MAKING RECYCLING LESS TRASHY

Virginia Recycling Association
Conference
May 10, 2016
THE BIG PICTURE

- Recycling Facilities (MRFs) and Communities are in this together
  - MRFs need to be profitable to survive, they cannot be banks and or insurance companies
  - Communities need facilities that will accept materials to provide critical services to community recycling programs
  - End users and manufacturers need high quality, consistent materials

- Partnership works best when everyone wins...in good times and bad times.
VALUE OF A COMMINGLED TON

Spring 2011
Summer 2011
Fall 2011
Winter 2011/12
Spring 2012
Summer 2012
Fall 2012
Winter 2012/13
Spring 2013
Summer 2013
Fall 2013
Winter 2013/14
Spring 2014
Summer 2014
Fall 2014
Winter 2014-15
Spring 2015
Summer 2015
Fall 2015
Winter 2015/16
## Example of Material Profile and Average Value

<table>
<thead>
<tr>
<th>Material</th>
<th>% of 1 MRF ton</th>
<th>Price/ton</th>
<th>Value</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Fiber Materials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>ONP</td>
<td>20.8%</td>
<td>$68.30</td>
<td>$14.21</td>
</tr>
<tr>
<td>Mixed Paper</td>
<td>21.3%</td>
<td>$50.00</td>
<td>$10.65</td>
</tr>
<tr>
<td>OCC</td>
<td>17.6%</td>
<td>$96.33</td>
<td>$16.95</td>
</tr>
<tr>
<td><strong>Fiber Sub-total</strong></td>
<td>59.7%</td>
<td></td>
<td>$41.81</td>
</tr>
<tr>
<td><strong>Container Materials</strong></td>
<td></td>
<td></td>
<td></td>
</tr>
<tr>
<td>Glass</td>
<td>27.4%</td>
<td>$(6.67)</td>
<td>$(1.83)</td>
</tr>
<tr>
<td>Aluminum Cans</td>
<td>1.2%</td>
<td>$1,100.00</td>
<td>$12.76</td>
</tr>
<tr>
<td>Steel Cans</td>
<td>2.5%</td>
<td>$43.00</td>
<td>$1.08</td>
</tr>
<tr>
<td>PET</td>
<td>4.8%</td>
<td>$150.00</td>
<td>$7.20</td>
</tr>
<tr>
<td>HDPE (colored prices)</td>
<td>3.4%</td>
<td>$400.00</td>
<td>$13.60</td>
</tr>
<tr>
<td>Mixed Plastics</td>
<td>0.8%</td>
<td>$30.00</td>
<td>$0.24</td>
</tr>
<tr>
<td>Cartons/aseptics</td>
<td>0.2%</td>
<td>$50.00</td>
<td>$0.10</td>
</tr>
<tr>
<td><strong>Container Sub-total</strong></td>
<td>40.3%</td>
<td></td>
<td>$33.15</td>
</tr>
<tr>
<td><strong>TOTAL</strong></td>
<td>$74.96</td>
<td></td>
<td></td>
</tr>
<tr>
<td>MRF Operating Costs</td>
<td>$70.00</td>
<td></td>
<td></td>
</tr>
<tr>
<td>Residue Costs</td>
<td>$7.20</td>
<td></td>
<td></td>
</tr>
<tr>
<td><strong>Net Cost/Revenue</strong></td>
<td>$(2.24)</td>
<td></td>
<td></td>
</tr>
</tbody>
</table>
TAKING ON CONTAMINATION ON TWO FRONTS

- The public

- Us, the professionals
CHALLENGES TO REDUCING CONTAMINATION

- Sorry, not everything is recyclable
- Complex process, complex messaging
- Contracting from early SS mentality (easier=more volume)
- Packaging is constantly changing
- Chicken and the egg approach to markets
- MRF technology changes evolve the accepted materials list
- Absence of standardization in terms and outreach
- Effective communication tools (face to face, trusted source) time consuming
- Frustrating to understand what’s in and what's out sometimes
WHAT IS CONTAMINATION?

Affect Processing

Affect Safety

Affect Quality
MRF/COMMUNITY BONDING

- REALLY understand the process
- Audit incoming loads
- Balance pressure to add more materials with the feasibility of their recovery
- Be on the same page about what exactly is recyclable
- Know the top contaminants and threats to quality
RESOURCES

IMPROVING MATERIAL QUALITY

Strong and healthy material recovery facilities (MRFs) are essential to the future of recovery and municipal recycling programs in North Carolina. Facilities can further support your program and possibly save market revenue if they receive high quality materials.

WHY ARE MATERIALS IMPORTANT TO YOU?

Whether you are a business or a municipality, you collect recyclables. Recyclables are your responsibility and what materials you collect will determine how successful and marketable your materials are. The more you can keep recyclables clean and separated from other materials, the more you can keep recyclables clean and separated from other materials.

QUALITY MATTERS

It matters how your community can profitably influence their material quality.

Get Rid of Plastic Bins

Plastic bags and other thin plastic are very difficult for MRFs to handle and can cause damage and contamination of outgoing commodities. Encourage your citizens to keep plastic bags out of recycling carts and dispose of this material. Encourage them to use alternative materials such as metal cans instead.

Clear and dry food and liquid items that can easily contaminate material quality.

BPA is present in most hard plastic bottles, cans, and jars. Before recycling them, remove them from food or containers with food still in them or the recycling. Recycle containers include bottles, paper veneers, and paper labels. Check with your MRF for specific information on acceptable materials.

Many companies allow citizens to properly shred documents in recycling carts and deposit them. Unfortunately, because of how many items are processed at once, most of the shredded paper ends up mixed with glass or in a meshed stream, not ensuring it is error-free for the recycling market. Most shredded paper also contains in plastic bags, which makes it more expensive. In addition, shredded paper is not accepted for glass processing facilities. Take shredded paper out of your material and place it in an acceptable category, such as conversion converting, composting, or in their local compost bin.

Paper products

Paper products are easily contaminated with plastics and other consumer or recycling materials. Paper products are not accepted for recycling, which can be made into paper products or mixed with other materials. This can reduce the value of the materials something that can be recycled and therefore what they can pay communities. It is important to understand what your materials can handle and communicate properly by contacting your local recycling program.

Avoid phrases like "all plastic" or "all through". Consider not even referring to the number or all but instead specify the names of materials acceptable for recycling, such as "plastic bottles" or "plastic bottles and jars" or "only plastic bottles and jars". Be sure to communicate this clearly and encourage your citizens to follow the rules. It is important to also communicate what you don’t want—"no styrofoam or plastic bags." Citizens should also get the message to leave the caps on their plastic bottles.
TWO (OVERSIMPLIFIED) SOURCES OF CONTAMINATION

Never Recyclers
Generally unaware of how to recycle.
Using the recycling cart as a second trash can.
Likely to require a more aggressive approach like code enforcement, cart hangers, and direct contact, or fines.

Overzealous Recyclers
Think they know how to recycle.
Keep messages positive and proactive.
Explain why some materials are problematic.
Provide alternative recycling options when possible.

Avoid overwhelming people, tackle the 3 most common/problematic sources of contamination. Fix those, then move down the list.
TAKING THAT TO THE PUBLIC IN A SIMPLE WAY

Update outreach with images and words that people can understand

Work towards common suite messaging

Prioritize top contaminants

Promote alternatives

Be positive, Be consistent

Provide direct feedback with info when they are doing it wrong
BROCHURES, SIGNS, WEB

Uses images

Prominent NO BAGS message

Uses words that people recognize

“Milk and Juice Cartons” not “gable top containers”

“Butter Tubs” instead of “rigid plastics”

Avoids messaging like “Plastics 1-7”

Plastic Bottles, Jugs and Tubs

Plastic Food Containers (getting a little slippery?)

Has a clear yes AND no list

No bags, Styrofoam, food/liquids, etc.
RECYCLE MORE DOWNLOADABLES

DON'T TRASH RECYCLING, IT'S EXPENSIVE!

To increase recycling's value and decrease environmental costs, keep these contaminants out!

NO PLASTIC BAGS
Plastic bags tangle up and slow down recycling equipment at the processing facilities. Don't bag your recyclables, keep them loose and then take clean and dry plastic bags back to grocery stores for recycling.

CLEAN, DRY & EMPTY
Food fluids and trash do not belong in your recycling cart and can ruin the good stuff. Clean bottles then reduce the costs and don't include containers that have food or liquid in them.

NO TANGLERS
Electronic cords, hoses and even wire hangers are not meant for commingled recycling. They tangle things up, while some of these materials may be recyclable through separate collection programs, they do not belong with your bottles and paper.

Click here to insert your contact information

Downloadables tab at www.recyclemorenc.org

WHAT GOES IN THE RECYCLING CART?
Almost everyone knows that bottles and cans are recyclable! However, the following materials are still commonly confused. This quick tip answers whether the following belongings go in your blue cart or not. Turn over for a full guide of recyclables: It's easy—no bags or sorting required!
MORE RESOURCES TO RECYCLE RIGHT

CANS & BOTTLES

RECYCLE HERE

COMPOSTA

MATERIA ORGÁNICA
Five Communities all Using the same MRF

Town of Cary
- Yes - Bottles and tubs #1-7, lids places back on bottle, tub, or jar, rigid #2 plastics
- No - bags, frozen food trays, clamshells/hinged containers, toys, flower pots

Town of Wake Forest
- Yes - Narrow-necked, screw-top bottles, such as soda bottles, dairy containers, plastic milk and water jugs and colored bottles labeled with the RICs, six pack rings with rings cut
- No - bags, Styrofoam, and plastic bottles containing oil or hazardous substances

City of Durham
- Yes - plastic bottles, jugs and jars
- No - take-out ‘clamshell’ containers

Franklin County
- Yes - plastic soda bottles or milk jugs
- No - bags or bowls

Nash County
- Yes - plastic drink bottles and milk jugs
- No - non-bottle plastics
COMMON SUITE AND REGIONAL MESSAGING

All communities feeding same MRF.

Communities came together to create new outreach.

Same messaging and terms where you work, live and play.
DIRECT FEEDBACK

Cart Hangers and Oops Tags having big impact

Provides specific info to resident
- Many think they were doing it right

Provides you with data

Changes behavior
- Springfield, MA enforcement
- Went from tagging avg. of 60 carts/day to 36/day
BEYOND CURBSIDE

Remember your Away From Home recycling too!

Only ask for the materials that are there, nothing more.

Use labels and pick the right containers/lids to prevent contamination.
Conducted Curbside Survey

- Looked at every route to ID top contaminants
- Left contaminants with info oops tag in cart
- Collected data
DATA-BASED EDUCATION STRATEGY

Percentage Chart

- Items in Bags: 2%
- Plastic Bags: 14%
- Other Incorrect Plastics: 30%
- Pizza Boxes: 15%
- Trash/Food Waste: 3%
- Yard Waste: 34%
- Other Unacceptable:

Common Recycling Mistakes

KEEP IT LOOSE IN THE CART
MAKE YOUR RECYCLING A FREE THROW

It's a team effort to operate a successful recycling program and it starts with you. Never bag your recyclables and always check to see if your items are acceptable. For a list of acceptable items, please visit our website at www.townofcary.org.
LET’S DO THIS

1. Have you called your MRF today?
2. Talk to your neighbors about regional efforts.
3. Adopt more effective outreach materials.
4. Invest a little time in evaluating your community and reuse what others have already found!
5. Tackle contamination - Start with BAGS!
THANK YOU!
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