DO WE GET THESE BANNED MATERIALS OUT OF OUR TRASH CONTAINERS?

Compliance...What could enforcement look like?

- “Soft” enforcement (consistent/continuous education, material ban reminders)

DID YOU KNOW?

On October 1, 2009, the State of North Carolina banned certain items from all NC landfills. This current ban includes all plastic bottles, oil filters, wooden pallets and oyster shells. Materials have been banned from the NC landfills starting as far back as 1991. These bans include such things as:

- Lead-Acid Batteries
- Whole Scrap Tires
- Used Motor Oil (1991)
- Antifreeze (1994)
- Aluminum Cans (1994)
- White Goods (1994)
- ABC Beverage Containers (2008).

You are strongly encouraged to participate in recycling in support of these material bans.
WHEN?

- Solid Waste Management Plan recommends short term implementation (2013-2017) of an ordinance supporting the State ban of materials from landfills prohibiting the placement of banned items in garbage containers.
With municipal consensus to move forward, County staff will develop a draft ordinance with general language. Compliance/Enforcement would be determined by individual municipalities.
QUESTION?