

Connecticut Department of Energy and Environmental Protection











Glass Collection Pilot Overview



Chris Nelson Solid Waste Advisory Committee (SWAC) meeting September 25, 2018



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In the beginning...

- In the early days of recycling in CT, glass was collected dual stream and processed separately from other collected recyclables. That collected glass was relatively contaminantfree, and much of it was recycled.
- Eventually, industry-driven single stream collection and processing systems became the norm. Glass was collected along with other mixed recyclables in one bin. This led to glass-related cross-contamination the separated glass from mixed recycling MRFs was highly contaminated with small bits of plastic, metal, paper & organics, and pieces of glass ended up contaminating bales of other commodities.



Outlets for MRF glass

- For years, some CT-generated MRF glass made its way to glass beneficiators, who (after much processing to decontaminate the glass) would use this cleaned MRF glass to supplement their supply of bottle bill glass.
- Much MRF glass would ultimately be sent to landfills for use as "alternate daily cover" (ADC). But really, it was just disposed of there for a fee. (DEEP does not consider ADC to be recycling, though it is an allowed use for glass pursuant to <u>CGS 22a-208z</u> – "Use of crushed glass as cover material").



In recent years...

 The demand for northeast MRF glass decreased with the closing of the Ardagh Glass Bottling facility in MA.

 Regional glass beneficiators were able to fill their demand needs using bottle bill glass only.

 With the adoption of China's National Sword, contamination of mixed paper and plastics bales (some of which was caused by glass) caused demand (and prices paid) for those commodities to plunge.



Current state in CT

- Due to falling prices for bales of mixed paper and plastic, municipalities with no previously-existing contract in place are now paying \$30+ per ton for each ton of delivered mixed recyclables.
- Although the "value" of glass in a mixed ton has remained somewhat level over the years, glass appears to be getting blamed for the rising costs for the tipping of mixed recyclables.
- Some MRFs have been lobbying for glass to be removed from mixed recycling collection due to contamination issues and due to wear it causes on sorting equipment.



Statutory Driver – PA 18-181

Sec. 12. (NEW) (Effective October 1, 2018)

Notwithstanding subsection (f) of section 22a-220 of the general statutes, the Department of Energy and Environmental Protection, upon the request of a municipality, shall authorize a two-year pilot program for the collection of glass, by one or more third parties, separate from the curbside recycling collection program, including prohibiting the collection of glass from the curbside recycling collection program in such municipality...



Statutory Driver – PA 18-181 (cont)

provided such pilot program includes...

- •one or more locations where glass is collected at no charge to residents,
- information about such program for residents of such municipality,
- •the collection of any data required by the department for the purpose of measuring program outcomes,
- •and any other requirements as determined by the department.



Can My Town Participate?

- With the law going into effect on October 1, DEEP is currently developing a "Glass Pilot Participation Application" for potentially interested towns to fill out.
- DEEP will be looking for potential pilot participants to provide detailed information regarding several elements of a glass diversion pilot program.



Pilot Program Elements

- Overview
- Data Collection & Metrics
- Glass Recycling Convenience
- Pilot Compliance with Existing Recycling Laws
- Fiscal Costs & Benefits of a Pilot Program
- Outreach/Education
- Pilot Partners



Pilot Overview

- The purpose of this glass pilot is to evaluate alternate options for glass collection that result in more glass actually being recycled (and not ending up in landfills).
- At the same time, any pilot programs should not end up being a step backwards, resulting in more glass disposed of in the trash. This is a key concept since glass is a designated (mandated) recyclable material.
- In the Participation Application, DEEP will be looking at pilot program design that addresses these two overarching objectives.



Data Collection & Metrics

- DEEP will be looking for towns to provide data that not only establishes a pre-pilot baseline, but also quantifies changes once the pilot is underway.
- Bottom line pilot towns will need to demonstrate that they can determine where their glass is going both before and after the pilot launch.



Glass Recycling Convenience

- Residents in almost all towns now have an option to recycle their glass curbside (whether as a town-provided service or via a subscription materials collection service).
- If curbside collection is not offered as part of a pilot (e.g., no curbside dual stream), how do the participating towns plan to make the pilot program convenient for all of its residents (especially those that do not currently utilize transfer station drop-off or have their own transportation)?
- Plans for assessing feedback from residents regarding the pilot program



Compliance with Existing Recycling Laws

- What measures will a pilot town take to minimize the disposal of glass in curbside trash collection?
- Has the participating town gotten any required authorization(s) to collect glass at locations other than the town transfer station?



Fiscal Costs & Benefits of a Pilot Program

- Is the town (or its residents) getting a better tipping fee for its "new" mixed recycling ton with less glass?
- Will the town (or its residents) be footing the bill for any additional tipping fees that result from extra glass in the trash?



Outreach/Education

 What kind of educational campaign and materials will be used in pilot towns to educate residents on how glass should be handled during the pilot?



Pilot Partners

- Does the town have any pilot partners that will enhance Glass Pilot efforts?
- If so, what roles will they be playing and/or what services will they be offering to the town and its residents?



Next steps

- DEEP aims to finalize an application form by 10/1/18.
- DEEP has no funding to assist towns with a pilot programs.
- Potential pilot towns should propose a robust pilot plan that responds to the application questions in great detail.
- Prior to approval of a proposed pilot, towns can softlaunch a glass collection program that supplements the current curbside collection option (i.e., encourage residents to drop off glass as specified collection point(s)).



There are other (non-ADC) options for MRF glass

- Pace Glass Recycling has an existing glass processing facility in NJ, and they are currently building a new, larger, state-of-the-art facility (also in NJ). They are currently soliciting MRF glass from northeast states.
- <u>Urban Mining Northeast</u> currently has DEEP applications being processed for a glass processing plant in Monroe, CT. At this facility, MRF glass would be cleaned up, ground up, and used as a pozzolan in concrete mix. This facility expects to be able to consume current levels of MRF glass generated in CT.



For more information...

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