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**MEMORANDUM**

**WMPSC-C 13-2021**

**Subject: Recycling Centre and Market Update**

**Date: Monday, February 22, 2021**

**To: Waste Management Planning Steering Committee**

**From: Jennifer Wilson, Supervisor, Waste Management**

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The purpose of this memorandum is to provide members of the Waste Management Planning Steering Committee with an update on market trends and commodity pricing for Blue and Grey Box material processed at Niagara Region's Recycling Centre in 2020.

**Key Facts**

- The COVID-19 pandemic had an impact on commodity pricing for recyclable material as well as the composition of the incoming material stream at the Recycling Centre.
- In comparison to 2019, there was a significant tonnage decrease in newsprint (-31.5%) which may be attributed to less advertisement by the commercial and retail sector.
- There was a significant tonnage increase in hardpack (28.8%), aluminum cans (17.3%), and PET (18.4%) primarily which may be attributed to more on-line purchases and residents consuming more packaged drinks at home.
- Between October 19, 2020 and December 31, 2020, total incoming recycling tonnage increased 8% (1177 MT) in comparison to the same time period in 2019 due to the implementation of every-other-week garbage collection.
- Overall in 2020, there was a gross budget surplus in revenue for the Recycling Centre of approximately \$146,430.
- The revenue forecast for 2021 is expected to be higher than 2020. Staff have budgeted a 6% increase in revenue in comparison to 2020.

## Market Conditions

2020 was a volatile year for commodity pricing. The COVID-19 pandemic had an impact on commodity pricing for recyclable material, specifically the container stream. Due to the economic slowdown that resulted from COVID-19, the demand for oil and gas decreased significantly resulting in plummeting prices for these non-renewable resources. Lower oil and gas prices reduce the cost of manufacturing virgin plastic, thereby, creating a market surplus in recycled plastic due to the lack of demand.

Another contributing factor in pricing was that in August 2020, Evergreen Plastic, a recycling plant in Clyde, Ohio suffered a major fire. The facility is Niagara's primary consumer of recycled Polyethylene Terephthalate plastics (PET). At this facility, recycled post-consumer PET is used to make 100% recycled strapping for packaging goods on pallets. The temporary closure of the facility created a market surplus, thereby reducing the market price of recycled PET. As a result of the temporary closure, baled PET from Niagara Region's Recycling Centre was temporarily stored until the end market resumed operations in November. Pricing for PET hit a 25 plus year low in late summer/early fall of 2020.

The COVID-19 pandemic has also had an impact on the composition of the incoming material stream at the Recycling Centre; specifically with newsprint, hardpack (mix of corrugated cardboard and boxboard), aluminum cans and PET. In comparison to 2019, there was a significant decrease in tonnage for newsprint (-31.5%) and an increase in tonnage for hardpack (+28.8%). This can likely be attributed to an increase in online shopping as a result of residents staying home and reduced print advertising from big box stores and grocery stores. In addition, there was a significant tonnage increase in aluminum cans (+17.3%) and PET (+18.4%). Recovery rates for aluminum cans and PET are typically higher when consumed at home. The increase can likely be attributed to residents staying home more, thus shifting consumption of carbonated beverages from bars, restaurants and gatherings for games and tournaments at parks and sporting facilities.

Increases in tonnages in the latter part of 2020, can also be attributed to the new every-other-week garbage collection contract change. Between October 19, 2020 and December 31, 2020, total incoming recycling tonnage increased 8% (1177 MT) when compared to the same time period in 2019. Table 1 summarizes the change in tonnage for newsprint, hardpack, aluminum cans and PET in 2020 in comparison to 2019.

**Table 1 Summary of significant tonnage increases/decreases in 2020 in comparison to 2019.**

<b>Commodity Type</b>	<b>2019 Total Tonnes Marketed (MT)</b>	<b>2020 Total Tonnes Marketed (MT)</b>	<b>Difference (MT)</b>	<b>% Change</b>
Newsprint (ONP)	20,711	14,177	- 6,534	- 31.5%
Hardpack (OBB/OCC)	23,683	30,510	+ 6,827	+ 28.8%
Aluminum Cans	554	650	+ 96	+ 17.3%
PET	2,620	3,102	+ 482	+ 18.4%

As indicated in WMPSC-C 17-2018, in 2017 China started to ban the import of solid waste and recyclables into their country. Recycling operations across North America were bracing for a market collapse when China implemented its full ban on the import of recycled fibre on January 1, 2021. The market collapse has not materialized. Since the original announcement, North America and other Asian countries such as India have been planning for this global transition in recycled pulp and board manufacturing. In North America alone, there are 28 expansion projects to boost recovered paper demand, of which, nine (9) have been completed. India and other Asian countries have also made infrastructure investments at their mill to supply mills in China with clean recycled pulp so that they can continue to manufacture boxes and paper.

## **Financial Impact on Niagara Region**

### **Fibre Revenue**

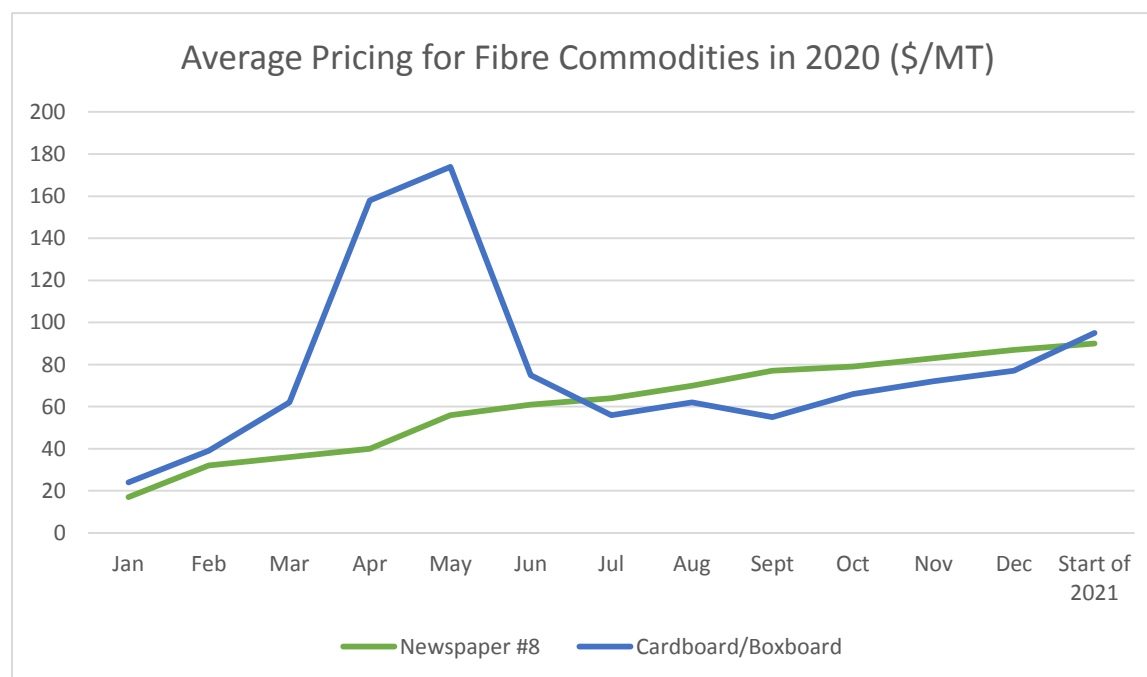
The fibre stream is comprised of the following marketed commodities: newsprint, OCC (from commercial sources), fine paper and hardpack. Table 2 illustrates the three-year average market pricing for the fibre stream.

**Table 2 Three-year average market pricing for fibre stream at Niagara Region's Recycling Centre (2018-2020).**

Commodity Type	Average Pricing 2018 (\$/MT)	Average Pricing 2019 (\$/MT)	Average Pricing 2020(\$/MT)
Newsprint (ONP)	72	39	55
Cardboard (OCC)	140	88	111
Fine Paper	310	217	181
Hardpack (OBB/OCC)	95	44	73

Pricing for the fibre stream commodities was volatile in 2020. Newsprint pricing hit a 30 year low in January 2020 at \$17/MT and remained weak during the first five (5) months of year before slowly moving upwards to approximately \$87/MT in December. Hardpack pricing ranged from a low of \$24/MT in January to a high of \$174/MT in May before dropping back down to under \$100/MT. At this time, it is anticipated that pricing for fibre commodities will remain strong during the first half of 2021. The pricing at the start of 2021 is approximately \$90/MT for newsprint and \$95/MT for hardpack. Figure 1 illustrates the average price per metric tonne for newsprint and hardpack in 2020.

**Figure 1: Average price per metric tonne (\$/MT) for newsprint and hardpack in 2020.**



In 2020, there was a gross budget surplus for fibre revenue of approximately \$809,360.

### Container Revenue

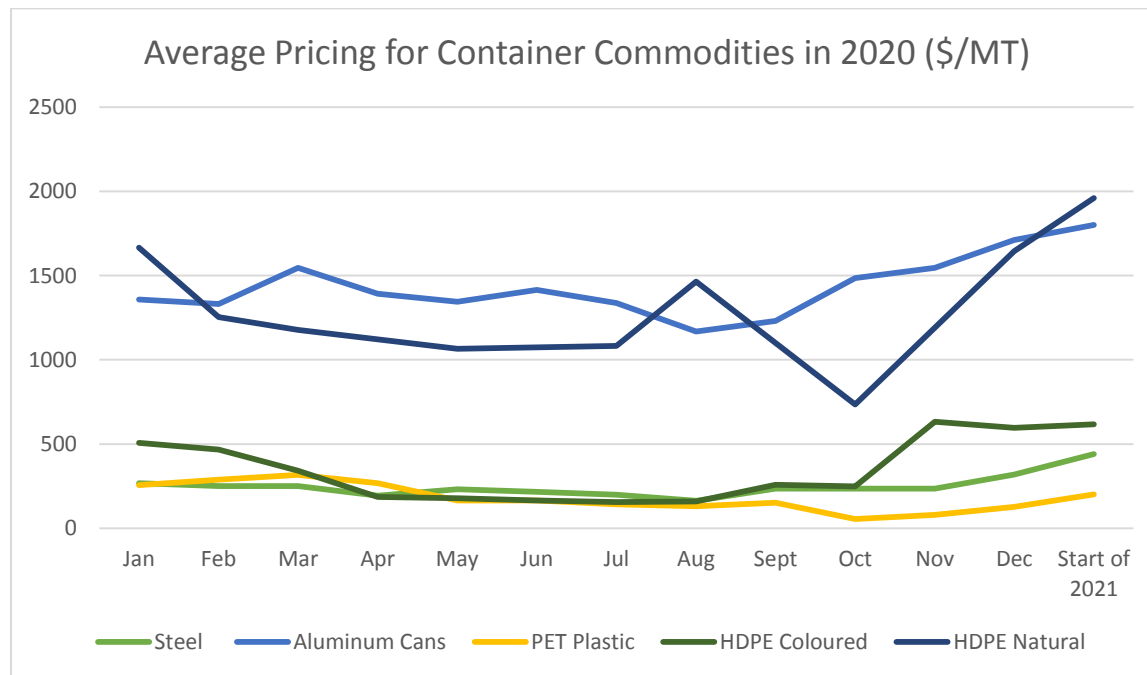
The container stream is comprised of the following marketed commodities: steel, aluminum, Polyethylene Terephthalate (PET) plastics (e.g. water bottles, salad dressing bottles), High-Density Polyethylene (HDPE) plastic (e.g. laundry detergent bottles, shampoo and conditioner bottles), polycoat (e.g. milk or juice cartons), plastic film (e.g. grocery bags), and hi-grade mixed plastics (e.g. containers and lids) and bulky rigids (e.g. plastic furniture). The container stream revenue had significant decreases throughout 2020. Table 3 illustrates the three-year average market pricing for the container stream.

**Table 3: Three-year average market pricing for container stream at Niagara Region's Recycling Centre (2018-2020).**

<b>Commodity Type</b>	<b>Average Pricing 2018 (\$/MT)</b>	<b>Average Pricing 2019 (\$/MT)</b>	<b>Average Pricing 2020 (\$/MT)</b>
Containers	\$319	\$429	\$394

Pricing for the container stream commodities was volatile in 2020. In early 2020, the pricing for PET was approximately \$300/MT but dropped to \$50/MT by the fall. PET prices have started to rebound and are expected to increase slightly in 2021. Coloured HDPE fell to an 18 year low of \$150/MT in July but rebounded to over \$600/MT in November. Pricing for PET is expected to remain in this range during the first few months of 2021. Natural HDPE fell to \$1100/MT in the spring but rebounded to \$1700/MT in November. Steel pricing fell to \$233/MT but rebounded to \$320/MT in December. Aluminum fell to a low of \$1108/MT before rebounding to \$1800/MT in December. Pricing for natural HDPE, steel and aluminum is expected to remain strong in 2021. Figure 2 illustrates the average price per metric tonne for steel, aluminum cans, PET and HDPE in 2020.

**Figure 2: Average price per metric tonne (\$/MT) for steel, aluminum cans, PET and HDPE in 2020.**



In 2020, there was a gross budget shortfall for container revenue of approximately \$662,930. Overall in 2020, there was a gross budget surplus in revenue for the Recycling Centre of approximately \$146,430.

### Next Steps

Staff will provide a further update to members of the WMPSC in Q3 2021 on the financial outcomes of Q2 2021.

Respectfully submitted and signed by

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