

MRF of the Month

Republic Services, Inc. MRF

Located just north of the Polk Parkway, in the Central Florida community of Lakeland, sits the first facility in Polk County capable of processing commingled recyclables.

Operated by the nation's second largest solid waste management company, Republic Services, Inc., the \$4.1-million Lakeland MRF handles single-stream material on behalf of 120,000 households in Hillsborough and Polk counties, and dual-stream



recyclables generated by commercial businesses in the same geographical area. The plant will be converting over to a single-stream commercial system by 2012.

The 80,000-square-foot facility came on line last November – established in response to the State of Florida's 2008 enactment of House Bill 7135, which created a statewide 75-percent recycling goal by 2020 – and consists of a multi-material recycling plant, glass processing facility, and equipment development and manufacturing shop. The MRF also offers on- and off-site secure multimedia destruction services.

The Lakeland facility operates one single-stream processing line – with three lines for ONP, mixed paper and commingled containers – producing a throughput of between 20 and 22 tons per hour (120 tons over a standard eight-hour shift). And, according to Mark Talbott, RSI's business unit general manager, the MRF is hoping to increase its processing volume to over 6,000 tons per month within two years.

Since commencing operation last November, the facility has processed over 6,000 tons, and is currently producing a residue rate of approximately 11 percent. However, that number is expected to decrease over time. "With a new facility, and with RSI offering a new curbside service, we are dedicated to educating our clients on the recyclable materials that should be placed in the single-stream containers," said Talbott. "We fully anticipate a lower residue rate once consumers have been fully educated."

In addition to the high residue rate, Talbott also noted "useful and profitable markets for glass" as being one of the other issues the MRF is presently dealing with.

Addressing the Lakeland MRF's installation, the single-stream processing system was designed by Machinex Technologies Inc. with a capacity of 20 tons per hour. However, thanks to the unit's flexibility, an additional line, as well as other equipment, can easily be added to the installation if the volume of incoming material grows. The Machinex automatic sorting system consists of: an optical sorter for plastic; OCC screen triple deck; back feeder drum; magnet for ferrous material; eddy current for non-ferrous material; Mach One separator disc screen; a double deck and finishing screen; and a glass clean-up system.

RSI's Lakeland, Florida recycling facility employs 24, comprising of a manager, maintenance personnel and 16 sorters, all of which



Technical Specifications*

Republic Services, Inc. MRF

Location:

Lakeland, Florida

Start-up date:

November 2010

Number of processing lines:

One single-stream line, with three lines for ONP, mixed paper and commingled containers

Throughput:

20-22 tons per hour

Tons of material processed since November 2010:

Approximately 6,000

Residue rate:

11 percent

2007-2008 Materials Processing and Recycling in the United States: Yearbook and Directory

5th Edition — Print or CD-ROM

The 1,300 page Yearbook is the only comprehensive guide to Materials Recovery Facilities (MRFs) in the United States, providing information on 583 operating, planned and shut projects. A nationally recognized resource, it provides a strategic analysis of the post-consumer recycling industry and a database of U.S. Material Recovery Facilities. It is an invaluable reference tool for solid waste decision makers, planners, consultants, and organizations interested in the present and future of recycling.

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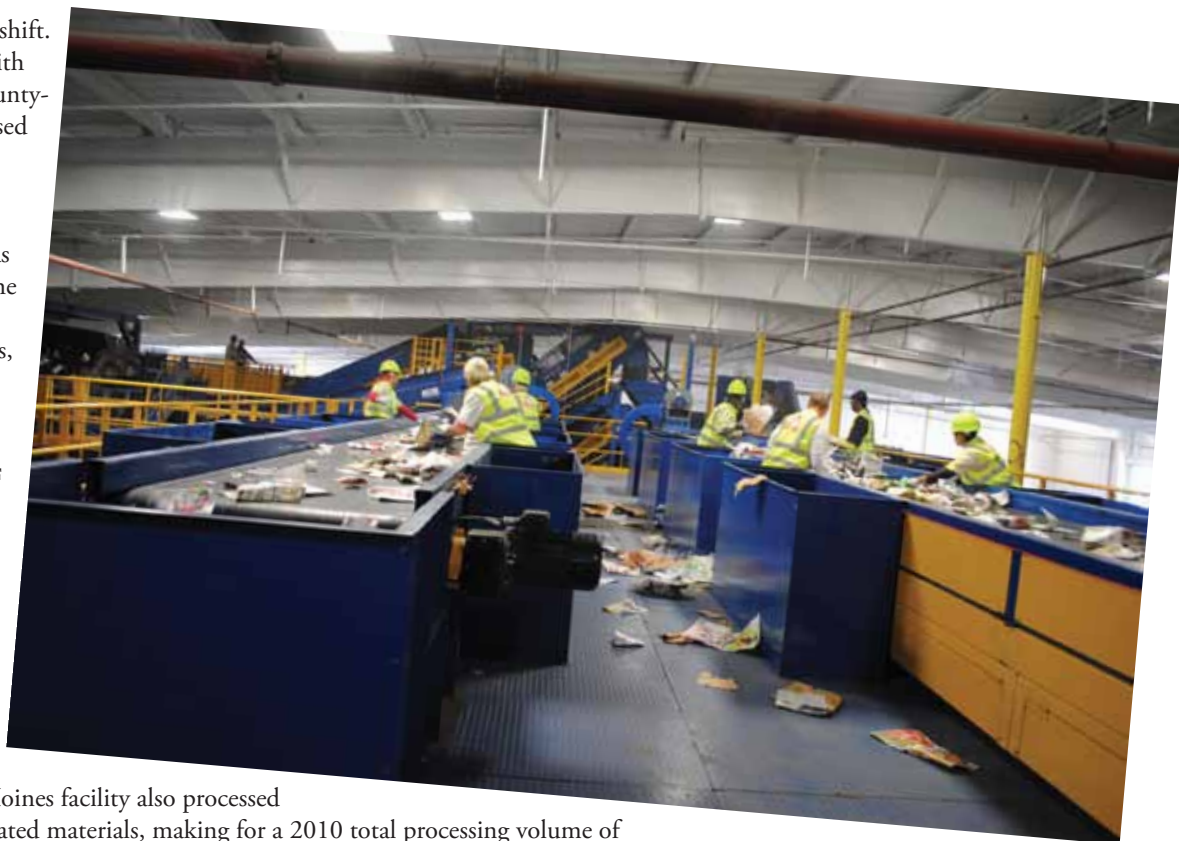
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work under one eight-hour shift.

In related news, with the opening of the Polk County-based MRF, RSI also increased the size of its Lakeland materials collection truck fleet by adding 41 natural gas vehicles and a natural gas fueling station. Presently, the Lakeland RSI fleet is made up of 125 collection vehicles, one-third of which are powered by natural gas.

Note: In last month's "MRF of the Month" column, Greenstar Recycling's (Des Moines) 2010 volume of materials processed was understated, as it only referenced the volume of single-stream materials handled. In addition to the 33,000 tons of single-stream recycling, the Des Moines facility also processed 84,000 tons of source-separated materials, making for a 2010 total processing volume of approximately 117,000 tons.



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