

Contamination is the Key Problem with Glass Recycling

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I've got trash in my glass. I'm betting if you have a single-stream MRF, your glass is mostly trash as well. I learned pretty quickly at the NERC Fall Glass Forum that glass is a problem everywhere. The struggles that we are having in New York are being experienced all over.

What struggles am I referring to? Well, if you have a single-stream MRF, most likely that glass is being sent to a landfill as a cover, drainage medium or road base. This is a beneficial use, but certainly we'd prefer to recycle the glass.

Recycling the glass is problematic because there is such a large amount of contamination in MRF glass. The only way to recycle the glass is to use additional equipment to shuffle and pull off the paper and plastic contamination and then employ secondary sorting with optical sensors to remove ceramics and rocks. Only after that extensive cleaning is the glass able to be recycled.

NERC Glass Forum Suggestions for Dealing with Glass:

- Collect glass separately if you can. Some communities call this single stream plus.
- Stop collecting glass, not an option for NY, but other places are doing this.
- Put in expensive sorting equipment to clean up the glass.
- Send your glass, at a cost, to a facility that sorts glass.
- Continue to send to landfills as a beneficial use item.
- Update your recycling message to prevent glass contamination from the get-go.

Most of the suggestions above are not feasible or might not be within your authority to implement. But that last one, that's the one I'm going to focus on.

Let me run down the list of items that are found as contamination, you will see we can all make a difference here: Shredded Paper (largest contaminate by volume) Batteries; Bolts; Bottle Caps; Ceramics; Food; Nails; Needles; Nuts; Pens; Pyrex; Screws; Straws; Toothbrushes.

I suggest we make a concerted effort to reduce the amount of these items by focusing more on the, "Do not recycle" list of items. Select the three items that are most prevalent in your system and raise awareness on the importance of removing them from the recycling stream.



Typical glass generated from a Single Stream MRF.



Glass after the paper is blown off and some of the plastics are sorted out.

With enough repetition, this may reduce the glass contamination.

This is important because, there is a market for clean glass. Bottle bill glass has no problem finding a home. Most facilities in New York that are using recycled glass in their products are using bottle bill glass, because it's clean and there is an ample supply. The market for recycled glass is not currently the problem. The problem is the quality of the MRF glass and the high costs involved with cleaning up that stream.

We will tackle the glass subject in a session at the Federation Conference in May, you won't want to miss it.