



Tours

Interested in taking a tour of the Recycling Center?

The Montgomery County Recycling Center is open for tours! The tour includes an age-appropriate presentation on waste reduction, reuse and recycling. After completing the tour, head upstairs to view the Recycling Center's sorting machinery. The facility is wheelchair accessible. This up-close look is a great way to learn how we help keep our land, air and water clean by recycling.


Schedule your tour online:

www.montgomerycountymd.gov/recycling
Click on "Facilities" and "Recycling Center"

The Recycling Center is located at:

16105 Frederick Road
Derwood, MD 20855

Montgomery County, Maryland
Department of Environmental Protection
Division of Solid Waste Services
Waste Reduction and Recycling Section
www.montgomerycountymd.gov/recycling
Call: 3-1-1 or 240-777-0311
TTY: Maryland Relay 7-1-1

 Printed on recycled and recyclable paper.

This information is available in an alternate format by calling 240-777-6480.



Facts

- » The Recycling Center, which opened in August 1991, has expanded with new processing equipment installed to accommodate the growth of Montgomery County's recycling program.
- » The facility is approximately 58,075 square feet.
- » The Recycling Center employs approximately 57 workers. Of those workers, at least 48 have jobs dedicated to sorting recyclable commingled materials and nine workers are dedicated to operating the mixed paper recycling sorting line. The work stations are equipped with both heating and air conditioning for year-round comfort. An elevated mezzanine over the processing area allows for safe public viewing of the facility operations.
- » Montgomery County owns the Recycling Center, which is managed by the Department of Environmental Protection's Division of Solid Waste Services.
- » In a state and county partnership, the Maryland Environmental Service (a state agency) operates the facility.
- » The Maryland Environmental Service is responsible for marketing recyclable materials to processors. The County receives revenues from the sale of commingled materials, mixed paper and cardboard. These revenues are used to help cover the costs of operating the Recycling Center.



Sorting It All Out.

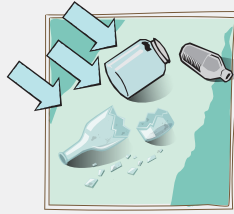
Learn how recyclable materials are sorted at Montgomery County, Maryland's Recycling Center.

Commingled Materials

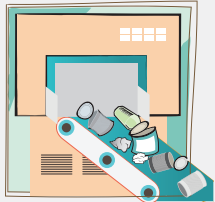
BOTTLES, CANS & CONTAINERS



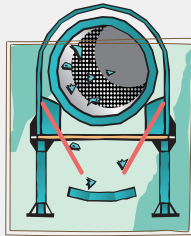
1 Tipping Floor
Recycling collection trucks unload glass, plastic, steel/tin and aluminum containers onto the tipping floor.



5 Broken Glass Screening Machine
Glass, plastic and aluminum cans fall onto a vibrating screen that catches broken glass and other small items. Conveyors move the broken glass to a storage bunker.



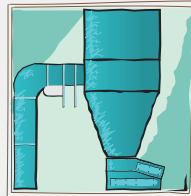
2 Infeed Line and Inclined Conveyor
Front-end loaders push the commingled materials onto a conveyor belt that leads to the processing area. Materials then fall onto an inclined conveyor that carries them to the pre-sort station.



6 Trommel
Inside a steel frame, the trommel, a spinning screen, catches bits of paper, broken glass and bottle caps not previously captured. A magnet is also used to remove ferrous metal cans the electromagnet missed.



3 Pre-Sort Station
Workers remove any non-recyclable materials. In addition, large plastic containers that are too large for the machinery are pulled out and separated for recycling.



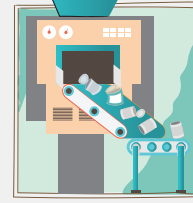
7 Air Classifier and Cyclone
Aluminum and plastics are pushed upwards by air currents in the classifier. The weight of glass bottles causes them to fall to bottom, while the lighter aluminum and plastic items flow into the cyclone for separation.



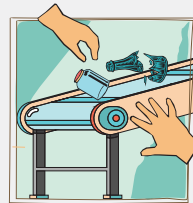
4 Electromagnet
Recyclables continue to move along on conveyors and pass under an electromagnet, which removes steel, tin and bimetal cans. The cans drop onto a conveyor leading to a storage silo.



8 Light Material Sorting Station
Plastic and aluminum cans are flattened for easier sorting and storage. Workers sort plastics by type and drop them into tubes where currents from air blowers propel the material to storage silos.



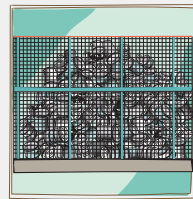
9 Eddy Current
Aluminum cans pass over an eddy current that causes the cans to have an opposite magnetic charge. Cans pop off the line onto connecting conveyors leading to a tube where air currents move the cans to a storage silo.



10 Glass Sorting
Unbroken and large pieces of glass are hand-sorted by color and dropped into separate bunkers for storage until the glass is transported in trailers for processing.



11 Recovery Conveyors
Additional sorters remove plastic tubs, lids, pails, and flower pots and other recyclable materials not sorted earlier.



12 Storage Silos
Aluminum, plastic, and steel containers, are stored separately in silos until they are baled.



13 Balers
The baler compresses the material into large blocks called bales which are mechanically wrapped with wire. Bales of materials, weighing up to 2,000 pounds, are sent to processors to be remade into new products.

Mixed Paper and Cardboard



1 Tipping Floor
Recycling collection trucks unload mixed paper and cardboard on the tipping floor. The paper is then loaded onto a main in-feed conveyor and hopper.

2 Feed Wheel
The material passes through the feed wheel onto an incline conveyor to the transfer and sorting conveyors, and then to manual sorting locations for removal of non-recyclable materials.

3 Screening Area
Having passed through the manual hand sorters, the material enters the screening area for mechanical sorting by type. Mixed paper and corrugated cardboard are separated by metal screens and placed into one of two live load bunkers.

4 Live Load Bunkers
These storage bunkers are monitored visually by electronic sensors to determine load capacity. When full, the bunker communicates to the operator which commodity should be processed for baling.

5 Baling
Separated loose material is loaded onto another incline conveyor and deposited into a horizontal baler for molding into either mixed paper or corrugated cardboard bales.

6 Outbound Transport
Baled materials are loaded on trailers for delivery to processors to be made into new products.