

MUNICIPAL RECYCLING COORDINATORS' MEETING

May 20, 2016

AGENDA

- Welcome
- 2016 Household Hazardous Waste Program – Sean McLaughlin
- 2016 Document Shredding Program- Sean McLaughlin
- Glass Study Presentation – Brendan Mullen, Mott MacDonald
- Plastic Bag Problem Project– Trish Totaro, Brick Recycling Coordinator
- Comments – Questions

Handouts: ANJR Spring Newsletter, repurposedMaterials, Ocean County Document Shredding; Ocean County Household Hazardous Waste Disposal Program, Fliers: Single Stream Acceptable, 2Good2Waste Ocean County, Boat Shrink Wrink Drop Off Locations, Marine Debris Timeline of Degradation, Mixed Rigid Plastic Recycling Program, Grease is the Word,

Township of Brick



PITFALLS OF PLASTIC BAGS



Plastic bags are **NOT** permitted in the blue recycling containers.
(They can be returned to a participating grocery/department store for recycling)

Problems caused by plastic bags at the Recycling Center:

The cost of cleaning the screens contaminated by plastic bags

- Screen cleaning due to plastic bags and other undesirables wrapping around the screens
 - 3 hours each day of labor at a cost of \$360.00 per day or \$90,720.00 per year
 - 2 hours each day of lost processing time due to having to clean screens for a production loss of \$1M annually.
- Maintenance and repair
 - Plastic bags and other undesirables accelerate the wear and tear on the rubber stars, shafts, and bearings
 - Accounts for approximately \$65,000.00 in added maintenance costs annually.
- Pre-sorting stations labor requirements
 - Seven full time labor positions to pull plastic bags and undesirables off the line before reaching the screens
 - Despite having these positions in place, they cannot remove all the material out of the stream before reaching the screens. Hence the costs mentioned above.
 - Bagged recyclables present an issue as well and time is spent removing and emptying the bags as best as possible.

Take the plastic bag pledge and do your part to help eliminate plastic bags from your recycling container.

I, _____, pledge to say "no" to plastic bags and use reusable bags whenever possible. I will keep reusable bags in my car, backpack, and purse so that I have them when I need them. By doing so, I will help to stop plastic bag pollution at the source.

AND....

I pledge to keep any plastic bags I currently possess out of the blue recycling containers and return them to a participating store for proper recycling.

EXECUTIVE SUMMARY

1

GLASS CHALLENGES the equipment integrity and the economic viability of commingled recycling programs.

The contamination of paper and other materials in a single stream recycling program resulting from broken glass compromises the County's ability to meet the high standards of today's end markets. In addition, the current market does not pay (in fact, charges) for low quality processed glass. Therefore, the goals of the study were to:

- Benchmark Ocean County's current glass recycling program
- Identify potential glass markets and options for separation, collection, and processing of glass, as well as potential markets
- Identify system modifications that may be needed in order to meet higher end-use market specifications for glass
- Estimate the ranges of costs and revenues associated with the identified options



Southern Recycling Facility in Stafford

2

A GLASS MARKET SURVEY was conducted and ten alternative systems for the collection, transportation, processing, and marketing of recycled glass were evaluated.

Once potential end-markets for glass were identified, transportation and processing alternatives were developed to examine the costs associated with producing various ranges of quality of glass cullet, both mixed and color-sorted. Source separation scenarios were also examined, where glass would be deposited at regional or municipal drop-off centers by County residents.

3

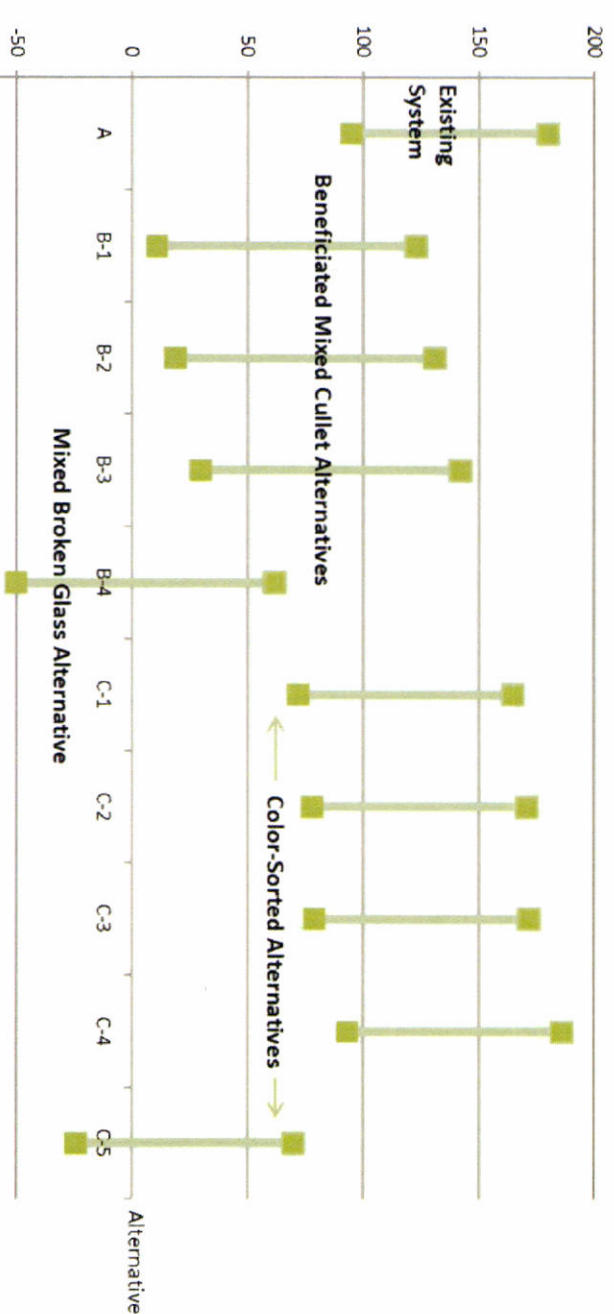
SOURCE SEPARATION OF GLASS appears to offer the most sustainable approach to recycling glass in Ocean County

The lowest cost scenarios shown in the chart below (Alternatives B-4 and C-5) reflect source separation of glass and have the potential to be net revenue producers dependent upon the quantity and quality of glass captured and continuing favorable market conditions. For these two alternatives, the potential economics range from a net cost of \$70/ton to a net revenue of \$50/ton.

4

The NEXT STEP is to refine the source separation program concept and prepare detailed estimates of program costs to confirm its long-term viability.

In addition to resulting in a higher marketability of the glass product, removing glass from the single stream recyclables will improve the quality of those materials. Source separation of glass will also reduce wear and tear on equipment at the Northern Recycling Facility and in the transfer vehicles hauling commingled materials from the Southern Recycling Facility. Unmarketable residuals will also be reduced. It is expected that there will be an initial lower public participation (resulting in a lower glass "capture") in a glass source separation program compared to the current program. These sensitivities need to be evaluated in a conceptual plan including detailed cost estimates. However, with renewed outreach and public re-education, the County should see a higher and higher percentage of glass recovered in the source separation program as it progresses.



Northern Recycling Facility in Lakewood