

Background and Drivers

Alpine Waste and Recycling is a full service waste and recycling company based in Commerce City, CO, with transfer and recycling operations in Denver, CO. Alpine is locally owned and is the largest independent waste and recycling company in Colorado. The company is completely vertically integrated with a fleet of almost 100 collection vehicles, its Altogether Recycling Facility (single-stream recycling plant), Alpine's compost processing plant, and East Regional Landfill, the only landfill owned by a private company in the State.



Alpine continues to strive for innovative and best-in-class service options, and pushing the envelope on material recovery in Colorado.

Foodservice Packaging Materials Processed

Foodservice packaging material including foam polystyrene comes from residential and commercial customers that Alpine services directly, as well as customers that are serviced by waste collection companies that deliver recyclables to their Altogether Recycling Facility.

The Alpine MRF instructs its residents to specifically include paper cartons, plastics #1 - #7 including bottles and tubs and mixed rigid plastics, and foam polystyrene (packaging and foodservice foam) in their recycling.

Challenges and Solutions

Alpine was proactive in the addition of foam polystyrene to their list of accepted materials for recycling. They completed a well thought out grant application to the Foam Recycling Coalition. The grant was awarded in 2015 and paid \$45,000 toward the purchase and installation of a foam densifier. The addition of the foam densifier and associated equipment coincided with a complete system upgrade at the Altogether Recycling Facility. Alpine invested in a state of the art sorting system to process their incoming stream of recyclables. As part of the planning, Alpine made space for the handling of foam polystyrene in the design of their facility.

The new system was operational in the fall of 2015, and Alpine provided a number of press releases and events to get the message out to their customers and the general public that they were now accepting foam polystyrene for recycling. http://www.denverpost.com/news/ci_29299259/adams-county-recycling-company-first-to-accept-styrofoam-curbide.

An innovative promotional kickoff event helped bring attention to the addition of foam polystyrene recovery at Alpine. During America Recycles Day activities Alpine encouraged Denver-area residents to bring the biggest quantities of foam to their recycling facility. The individual that brought the most

foam on Nov 16 won a free lunch for two-weeks from a local restaurant, http://alpinewaste.com/wp-content/uploads/ARD2015results_release-F.pdf.

End Markets

Densified foam polystyrene is a commodity that has value. Protective packaging foam as well as foodservice packaging foam can be collected, densified and palletized to be shipped to market in 40,000 pound truckloads. Typically post-consumer plastics generated in a MRF will need grinding, washing and re-pelletizing before being introduced back into a manufacturing process.

Alpine has both west coast and Midwest options for marketing their densified polystyrene foam. One of the newer Midwest facilities includes PRI in Indianapolis, IN. <http://plastic-recycling.net/>.

Key Learnings and Recommendations

Alpine Waste and Recycling has successfully used the FRC grant as an investment tool to help them justify the cost/benefit of recovering foam polystyrene as part of their single-stream MRF operations. The accompanying local press coverage this generated and additional service offerings provided to their collection and MRF customers is a positive result for their overall business.

The purpose of the FRC grant program is to reduce the barrier to entry for recycling facilities that want to include foam polystyrene as part of their accepted material list. The MRF to market recovery model opens up a new pathway to recovery of this material, and to the increased recycling of polystyrene.