Recycling Re-education in New Jersey

Center for Government Services Conference
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What are we covering?

<table>
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<th>Material values/current recycling markets</th>
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<td>Vendor Selection</td>
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<td>Product quality</td>
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<td>The impact of China’s Green Fence</td>
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<td>Public education</td>
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Number 1 priority of a recycling program

Availability to receive material throughout the life of a contract.

Current Events in NJ....

- Cooler heads are prevailing
- Another hard winter
- The evaporating rebate
- Natural gas growing
- Thinning of the ranks
Current Values ... the commodity roller coaster

- HDPE Natural 50% value reduction since November 2014
- HDPE Pigmented 40% value reduction since November 2014
- OCC losing value since January 2014
- No.8 News dropping steadily since third quarter of 2014

The good news is.....
- Aluminum stagnant

Commodity values

Historical chart of average commodity prices based on a standard mix of resources (ONP, OCC, Plastics, Aluminum, Ferrous Metals, and Glass) across a national footprint.
How did we get here?

- Depressed oil market
- Chinese economy cooling
- Strong U.S. Dollar
- US economy growing but slowly

An almost perfect storm...

![Graph showing the relationship between Begin G.F. and Oil $100/barrel with price points at $52.](chart.png)
Is recycling still worth doing?

Yes! It’s the law. And....NJ type 10 tip fee savings add up

- South of Monmouth and Mercer is $75.96 per ton
- Monmouth/Mercer and north average $93.56 per ton

Town of 5,000 homes 12 pounds of recycling per week
Producing ~1560 tons of recycling per year your tip fee savings are

- $118,500 in South NJ
- $145,900 in North NJ
What does it all mean??

- Recycling in NJ is still strong - still more affordable than landfiling
- Markets have dropped before - mirror economic growth
- True partnership with end markets remain the best play
- Markets will rebound (low oil = low energy = economic growth)

Marketing your materials
Your next contract....
To bid or rfp, that is the question!

**Bids**
- Include a bond for performance
- Secure financial information about partner
- Locks Municipality into lowest “responsible” bidder

**RFP’s**
- Allows flexibility with respondents
- Avails respondent creativity
- Flexible in decision making
- Can show you what you don’t know

**Bid/RFP suggestions**
- Avoid the boiler plate!
- Consult likely respondents
- Look at neighboring towns specs
- *Don’t shop for food in a hardware store!* - Keep it to recycling only
- Try not to pigeon hole your partners financially
- Considering Single Stream?? Create options for comparison shopping
- Report card style format
Report Card

- Adds weights to important elements in relationship
- Encourages generator to consider “total cost of ownership”
  - Rebate 30%
  - Distance from town 30%
  - Credit history 15%
  - Education 10%
  - Facility/Ability to perform 15%

Revenue Share - Rebates

- Before a rebate all commodities have a cost to process
- High floors - false sense of security
- $0 floors are debatable
- Fixed pricing - creates winner/loser format
- Equation of
  - Commodity Revenue $100
  - Minus Process Cost $75
  - Equals shareable revenue $25 divided by ???
Who to partner with....

- Safe
- Liquid
- Proven
- Diligence is king

Is your partner as invested as you are?
Product quality... What’s the big deal??

- Single stream has received a bad rap
- Garbage in equals garbage out
- Global partners refusing
- Glass issues
- Trash is magnified in poor commodity markets

No matter what stream you employ – weather is an issue.
Happy Birthday to Green Fence!!

Green Fence... aka The New Normal

**What is Green Fence?**
- February 2013 – November 2013, the Chinese government initiated a policy known as Operation Green Fence to prevent residue from entering their country.
- Intent was to enforce existing laws regarding wet/contaminated bales of plastics, fiber, and scrap metal.

**How did it start?**
- Relaxed QC at end market and processor level.
- Green Fence is focused on reversing that trend.
World economic affect on markets

Who does it affect and how??

- All stakeholders in the U.S. recycling industry have been impacted directly or indirectly
- MRF operators have had serious problems with rejected loads
- Chinese government will inspect every imported bale and container and reject any shipment containing 1.5% or more contaminants and/or moisture of 12%.
- Containers that fail inspection will be returned to sender, without ability to redirect
Summarizing the Impact

<table>
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<tr>
<th>China - 2013</th>
<th>MRF - 2013/14</th>
<th>Generator - 2014</th>
<th>Resident - 2015</th>
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<tr>
<td>Economy, Residue</td>
<td>Penalty, Processing, Education</td>
<td>Quality, Education, Options</td>
<td>Education, Acceptables</td>
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Quick Q&A

► Is anyone confused about what is and is not acceptable material?
► Are processors backpedaling??
► Consult your local MRF... as a partner
► Single Stream - Convenient but not magic
Recycling
Re-education

“You mean you can’t recycle garden hose?!”

Pre Green Fence lenience

Residential Fiber:
- Brown Paper Bags
- Cereal Boxes
- Chipboard
- Corrugated Cardboard
- Hardcover Books
- Junk Mail
- Magazines
- Milk Cartons
- Newspaper
- Office Paper
- Paperback Books
- Telephone Books
- Wrapping Paper

Commingled:
- PET - 2-liter soft drink bottles, cooking oil, peanut butter jars
- HDPE - Detergent bottles, milk jugs
- LDPE - Dry cleaning bags, produce bags, food storage containers
- PVC - Plastic pipes, outdoor furniture, shrink wrap, water bottles, salad dressing, liquid detergent containers

PP - Bottle caps, drinking straws, yogurt containers
PS - Packing peanuts, cups, plastic tableware, meat trays, takeout food clam shell containers

Other - Plastic found on certain types of food containers, Tupperware, Nalgene bottles
Review acceptables with your processor - Educate together!!

Waste Management.....
Foundations for Program Success

- Top down support of government - State, County, Local
- Sustainable infrastructure
- Financial incentive
- User friendly
- Continuous education
- Smart shopping
Q & A

Thank You!!