Managing Recycling Market Impacts in these Challenging Times for Municipalities

A Guidance Document Prepared by MassRecycle to Help You Make a Difference

Single stream recycling is a process where mixed materials are collected and sorted by material: paper, cardboard, plastic, metal, glass. The sorted materials are baled and sold to facilities that use them as feedstock for new manufacturing. As recognized commodities, the bales are sold on the open market, with China being a primary customer until January of 2018. Prior to 2018, China bought approximately 30% of this material from the US, and a majority of bales from Eastern Massachusetts.

China National Sword Impacts in Massachusetts

In July 2017, China declared there was too much trash in the bales of imported recyclable materials and lowered the allowable rate of contamination (trash) from 5% to 0.5%, effective January 2018. This specification is nearly impossible to meet by current industry practices, especially when the contamination in the recycling stream coming from homes and businesses is as high as 40% in some areas. The supply of recyclable materials (amount generated) is now higher than the demand (amount being purchased). For certain materials, like mixed paper, the price has dropped dramatically, resulting in lower revenues for recyclers (mixed paper example, right).

Recycling cost increases/revenue decreases

- Because the US imports many goods from China, the backhaul on cargo ships for recycling was inexpensive. Now that markets are sought elsewhere, transportation costs have increased substantially.
- Material recovery facilities (MRFs) have slowed the sorting lines and added staffing to remove contamination before materials are baled; both measures have increased operating costs.
- Most MRFs are adding equipment to address contamination, which can also increase costs.
- Single stream recycling is comprised of:
  - ~20% glass, which has a negative value;
  - ~40% mixed paper that sold for nearly $90/ton in 2017 and dropped to less than $5/ton in 2018;
  - Overall: 60% of the total recycled material is currently at a neutral or negative price.

As a result, in 2018, some smaller waste hauling companies and recycling facilities went out of business due to the unexpected financial strain of these increased costs and reduced revenues. Across the country, haulers and recycling facilities have been, and continue to be, forced to renegotiate their contracts with businesses and municipalities. In some cases, bales of recyclables were stockpiled for months, while recyclers sought out new markets. Slowly, recycling facilities have found some new domestic and foreign buyers for their material, but none have the low-cost backhaul that made China the perfect customer for port cities. As of Spring 2019, mixed paper prices are still under $6/ton in New England.

Manufacturing businesses in China are now investing substantially in the US to source recycled material, especially paper and cardboard. As the US works to produce cleaner baled recyclables, demand will grow.
Accordingly, the recycling model had to change -- and did -- in several key ways, due to this crisis:

1. Recycling has never been free, but haulers cannot absorb the cost increases alone and remain financially solvent. Instead, they must impose an up-front processing fee to remain viable.
2. The cost of trash in the recycling container is now passed onto the customer, rather than being absorbed by the hauler or recycling facility.
3. Massachusetts needed uniform statewide recycling guidelines. The Department of Environmental Protection joined together with recycling facilities in MA to develop them, which are available at RecycleSmartMA.org.

Six Good Reasons for Municipalities to Continue to Recycle

1. Recycling material, rather than using virgin product for feedstock in manufacturing, saves energy, water, trees, prevents the need for mining, lowers pollution, and saves greenhouse gases, thus helping our environment for future generations.
2. The MassDEP has mandatory waste bans in place for materials in single stream recycling and is enforcing those with fines.
3. Public sentiment is positive on recycling: explaining to your residents that your municipality is decreasing or eliminating recycling will not be well received.
4. The amount of trash that we can dispose of within Massachusetts at waste-to-energy facilities and landfills is shrinking. Capacity for trash disposal is limited, thus the price of trash disposal is going up. More recycling in the trash will eventually lead to exporting more Massachusetts waste out of state.
5. Recycling is good for the economy: on a per-ton basis, sorting and processing recyclables sustain 10 times more jobs than landfilling or incineration.
6. We’ve all invested a lot of money and time into our robust recycling system. In time, commodity markets will strengthen. Program changes now will be difficult to change back and be all the more difficult to educate residents about.

Advocate for Your Municipality

1. Remember, this problem is not unique to your recycling hauler, MRF, or Massachusetts. Each municipality is a part of the regional, national, and global recycling system.
2. Expect that your recycling hauler and/or MRF will reach out to you about pricing, even if you recently negotiated a contract. There are at least 30 municipalities in Massachusetts that have -- or are in the process of -- renegotiating at the behest of their hauler. Here are examples of what other municipalities have done:
   a. Visit the MRF to see and discuss changes the MRF operator is making to address contamination.
   b. Request documentation regarding cost increases/revenue decreases to provide transparency on pricing.
   c. Inquire about future rebate or profit-sharing potential when the markets eventually strengthen.
3. Remember that recycling services are a partnership between your municipality and the hauler, as well as the MRF operator, all of whom are facing decreased revenues and increased costs.
4. Contamination costs money. Invest in reducing contamination in the recycling stream. Use these tools:
   b. MassDEP Recycling IQ Kit – Apply for a Recycling IQ Kit grant. Up to $40,000 per municipality is available to those who want to get serious about tackling contamination. Open source tools are also available for municipalities to use.
5. Ensure that whoever manages recycling in your community works with your municipality’s MassDEP Municipal Assistance Coordinator (MAC). Each municipality has a MAC and they are a great resource when it comes to knowing what other municipalities are experiencing. They can also provide guidance on strategies for communicating with your hauler to reduce contamination.