NERC Fall Conference

The State & Future of Northeast MRFs

Casella Waste Systems

Bob Cappadona Vice President Casella October 30, 2018



Casella Company Overview:

- Founded in 1975 with one truck
- 2,000 employees serving over 200,000 customers
- Traded on NASDAQ as CWST
- Over \$650M in annual revenue
- Operating in ME, MA, NH, NY, PA, and VT
- Vertically integrated collection, transfer, disposal and recycling operations
- Recovering over 850,000 tons of recycling and over 400,000 tons of organics for beneficial use each year
- Strategy to help our customers reduce waste utilizing our expertise, services, and assets





The Casella Recycling Arm

- > 12 Recycling Operations
- 6 Single Stream Recycling Operations
- Process and markets over 850,000 tons/yr
- **▶** Boston, MA MRF 7th largest in the U.S. (210,000 tons processed in 2018)
- **▶** Brokerage Arm − 100,000 tons/yr of Mill Direct Recyclables



National Sword – one year later....

- ➤ A Ban on 24 types of Scrap
- Most notably Mix Paper.
- Chinese quality spec of no more than 0.5% of "carried waste" within the imported finished product
- "Rippling impact on Quality"



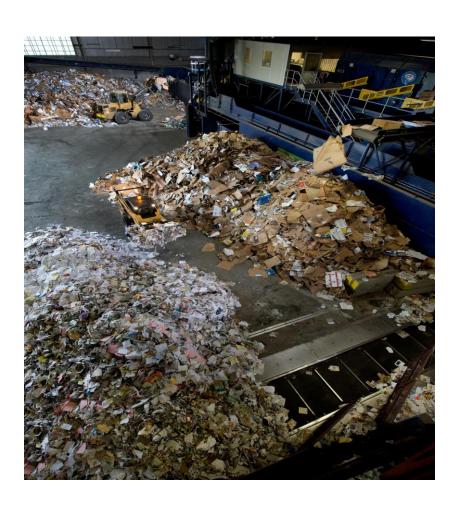
And by the way... Glass

- > 100,000 tons "MRF glass"
- > Ardagh closure
- One end site does not constitute a Market.
- "Bottle to Bottle" to Aggregate
- Significant change in economics.



Impacts to the MRF

- Manufacturing Operations
- Added Labor
- Processing design per ton/hour (or slower).
- Capacity issues
- MRF retrofits
- > Focus on Quality
- Dealing with Contamination



"Hitting the Quality Mark"

Operational Adjustments:

- Less 2% Prohibitives is the mark.
- Process Commercial & Residential independently.
- ➤ Operational discipline Manage to the designed throughput.
- > Retrofits where needed.



Adding Technology

- Polishing/Ballistic Screens – extract further contaminates.
- OCC Screening Retrofits
- Optical sorting for further upgrades



#RecycleBetter Campaign

To get the word out, Casella has launched an outreach campaign called "Recycle Better":

- Social Media
- Print Ads
- Webpage
- Videos
- Universal list
- Updated signage
- Targeted pilots
- More to come...



Back to the Basics..... The Worst Contaminates

The worst contaminants put employees' safety at risk, damage the sorting equipment, shut down the plant, degrade outbound quality, or all of the above.



- 2. Lithium Batteries
- 3. Clothing and other textiles
- "Tanglers" such as cords, ropes, hoses
- 5. Food and beverages





Back to the Basics.... Universal Lists

CARDBOARD/PAPER



Corrugated Cardboard (Wavy center layer)



Boxboard (Dry-food boxes, paper bags, egg cartons, & rolls)



Junk Mail, Periodicals, & Office Paper (Envelopes, catalogs, & soft cover books)

PLASTIC







Plastic Bottles, Jars, Tubs, & Lids (Empty kitchen, laundry, & bath containers)



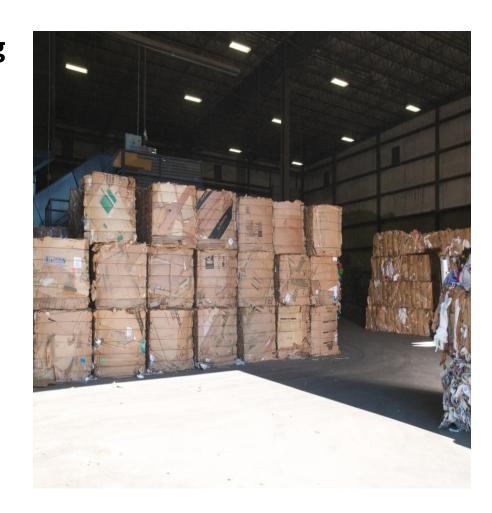
Aluminum & Steel Cans (Empty cans, bottles, & foil)



Glass Bottles & Jars
(Empty food & beverage bottles & jars)

What you can expect

- Mix Paper Mill capacity coming online (timeline?)
- Glass development
- "Renewed Focus" on Contamination
- Higher Processing costs -Customers must be willing to pay more to recycle.
- Reduced value to the overall curbside stream.



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Questions?

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