

Owner Communities

Bridgton

Cape Elizabeth

Casco
Cumberland
Falmouth
Freeport
Gorham
Gray

Harrison Hollis Limington Lyman

North Yarmouth

Ogunquit
Portland
Pownal
Scarborough
South Portland
Waterboro
Windham
Yarmouth

Associate Members

Baldwin Hiram Naples Parsonsfield Porter Saco Standish

Contract Members

Andover Cornish Eliot

Greenland, NH Hampton, NH

Jay Kittery Limerick Livermore Falls Manchester Monmouth Newington, NH North Haven

Old Orchard Beach

Poland Readfield Sanford

Stockton Springs

Wayne

June 4, 2013

Mr. Troy Moon Solid Waste Manager City of Portland 55 Portland Street Portland, ME 04101

Dear Troy:

You inquired about what challenges we might be faced with by adding polystyrene foam to our single sort recycling program. I offer the following feedback regarding the challenges associated with recycling polystyrene foam:

- Shipping baled polystyrene foam material is very inefficient due to the weight and density. Baling and/or densification of the polystyrene foam could be a challenge and an added cost. You wouldn't want to ship this material very far to market.
- The marketability of recycling polystyrene foam materials is very limited. Markets would need to be identified and anticipated scrap revenues would need to be determined. Market specifications would also need to be researched to ensure that markets would be willing to accept some residue on the foam containers. There has been very little interest from potential buyers of polystyrene foam and this is a significant concern for the industry.
- We take plastic, metal and glass containers. There would need to be an extensive educational component with polystyrene foam to differentiate foam cups, foam peanuts, foam packaging, clamshells, etc.
- Unlike most of the other plastic, foam easily breaks apart and becomes difficult to manage when in tiny pieces. In comparison, most plastic containers stay intact even when squashed by a loader wheel.
- Sorting of small pieces of foam would be challenging in the MRF. In particular, foam peanuts and broken pieces of foam would go everywhere.
- Collection of polystyrene foam from the source is inefficient without significant compaction or densification.
- Additional equipment would be needed to process polystyrene foam.

This outlines our primary concerns with recycling polystyrene foam. Please feel free to contact me if you have any questions.

Sincerely,

Kevin H. Roche General Manager

Su Oko

cc: John Morin

COMPARISON OF COSTS-LOWEST COST POLYSTYRENE FOAM CONTAINERS VERSUS LOWEST COST ALTERNATIVES

| | Polystrene Product | | Non-foam Product | | |
|------------|-----------------------------------|----------------|-----------------------------------|---------------|-----------------------------|
| | (Lowest price, various suppliers) | Cost per unit | (Lowest price, various suppliers) | Cost per unit | Difference in Marginal Cost |
| 10 oz Cup | Foam – Dart Container | | Plastic- Dart Container | | |
| | 1000 ct | \$0.020 | 2500 ct | \$0.023 | \$0.003 |
| | \$19.99 | | \$56.99 | | |
| 12 oz Cup | Foam – Dart Container | | Plastic- Dart Container | | |
| | 1000 ct | \$0.022 | 1000 ct | \$0.026 | \$0.004 |
| | \$22.49 | | \$25.99 | | |
| 16 oz cup | Foam – Dart Container | | Plastic – Dart Container | | |
| | 1000 ct | \$0.032 | 1000 ct | \$0.036 | \$0.004 |
| | \$32.49 | | \$35.94 | | |
| 12 oz Bowl | Foam – Dart Container | | Plastic- Genpak | | |
| | 500 ct | \$0.035 | 1000 ct | \$0.042 | \$0.007 |
| | \$17.49 | | \$41.99 | | |
| 16 oz Bowl | Foam – Dart Container | | Plastic - Genpak | | |
| | 500 ct | \$0.039 | 1000 ct | \$0.070 | \$0.031 |
| | \$19.49 | | \$69.99 | | |
| 6" Plate | Foam – Dart Container | | Paper - AJM | | |
| | 1000 ct | \$0.030 | 1000 ct | \$0.020 | (\$0.010) |
| | \$29.99 | | \$19.99 | | |
| 9" Plate | Foam- Dart Container | | Paper- AJM | | |
| | 500 ct | \$0.036 | 1000 ct | \$0.026 | (\$0.010) |
| | \$17.99 | | \$25.87 | | |
| 6" Hinge | | | | | |
| Container | Foam – Dart Container | | Plastic | | |
| | 500 ct | \$0.038 | 500 ct | \$0.064 | \$0.026 |
| | \$18.99 | | \$31.99 | | |
| 9" Hinge | San Bart Contri | | Bloods | | |
| Container | Foam – Dart Container | ≜0.0 =2 | Plastic | 40.42 | 4 |
| | 200 ct | \$0.072 | 200 ct | \$0.125 | \$0.053 |
| | \$14.49 | | \$24.99 | | |