



Metro Waste Authority

We Know Where It Should Go

SWAP Grant Final Report Grant 21-G550-08

Submitted by Metro Waste Authority (MWA)
To the Iowa Department of Natural Resources (DNR)

Metro Waste Authority

300 E. Locust Street, Suite 100
Des Moines, IA 50309

Submitted by Leslie Irlbeck
(515) 323-6501

lir@mwatoday.com

Milestones Summary

Milestone 1: Initiate Public Education Campaign

Metro Waste Authority initiated a public awareness campaign about the agency's new material recovery facility (MRF) and accepted recycling materials in spring 2021. This initial awareness campaign reached more than 100,000 Curb It! customers through mailed postcards, blogs, and social media posts. Awareness initiatives following this campaign have included brochures and commercial advertisements focusing on enforcing proper recycling guidelines to promote correct recycling habits.

Milestone 2: Purchase and Install No-Wrap Augers and Optical Sorters

In addition to developing a public education campaign, Metro Waste Authority completed equipment installation at the MRF in October 2021.

To establish a state-of-the-art recycling operation in the new MRF, an advanced equipment package was purchased from and installed by CP Group, the leading manufacturer of recycling equipment and systems. This package included no-wrap augers and two optical sorters.

The augers, placed at the front of the system, include the Primary Auger Screen as well as the patented OCC Auger Screen, which has only been installed in one other MRF worldwide. Because of this auger's unique design, the equipment does not wrap or jam and requires very little maintenance. It also reduces contamination early in the sorting process and does not require a presort, increasing employee health and safety.

As materials continue through the sorting process, they are also sent through two optical sorters - the MSS PlasticMax and the MSS FiberMax. The PlasticMax is the industry's most efficient optical sorter for containers and plastic recovery, and the FiberMax optical sorter maximizes fiber quality for best marketability while reducing manual sorter headcount.

These advanced features ensure that the MRF processes the best output for commodity sales and is contributing to a sustainable future for recycling in Central Iowa and beyond.

Milestone 3: Project Fully Operational

Metro Waste Authority began operations at the Metro Recycling Facility on Nov. 1, 2021. The facility serves more than 100,000 households through Metro Waste Authority's Curb It! curbside recycling program, as well as an additional 100,000 households from the City of Des Moines. The agency also works with additional municipalities for recycling services as well as area businesses.

Summary of Public Awareness Activities

In spring 2021, the agency initiated a public awareness campaign about the new MRF and accepted recycling materials. The initial awareness campaign included a mailed postcard to more than 100,000 Curb It! customers, a blog, and social media posts. This campaign introduced the MRF as the new home of recycling for Curb It! materials and included a list of basic accepted items, such as cardboard, aluminum and tin cans, and plastics with twist-off lids.

Awareness initiatives following this campaign focused on enforcing proper recycling guidelines to promote correct recycling habits. These initiatives included a recycling brochure and flyer as well as a commercial advertisement for on-demand, broadcast, cable, and satellite use. Additionally, the agency spread awareness about recycling guidelines through designs on two of its new transfer truck semi-

trailers. These graphics share accepted recyclables with residents via quick glances of the images while the truck is on the road between Metro Waste Authority’s transfer stations and landfill. Samples of these materials can be found further in the report.

With the MRF now fully operational, Metro Waste Authority has continued public awareness activities about the new facility, accepted materials, and the recycling process through social media posts, blogs, in-person and virtual tours, and open hours in the facility’s Education Center. As best practices based on our first year of operations are developed, Metro Waste Authority will continue to initiate public awareness campaigns and diversify the agency’s education program.

Summary of Economic Impacts

Tonnage/Revenue

To establish a successful operation at the MRF, Metro Waste Authority focused on advanced equipment to provide low contamination rates, such as the no-wrap augers and optical sorters, as well as strong, reliable partnerships.

Thanks to this emphasis, multi-year contracts for mixed paper and OCC have already been signed with regional manufacturers, and the agency has been able to market and sell challenging commodities, such as glass.

Through these broker and end-market user partnerships, Metro Waste Authority has processed a total of 17,806 tons of material since Nov. 1, 2021 and accrued more than \$1.1 million in revenue in FY 2021/22, approximately 114% higher than the six-month budgeted estimate.

On average, the MRF sells nearly 1,500 bales of commodities each month, with approximately 20 semis filled with bales of material leaving the MRF each week.

Tonnage, broken down by material type, is listed below:

Material Type	Tons Processed
Mixed Paper	8,427.26
PET	1,151.6
OCC	6,574.39
Steel Cans	509.13
Aluminum Cans	359.99
HDPE Natural	438.65
HDPE Color	289.3
Polypropylene Plastic	10.97
Mixed Rigid Plastic	45.32

Labor

Metro Waste Authority’s new MRF created approximately 30 new jobs for the metro, including line sorters, mechanics, small equipment operators, and managers. These positions receive competitive pay and benefits, and considerable thought has been given to creating a pleasant work environment.

Representative Photos of the Project

Samples of Public Education Campaign Materials



Figure 1: Initial MRF introduction and accepted recyclables campaign postcard

Keep the wrong things out!

POSTED ON MARCH 26, 2021



We all play an integral role when it comes to keeping the recycling program alive and robust in Central Iowa. As the agency leading the charge in terms of 'Where It Should Go,' Metro Waste Authority is committed to keeping the program not only going, but growing! That's why, in November 2021, we will be opening the doors to our very own Material Recovery Facility. Starting in November, your recyclables will go to this new facility to be sorted and sold to manufacturers who will make them into new and exciting things.

That's where you come in...

As the famous Iowa phrase goes, if we build it, they will come. While we can supply the new facility with enhanced optical sorting and a state-of-the-art education center, we need your help making sure the RIGHT material makes it there, which all starts with your recycling choices at home!

Toss the *right* things in your Curb It! cart

You've heard us say it before, but when it comes to recycling, we want you to stick with the basics. This includes:

- Plastics with twist-off lids
- Juice cartons
- Junk mail
- Newspaper
- Cardboard
- Aluminum & tin cans

It's easy to second guess yourself when you're deciding what types of things belong in your Curb It! cart. A good rule of thumb, when in doubt – throw it out.

Let's keep the *wrong* things out

While we know your intentions may be good, when items are wishfully tossed into your cart, without sticking to the guidelines, it can turn the whole batch to trash. It's like throwing a red sock in with a load of whites, you risk turning the whole load pink!

Items we've found frequently discarded among wishful recyclers include...

- Plastic bags
- Coffee cups
- Pizza boxes
- Hazardous waste
- Styrofoam
- Yard waste

We want everyone to become a recycling rock star. So, next time you see a pizza box in your friends recycling, or an aluminum pop can in their garbage, spread the word so we can all become recycling experts.

If you are wondering if an item is recyclable, check out our [Recycling Guide](#) or give us a call at 515.244.0021.

Figure 2: Initial MRF introduction and accepted recyclables campaign blog post

You've heard us say it before, but when it comes to recycling, we want you to stick with the basics.
<https://www.mwatoday.com/.../news/be-a-recycling-rock-star/>



8,121
 People Reached

423
 Engagements

Boost Post

10

3 Comments 11 Shares

Figure 3: Initial MRF introduction and accepted recyclables campaign social media post



Figure 4: Recycling guidelines flyer



Figure 5: Semi-truck wrap designs

Samples of No-Wrap Augers and Optical Sorters Among Equipment Package

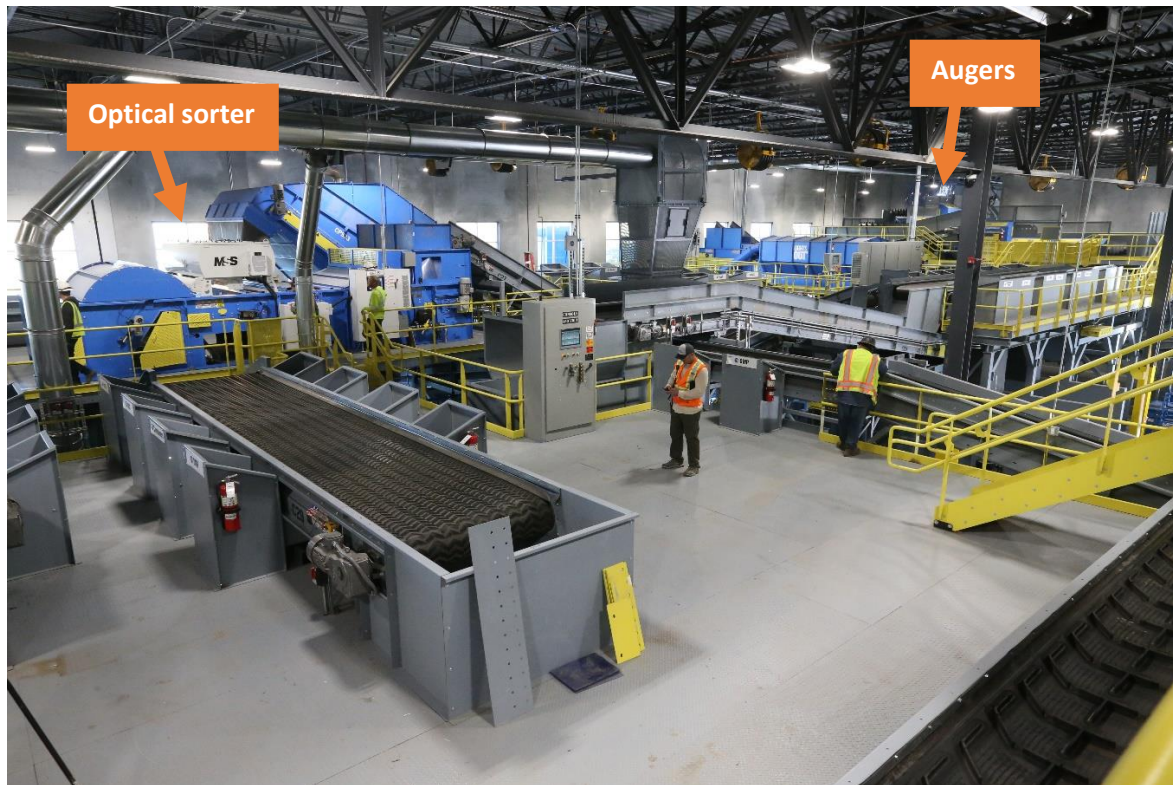


Figure 1: Optical sorters and no-wrap augers included in equipment package



Figure 2: OCC Auger Screen



Figure 3: OCC Auger Screen's patented non-round design



Figure 4: MSS PlasticMax optical sorter



Figure 5: MSS FiberMax optical sorter



Figure 6: Optical sorters use lighting to identify and separate recyclables

This Final Report was prepared with the support of the Iowa Department of Natural Resources Agreement Number 21-G550-08. However, any opinions, findings, conclusions, or recommendations expressed herein are those of the author(s) and do not necessarily reflect the views of IDNR.