Boulder County Recycling Center Completes Major Upgrades

Residents, businesses can recycle more types of plastics starting Oct. 1

Boulder County, Colo. (Sept. 28, 2017) – With Boulder County’s recent installation of two plastic optical sorting units and other capital improvements at the Boulder County Recycling Center (BCRC), residents will now be able to recycle more plastic items than ever before beginning Oct. 1. The county and Eco-Cycle – which was just awarded a new contract to continue operating the facility – released new recycling guidelines today detailing the changes, which take effect Oct. 1.

The $2.8 million worth of upgrades, customized for the BCRC by MACHINEX Technologies of Canada, uses optic technology and compressed air to sort different types of plastic materials delivered to the recycling center, which were previously sorted by hand. This equipment is expected to increase the amount and quality of plastics sorted, helping to further push Boulder County toward its goal of Zero Waste or Darn Near by 2025, and resulting in higher revenues for the Recycling Center.

For Boulder residents and businesses, this means that certain plastic items once barred from single-stream recycling bins and carts, will now be accepted. (See attached for complete guidelines.) These items include:

- “Clamshell” containers, such as berry containers of all sizes
- Flat plastic tub lids, such as yogurt container lids
- Rigid plastics, such as buckets and backyard toys with metal axles removed

“These improvements allow us to provide residents with more recycling opportunities, while making the facility more modern, efficient, and economically sustainable,” said Boulder County Resource Conservation Manager Darla Arians. “This is a smart investment for the county, which is committed to meeting its zero waste goals and providing the public with excellent service.”

The BCRC currently processes about 50,000 tons of recyclable materials annually and is recognized as an industry leader in terms of the high-quality and cleanliness of materials. With the upgrades, the BCRC will be able to recover and process fully 95 percent of the mixed plastics it receives, 90 percent of the aluminum, and 98 percent of other targeted materials. In
addition, the upgrades are expected to increase the volume of residential material processed through the recycling center to 28 tons per hour from the current 25 tons per hour.

“We are thrilled to partner with Boulder County in taking this next step towards Zero Waste,” said Eco-Cycle Director Suzanne Jones. “With these state-of-the-art upgrades, this publicly-owned facility is helping residents, businesses, and communities countywide better reach their waste diversion goals—for the benefit of our climate and planet.”

In addition, the new equipment will reduce labor costs by replacing eight manual sorter positions on the container line, grueling jobs that are increasingly hard to fill.

“Designing this container recycling system was a team effort with MACHINEX, Boulder County, and Eco-Cycle,” said Chris Hawn, CEO of MACHINEX. “Together we created a plastic container recovery system that sets a new industry standard.”

Ribbon-Cutting Event

A ribbon-cutting ceremony is scheduled for Wednesday, Oct. 11 at the BCRC to celebrate the new, fully operational plastic optical sorting equipment.

What: Equipment ribbon cutting  
When: 12– 1 p.m., Wednesday, Oct. 11  
Where: Boulder County Recycling Center, 1901 63rd Street, Boulder

Members of the public are welcome to attend the ribbon cutting, but will not be able to enter the operations floor of the Recycling Center due to safety concerns. A Q&A session and self-guided tour will provide information about the equipment upgrades and give limited visibility to the new equipment. Members of the media who are interested in viewing or photographing the equipment will be allowed to do so with a staff escort while wearing personal protective equipment (PPE) that we will provide.

Additional Details about the New Equipment

The new plastic sorting units use advanced camera and light technology to identify which plastics are on the belt, while the facility’s new 100HP air compressor releases air jets to propel plastic items sorted by type into their correct storage bunkers. The high-speed, short-wave infrared hyperspectral detection system takes only one millisecond to analyze items on the belt, drastically increasing the rate and volume of material processed.

Additionally, the new takeaway conveyor for the containers line will save hours of manual labor by automatically delivering material containing (paper) fiber from the pre-sort station to a new walking-floor bunker where it becomes ready to be baled.
Lastly, the purchase of a new eddy current machine (which helps separate materials using magnets and electrical currents) will bring the recycling center’s recovery rate of aluminum up to 90 percent.

“Aluminum is our most valuable commodity, so it’s a big deal for us to be able to increase our recovery rate for that item,” said Arians. “The new unit is twice as large as the previous one, which means more aluminum will be collected.”

The capital improvements were purchased through the now-expired Boulder County Recycling Tax passed back in 1994 with additional funding from grant from the Carton Council.

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