

MRF of the Month

The Rhode Island Resource Recovery Corporation Materials Recovery Facility

Rhode Island may be the smallest state (by area) in the union, but its newly-revamped materials recovery facility is among the region's largest. This month's column is the first to follow-up on a completely redesigned MRF after also featuring it in its "before" condition. The Rhode Island Resource Recovery Corporation (RIRRC) Materials Recovery Facility has been handling materials from all 39 of the towns and cities in Rhode Island for over 20 years and was in need of an update after entering its third decade of operation.

Following the redesign from a dual-stream to a single-stream operation, much of the Ocean State is moving to single-stream recyclables collection in June of this year.

The new operations at the 77,260-square-foot facility were designed and constructed by VAN DYK Recycling Solutions and feature Bollegraaf balers, four TITECH optical sorters, a Lubo ballistic separator and Bakker Magnetics separators. The new MRF has a 50 ton per hour (tph)



capacity, much greater than the previous system's capacity of 30 tph for fiber and 20 tph for mixed containers.

While undergoing the redesign, RIRRC kept its doors open. "The seven-month retrofit was conducted while still receiving all normal material deliveries," says Brian Dubis, MRF operations manager for the facility. "VAN DYK built a temporary container processing system in one of our buildings onsite, which allowed us to continue to process recyclables with no production downtime and no unprocessed material shipped off-site." The facility accepts recyclable materials for the entire state, approximately 375,000 households and over 1 million residents.

"The temporary system was constructed using components from the system being dismantled, saving RIRRC money and time," Dubis continued. "The fiber line continued to run in the 'old' MRF while construction was occurring to create the 'new' MRF. Once the container portion was nearly completed, the fiber line was tied in over the course of a single weekend, and



Technical Specifications*

The Rhode Island Resource Recovery Corporation Materials Recovery Facility

Location:

Johnston, Rhode Island

Start-up date:

May 1989, grand re-opening, April 2012

Number of processing lines:

One

Throughput:

350-400 tons per day

Tons of material processed in 2011:

94,000 tons

Residue rate:

9 percent

the entire system was then ready to go.” The material mix at the RIRRC is approximately 55 percent fiber and 45 percent containers.

Fiber materials accepted at the facility include newspaper, cardboard and mixed paper (mail, magazines, boxboard, etc.). Accepted commingled materials include: Nos. 1-7 plastics, tin, aluminum beverage containers and foil, glass containers, aseptic packaging and scrap metal.

There are 55 people employed at the RIRRC MRF working one eight hour shift, five days a week. Previously, the facility had to stretch shifts up to three hours past the standard eight hour day. The retrofit “is saving us a tremendous amount in overtime,” says Sarah Kite, director of recycling services for RIRRC.



*Know of a North American MRF that you feel *Resource Recycling* readers should know about? If so, e-mail your recommendation, with high-resolution pictures, to dylan@resource-recycling.com, and your facility may just be highlighted in a future “MRF of the Month” column.