

RECYCLING UPDATE

Environmental Quality and Public Works Committee

July 7, 2020



LEXINGTON



Recycling Update

Topics covered

- Recent maintenance challenges
- Market changes
- Current status of operations
- Progress

Maintenance Challenges (Dec 2019 - Feb 2020)

Hazardous Materials including medical waste

- Multiple incidents led to facility closures to protect employees.
 - 1 employee sent to the hospital
- Material diverted to the landfill numerous times to ensure employee safety.

Response

- News release and social media outreach campaign
- Direct tracing conducted back to the source businesses for education outreach.



Scheduled Maintenance (January 2020)

Planned 2-week closure

- Main conveyor belt replaced.
- Portion of the fire sprinkler located over the conveyor system replaced.
- Permanent water lines installed to support summer cooling efforts.



Maintenance Challenges (April 2020)

Main shaft that drives the material sorting conveyor system broke.

- Local contractor determined that multiple replacement parts were needed.
- Worked with Machinex to get the part as soon as possible and complete installation.
- MRF was closed for 3 weeks.



Scheduled Maintenance (June 2020)

New eddy current machine installed to improve sorting aluminum cans.

- Existing machine failed in 2018 and 2019.
- Out of date and no longer supported by the manufacturer without specialized labor and machining.
- Rebuilt in 2018.
- In 2019, ordered the replacement and established a price contract for parts until the new eddy current arrived. The manufacturer is in Germany, which extended the time for the machine to be assembled and shipped.
- Arrived in January but other needs postponed this work.
- Successfully replaced and new separator running.

Market changes

COVID-19 has generated an increased demand for recycled paper

- Increased demand for toilet paper and cleaning supplies
- Receiving approximately 50-75% of the quantity of paper that we were receiving prior to May 2019.
 - We have been able to find a home for this paper and it is easier the last 2 months.
 - Still no financial value.



Market Changes

Yellow Bin Paper

- Receivables much less contaminated.
- Receiving \$50/ton.
- Working with paper mills to determine the value and tonnage if we mix the yellow bin paper with the Rosie collected paper.

Cartons

- Will likely start collecting these in 2021, after the new equipment is installed.
- Market has been historically positive and steady.
- Entering into a partnership with the Carton Council to purchase and dedicate an optical sorter to increase the capture rate and value of marketable materials.



Recent Market Changes

- Plastic bottles & jugs – lost value due to a glut of virgin material
- Cardboard – Amazon effect and COVID-19 increased demand in packaged materials offset by packaging using flexible materials resulting in steady market and continued recovery from the collapse that began in 2017.
- Glass – still no value due to our quality and market availability. No change in the \$15/ ton shipping fee.
- Aluminum and steel – steady but lower value due to glut of virgin material from China and Russia and no growth in demand.

Current Status of Operations

Where we are today

- Open for business
- Paper drop-off locations monitored & collected regularly
- Eddy current, conveyor and sprinkler in place





Continuing our Progress

- Issuing a bid very soon for a new optical sorter. Overall process will take a few months.
 - Will improve the quality of the paper we collect both through the curbside and the yellow bins.
- Working on a larger bid package for additional improvements for more reliable processing. Estimated at \$3.4 million in the recently passed budget.
 - how we process glass,
 - add a second optical sorter,
 - add a second baler and
 - replace the maintenance intensive disc screens with a more reliable method.



Continuing our Progress

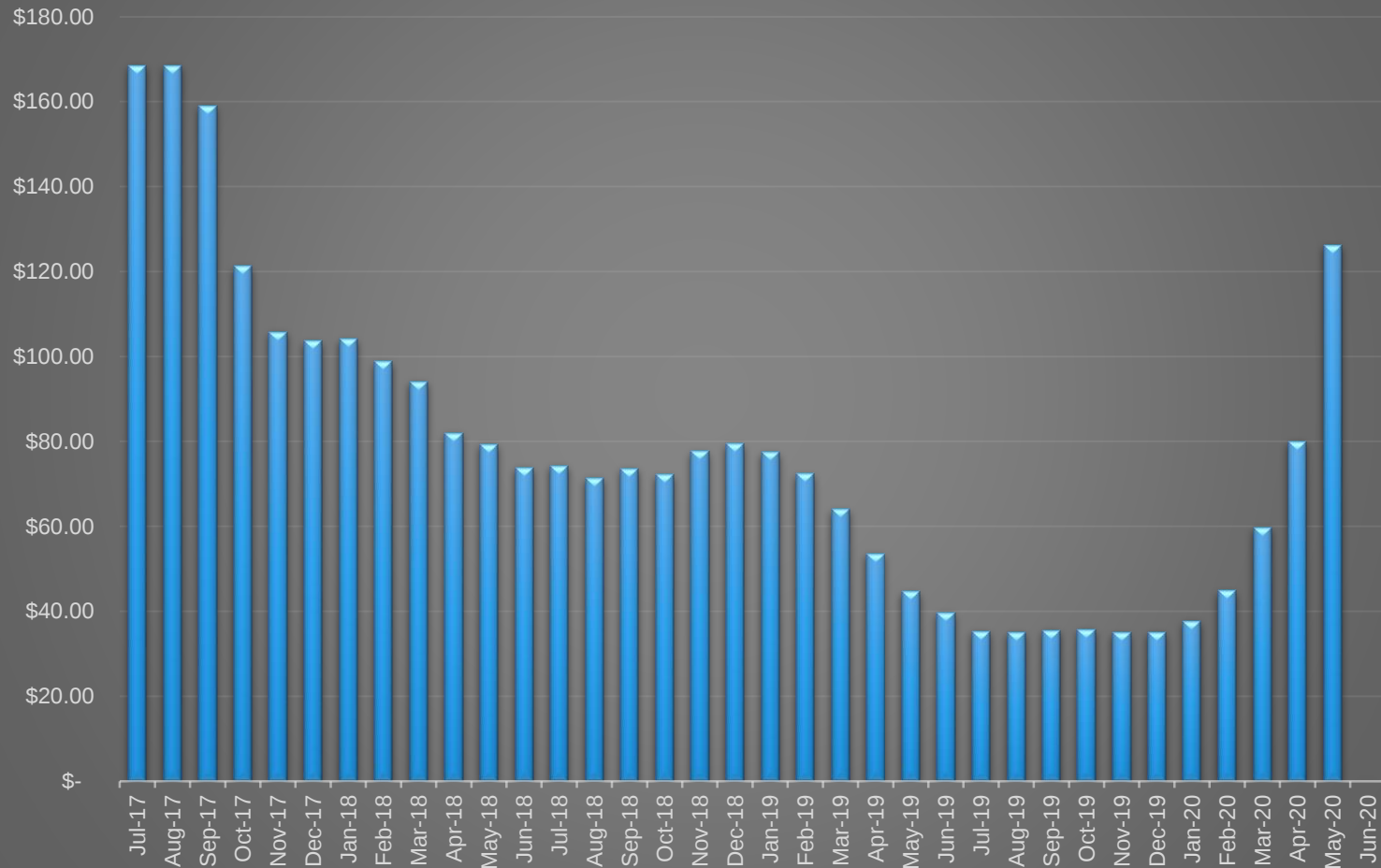
- Recycling requires the entire community
 - LFUCG will continue to adapt to challenges
 - Encourage public to use yellow bins
- Continue educational efforts that reduce trash in the collection
- Yellow Bin paper is much higher quality than curbside collected paper.

Questions?

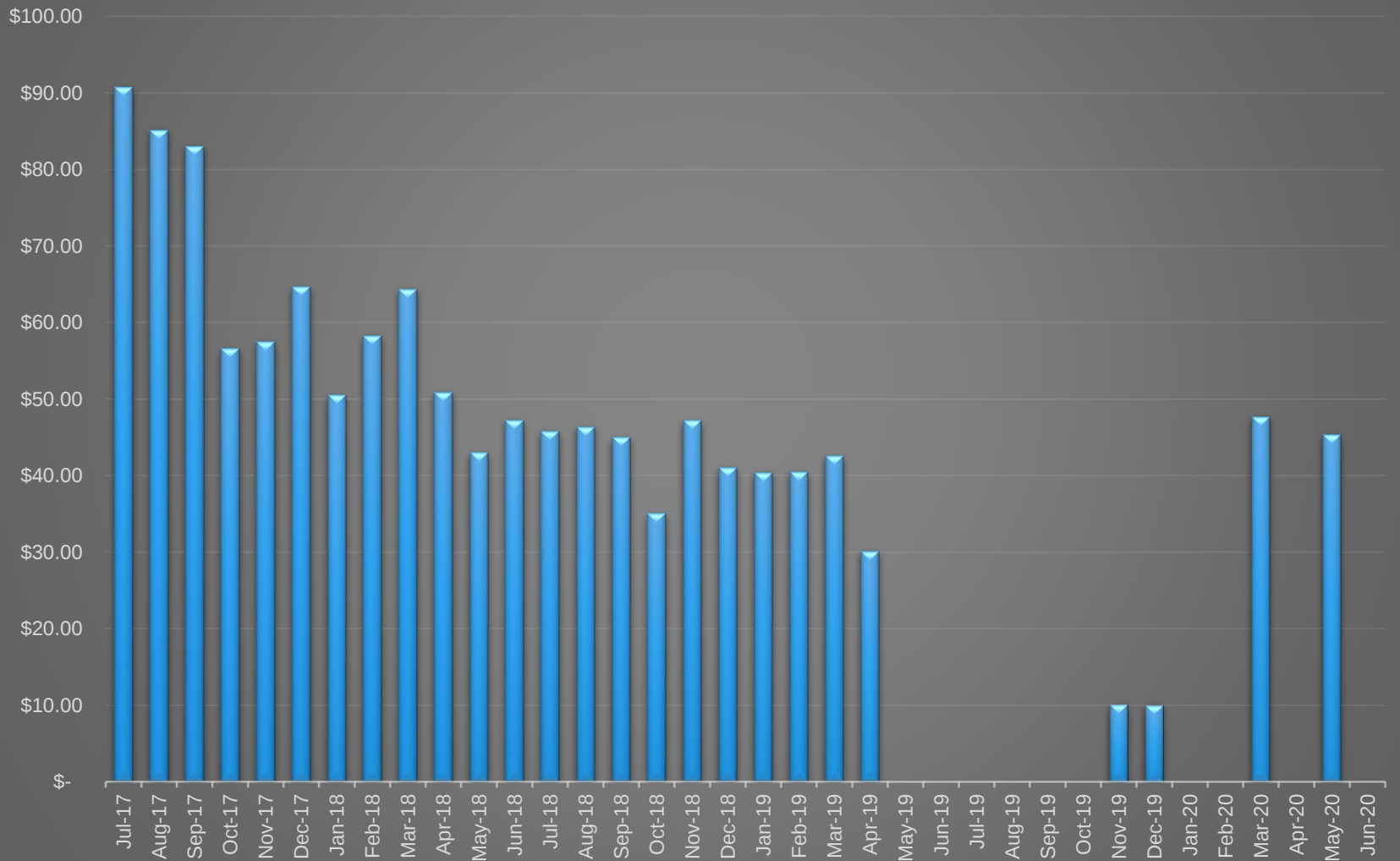


LEXINGTON

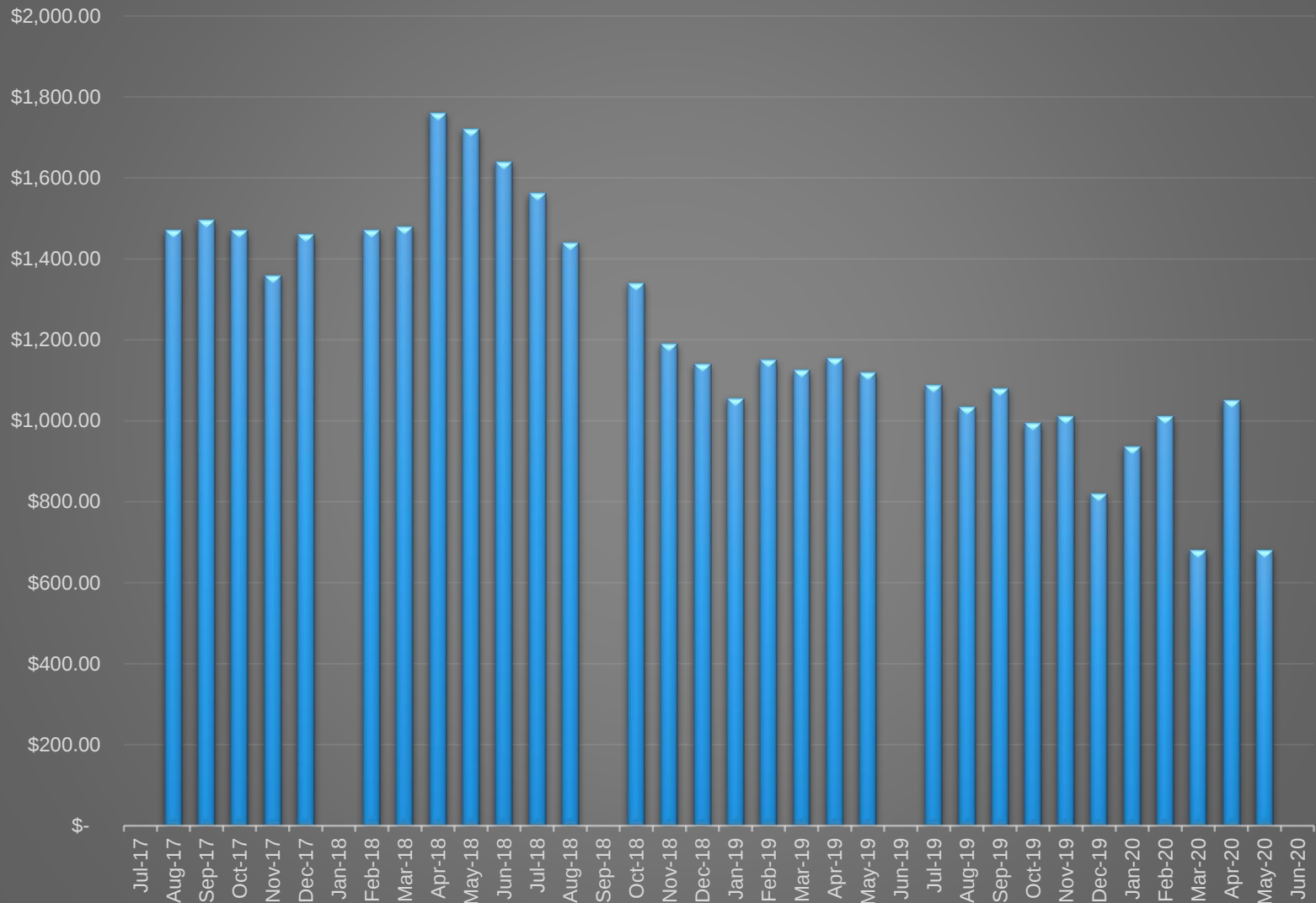
Cardboard prices per ton



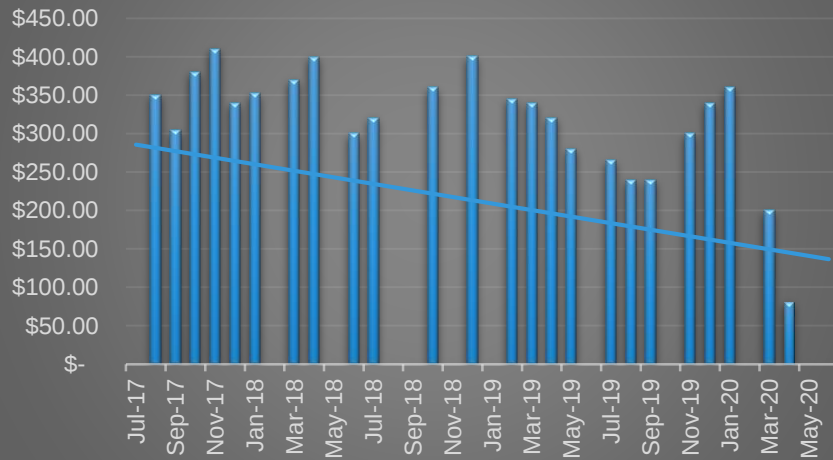
Paper price per ton



Aluminum price per ton

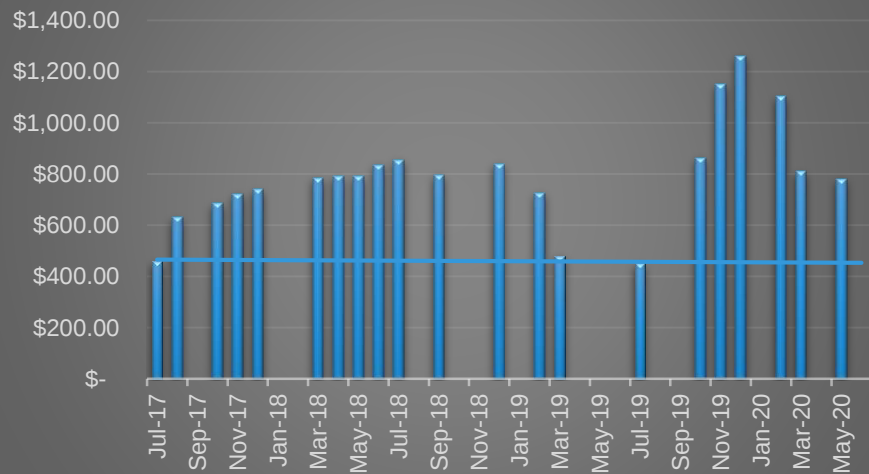


CHDPE



Different Plastics price per ton

NHDPE



Water and soda bottles

