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Report on Blended MRF Commodity Values in the Northeast

Period covered October 1 – December 31, 2020

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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 seventh 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 the first quarter of 2020 with the receipt of a grant from EPA Region 3. This report reflects information received from 19 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 technical support.

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.

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.

Survey Questions & Results

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

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 2020

In January 2021, survey participants were asked to provide the average percentage of a ton represented by each of the following commodities in calendar 2020. Those percentages have been used in the blended average value of a ton analysis.

Mixed Paper (Grade #54)	25%
Corrugated Containers (OCC Grade #11)	28%
Aseptic and Gable-top Cartons (Grade #52)	>1%
All other Paper (excluding grades 11, 52 & 54)	7%
Glass (weighted average)	12%
Aluminum Cans (UBC)	1%
Steel Cans	2%
PET	4%
Natural HDPE	1%
Colored HDPE	1%
Mixed Plastic #3-7	2%
Bulky Rigids	1%
Polypropylene	>1%
Residue	16%

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 19 MRFs were asked to provide the average value of each commodity for the period September – December 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: \$53.96 – up 29% the previous quarter

Average commodity value per ton *without* residuals: \$60.46 - up 23% the previous quarter

These increases can be attributed to strong increases in the value of almost every commodity.

Participating MRFs

Single Stream	Dual Stream/Source Separated
68%	32%

	Single Stream	Dual Stream/Source Separated
Without residue	\$65.83	\$62.73
With residue	\$59.96	\$53.70

The proportional value of a ton of single stream compared to dual stream is *higher* this time than dual stream. This is because, on average, dual stream facilities reported lower values for several grades, including: HDPE natural and colored, 3- 7 plastics, OCC, “all other paper”, 3-mix glass, and residue than single stream MRFs. In most cases, this disparity is due to one MRF significantly under-performing other MRFs in the category.

Processing Costs

The MRFs were also asked about processing costs³ for the period October – December 2020.

The average processing cost per was \$80/ton. This quarter represents a decrease of 5% from the previous period.

Conclusion

With all of the disruptions in 2020 due to the pandemic and shifting end-markets, it ended on a bright note for the recycling community. Values for most commodities processed at residential MRFs rose significantly.

³ The cost to sort and prepare the commodities for sale.