

# MRF of the Month

## Dem-Con Materials Recovery Facility

One of the primary attractions of Shakopee, Minnesota is “The Landing,” an almost 100-acre historic village that offers a working representation of life in the Land of 10,000 Lakes from the mid-19<sup>th</sup> Century. While residents of the area didn’t have curbside recycling pick-up in 1860, much of Minnesota does in 2014, and the brand-new Dem-Con Materials Recovery Facility in Shakopee, a Twin Cities suburb, can process recyclables from any and all of the haulers in the region.

The 60,000-square-foot MRF is fed through mostly single-stream recycling collection programs from the greater Minneapolis and St. Paul area and is expected to take in 60,000 tons of commingled curbside materials in 2014 along with 25,000 tons of source-separated material.



The mix of that material is approximately 55 percent fiber and 35 percent containers.

The equipment for the state-of-the-art facility is entirely provided by the CP Group and includes a drum feeder, various proprietary screens – including the company’s OCCScreen, glass breaker, NEWScreen and CPScreen. The facility also contains an eddy current separator, a drum magnet, a glass clean-up system, an MSS optical sorter – a near-infrared sorter for plastics – and two IPS balers.

The facility is a merchant MRF catering to all of the haulers serving the Twin Cities and accepts materials from commercial entities, handling single-, dual- or multi-stream loads.

The daily throughput of the MRF is around 280 tons for both commingled recyclable materials and for fiber, all processed on the facility’s one processing line. The residue rate for the MRF is less than 10 percent and the issues facing it will sound familiar to all MRF owners and operators,



## Technical Specifications

### Dem-Con Materials Recovery Facility

#### Location:

Shakopee, Minnesota

#### Start-up date:

November 2013

#### Number of processing lines:

One

#### Throughput:

20 tons per hour for both fiber or commingled materials

#### Tons of material expected to be processed in 2014:

Over 85,000 tons

#### Residue rate:

Less than 10 percent



including “sharps, plastic bags and a large percentage of non-recyclable materials in incoming loads.”

Not like all MRFs, however, the new facility has implemented a “forward-looking educational room,” enabling local residents and students to learn about recycling and the plant. According to the company, the room “contains a 3D rendering of the system where the Dem-Con team can ‘walk’ people through the system before they head out onto the site floor. This 3D figure also features augmented reality technology where users are able to play videos on an iPad,” helping the public understand the job of each piece of equipment in the MRF. The facility also contains an end markets room that “allows individuals to get hands-on experience while learning what materials can and cannot be recycled.”

The Dem-Con MRF in Shakopee has 58 employees running two shifts, five days a week.

