ASSESSING THE STREAM (CONT.)

tremely well mixed material" that was suitable for injection molding, according to MRFF.

Still, the report noted, "while all tests were successful, the supply chains to take an rFlex bale and get it washed, ground and processed for a plastics-only market did not exist in the U.S."

As the project moved forward, it deepened its work with Continuus. It also conducted tests with PAVERRECO, Erema, QRS-RePoly and Ultra-Poly, as well as with several firms using pyrolysis and gasification technologies.

Those tests helped demonstrate that flexible packaging bales need to be cleaned up further for plastics-only markets, and reducing fiber and rigid PET in the bales would be particularly important. Project backers also learned that bales with at least 70% polyolefin yield would be useful for many end markets. And they determined that a dry washing step between the MRF and reprocessor would be beneficial.

The building-products sector is a promising field for end market investment, according to the project team. For one thing, this market doesn't require the level of reprocessing that other uses do; the plastics do not need to be processed into pellet or flake form.

Additionally, there is established and growing demand for building products both from the public and private sectors the report stated.

The MRFF report suggested that product manufacturers and retailers that use flexible film packaging begin to incorporate building materials containing recovered flexible materials in their facilities.

The demand growth will drive other flexible packaging recovery improvements, according to the report, as MRFs will have an incentive to produce and optimize such flexible packaging bales.]

Assuming curbside flexible packaging recovery advances, bale specifications will need to be developed, according to the project team.

The project team offered two potential bale specifications, an "rFlex mixed bale grade" that includes 15% paper and 85% low-value flexible plastics, and a second higher-grade "FPP plastic bale grade" that's rich in poly-olefin plastics and has a negligible amount of paper and other contaminants. ■

DATA SORT

A growing preference for segregated material among buyers

Recently released industry data indicates that at least 1.3 billion pounds of post-consumer non-bottle rigid plastic were recovered for recycling in 2018, and as in previous years, the majority of non-bottle rigid plastic was purchased by U.S. and Canadian reclaimers. Increasingly, buyers are purchasing material segregated by resin, as opposed to mixed resin bales. In 2018, 80 percent of non-bottle rigid plastic recovered for recycling was segregated by resin, compared with 77 percent in 2017. The segregated material is broken out into two categories: commercial source-separated/collected material, and material further separated into resin-specific bales by a processor after commingled collection or other other collection pathways.

Export Overseas 2014 U.S. & Canada Export Overseas 2015)verseas 2016 U.S. & Canada Overseas 2017 U.S. & Canada Export 2018 U.S. & Canada 200 400 600 800 1.000 1.200 0 MILLIONS OF POUNDS Segregated by resin – Source-separated from commercial sector Segregated by resin – Commingled material that has been sorted Mixed resin Electronic scrap

MATERIAL CONSUMPTION IN THE NON-BOTTLE RIGID MARKET

Data Sort is produced each quarter by MORE Recycling. For additional information, go to morerecycling.com.