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Report on Blended MRF Commodity Values in the Northeast

Period covered July 1 – September 30, 2020

Prepared with funding support from EPA Region 3

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Background

The Northeast Recycling Council (NERC) supports recycling market development and opportunities for improvements in its 11-state region: Connecticut, Delaware, Maine, Maryland, Massachusetts, New Hampshire, New Jersey, New York, Pennsylvania, Rhode Island, and Vermont.

In 2018, in partnership with the Northeast Waste Management Officials' Association (NEWMOA), we formed a *Regional Recycling Markets Development Committee*. The Committee determined that having information about the value of commodities processed by the region's Materials Recovery Facilities (MRFs)¹ would be helpful for assessing regional market trends and to serve as an educational tool for promoting improved residential recycling and participation. The results have been invaluable to recyclers, MRFs, and also municipalities and state agencies.

This is the sixth report. The first report covered the period April – June 2019 and focused on NERC's 11-state region. The scope of the participating states expanded in for the first quarter of 2020 with the receipt of a grant from EPA Region 3. This report reflects information received from 18 MRFs in 11 states.² Among respondents are single stream, dual stream, and source separated MRFs. The survey is conducted quarterly.

These survey results reflect the differing laws and collection options in the participating states. Five of the states have beverage container deposit laws. As a result, fewer glass bottles, PET bottles and aluminum cans are processed in MRFs in those states. Those MRFs are also likely to have less revenue from those recyclables. In addition, the report reflects a mix of single stream, dual stream and source separation to collect recyclables with single stream being the most common approach. The type of collection used will have an impact on MRF design and operation. Thus, the data from this report reflects the unique blend of facilities and statewide laws in the reporting states.

A special thank you to Robert (Max) Babits, RRS for providing the necessary spreadsheets to conduct the analysis.

At no time will any individual company information be shared with anyone outside of NERC staff. No participating facilities will be identified and no state-specific data will be released.

Survey Questions & Results

Survey respondents were asked to provide the average value received/paid for each of the commodities listed below during the period July – September 2020, as well as the cost to process a ton of material received at the MRF.

¹ MRFs are a facility that receives, separates and prepares recyclable materials from the public for marketing to processors and end-user manufacturers.

² There are no MRFs in New Hampshire, and no report was received from Vermont this quarter.

UBC (aluminum cans)
Steel Cans
PET (plastic #1)
HDPE Natural (plastic #2)
HDPE Colored (plastic #2)
Polypropylene (plastic #5)
Plastics #'s 3-7
Bulky Rigid Plastics
OCC Grade #11 (corrugated cardboard)
Mixed Paper Grade #54
Aseptic and Gable-top Cartons (Grade #52)
All other Paper (excluding grades 11, 52 & 54)
Clear Glass Containers
Green Glass Containers
Brown Glass Containers
3 Mix Glass Containers
Residue

Weighted Percentage of Outbound Tons Marketed per Commodity in Calendar Year 2019

In January 2020, survey participants were asked to provide the average percentage of a ton represented by each of the following commodities. Those percentages have been used in the blended average value of a ton analysis.

UBC (aluminum cans) ³	0.78
Steel Cans	2.53
PET (plastic #1)	3.35
HDPE Natural (plastic #2)	1.05
HDPE Colored (plastic #2)	1.06
Polypropylene (plastic #5)	0.12
Plastics #'s 3-7	1.28
Bulky Rigid Plastics	0.64
OCC Grade #11 (corrugated cardboard)	25.07
Mixed Paper Grade #54	31.60
Aseptic and Gable-top Cartons (Grade #52)	0.04
All other Paper (excluding grades 11, 52 & 54)	4.09
Glass Containers ⁴	14.60
Residue	13.77

³ Half of the participating states are so-called bottle bill states, which results in lower percentages for glass, metal, and plastic containers received at the MRFs.

⁴ Responses were received for clear, green, brown and 3-mix. The answers were blended to provide a single glass value, thus avoiding the over-counting.

It is worth noting that all of the commodity percentages include some degree of contamination – unwanted materials. The amount will vary by MRF, the type of commodity being marketed, and the requirements of the end-market.

Average Commodity Value per Ton of Marketed Materials

The 18 MRFs were asked to provide the average value of each commodity for the period July – September 2020. These values were then combined into a weighted average to reflect the blended value per ton for recyclables marketed in the region.

Average commodity value per ton *with* the expense of handling residuals: \$40.19

Average commodity value per ton *without* residuals: \$46.83

These values are *down significantly* from the previous quarter (April – June 2020).

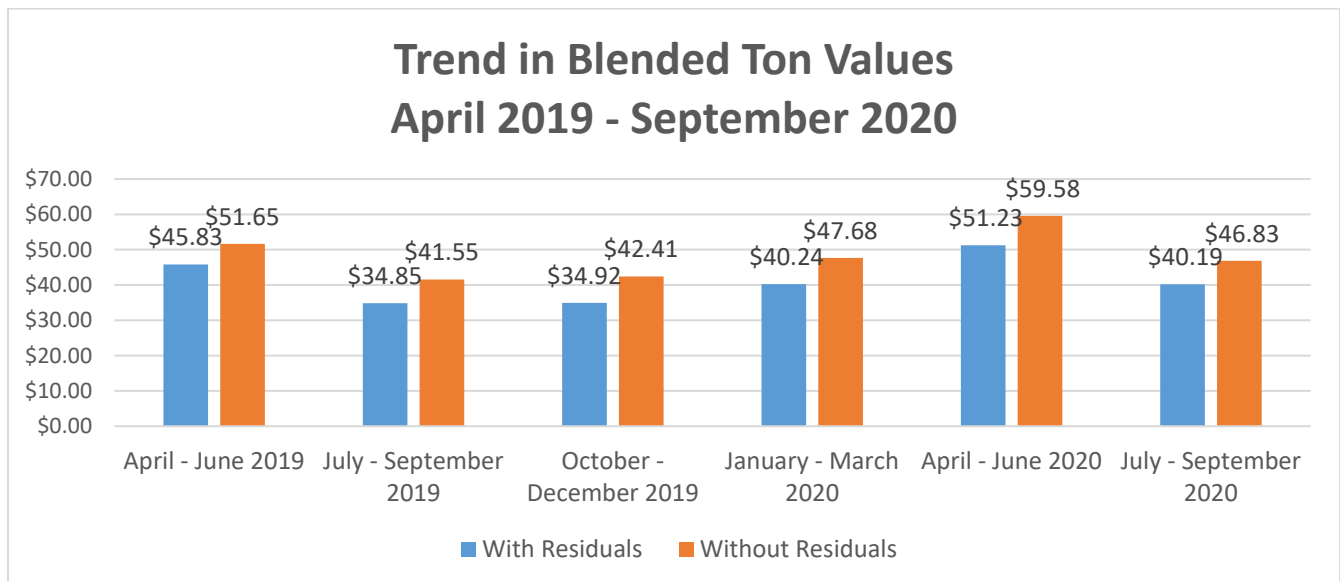
Change in average commodity value per ton *with* residuals from the previous quarter -21.6%

Change in average commodity value per ton *without* residuals: -21.4%

Comparing the most current quarter to the first quarter of the survey (April – June 2019) we see the following trend.

Average commodity value per ton *with* residuals compared to the first quarter is also down, but not as dramatically, with a decrease in value of -0.1%.

Average commodity value per ton *without* residuals: The overall change is also down, at -1.8%.



Participating MRFs

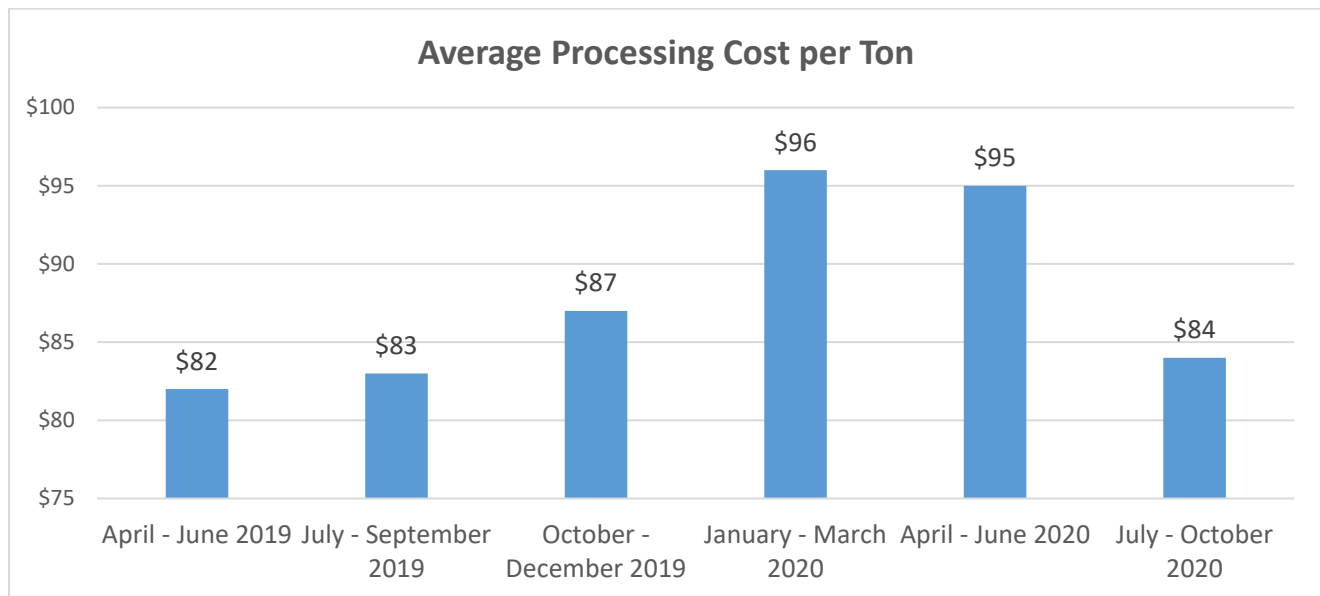
Single Stream	Dual Stream/Source Separated
67%	33%

	Single Stream	Dual Stream/Source Separated
Without residue	\$37.43	\$50.59
With residue	\$31.63	\$44.11
% difference comparing with & without residue	-18%	-15%

Processing Costs

The MRFs were also asked about processing costs⁵ for the period July – September 2020.

The average processing cost per was \$84/ton. This quarter represents a decrease of -12% over the previous period, and an increase of + 1% since the survey began.



Conclusion

With values down and up and now down again, calendar year 2020 has been volatile for residential MRF commodity values.

We welcome any questions or suggestions for this report. Please contact Lynn Rubinstein (lynn@nerc.org), NERC Executive Director.

⁵ The cost to sort and prepare the commodities for sale.