

Kent County Department of Public Works

Vision: Reimagine trash...as a resource, as a feedstock, as an opportunity.

www.reimaginetrash.org

Kent County Recycling and Education Center

Kent County's Recycling & Education Center serves as the primary materials recovery facility for residential recyclables generated in homes throughout West Michigan. A materials recovery facility, or MRF (murf), is a processing facility where recycling from curbside bins and drop-off recycling centers is sorted and prepared to be sold to processors and end-users. Nearly 58 million pounds of recyclables were delivered to the facility in 2017. These materials were put back into our economy as feedstock for new products like cereal boxes, glass bottles, toys, packaging, clothing, park benches and more.

Key Components of MRF

- Tipping Floor – area where recycling trucks drop off recycling; front end loader evenly distributes recycling onto conveyor belts
- Pre-sort Line – first line of sorting where workers pick out oversized or non-recyclable materials
- Cardboard Screen – mechanically sorts out cardboard through use of rows of metal discs, other materials fall through the gaps and continue on conveyor belts
- Glass Breaker – glass falls through a screen and breaks before continuing on its own conveyor belt to the glass pile
- Disc Screens – mechanically sorts out paper and paperboard through rows of rubber discs, spaces become smaller in second screen
- Magnet – collects ferrous metals
- Optical Scanner (#1 plastics) – light scans materials and reflects differently depending upon chemical makeup of item, bursts of air push #1 plastics onto a separate conveyor belt
- Optical Scanner (#2 plastics and cartons) – light scans materials and reflects differently depending upon chemical makeup of item, bursts of air push #2 plastics and cartons onto a separate conveyor belt
- Plastics Line – workers pick out various types of plastic by hand
- Paper Line – workers pick out contaminants from paper
- Cages – area of storage for sorted recyclables
- Baler – final step of sorting and processing, bales are then shipped out on semi-trucks to further processing facilities