Massachusetts Department of Environmental Protection (MassDEP) Recycling Market Development Workgroup February 17, 2022, 10:00 am to 12:00 noon Meeting #2 Summary

This meeting featured two presentations:

- 1. NERC's Focus on Recycling Market Development, Mary Ann Remolador, NERC
- 2. Recycling Market Development, Susan Bush, Circular Matters

These notes capture questions and discussion relative to these two presentations.

C: NERC co-sponsored a study on the workforce needs of the recycling industry in Massachusetts. Not directly Market Development-related, but it overlaps. Workforce development professionals were very interested in understanding how to better work with the industry.

Link: Recycling and Jobs in Massachusetts – A Study of Current and Future Workforce Needs <u>download (mass.gov)</u>

C: When NERC worked with financiers - helping them to understand the industry - they were very appreciative. They viewed these as opportunities and wanted to understand the risks of financing the recycling industry.

Q: Does the circular economy address food scraps too? All local market development, with a large portion of our waste stream.

A: Yes. The circular economy is about putting those resources back in: composting, getting nutrients back in the soil, selling fertilizers, etc.

Q: With respect to the "chasing arrows" logo. We know numbers 4-10 do not have any market due to commingled components. Is there any effort by government to address this issue?

A: California is working on labeling. One of the goals is to remove the chasing arrows on packaging. Washington has such a bill as well. The chasing arrows are confusing: they material is technically "recyclable," but not necessarily where you live. EPR bills for packaging have passed recently in Oregon and Maine and there are others out there, including Connecticut. These will encourage producers to use truly recyclable packaging. The Oregon approach looks at life cycle analysis: the benefits along the life of the product. The purpose of packaging is to protect embedded resources (such as food) for the benefit of human health. Do you recycle everything at all costs? Probably not. But where it makes environmental sense, yes. So, EPR will encourage that. Eco-modulation fees are a part of that. These have been adopted in Europe to provide that financial incentive. They either penalize or reward producers for their actions – as opposed to just paying fees into a system.

Link: Recycling Market Development in the United States – Looking Back and Looking Forward <u>Recycling-Market-Development-Report.pdf (circular-matters.com)</u>

C: NERC and NEWMOA are currently in the process of finalizing model Legislation on Minimum Recycled Content for plastics.

Q: Could you please talk more about glass? What are the challenges and opportunities you see?

A: It's an inert material, so not as terrible in a landfill as other things, but it's great to recycle. It's been blamed for contaminating other materials at MRFs (such as fiber). So, we're seeing some places initiate separate drop-off programs and those have been great. Usually in bar/downtown areas. Athens, GA is an example. There's a much cleaner, higher value stream – like with Bottle Bill material. In large generation areas, that approach makes a lot of sense. In Rhode Island, they did post-processing which cut down on trucking because they were sending clean material rather than half-dirty loads.

Q: MassDOT has a specification for glass to fill as aggregate. Not all MRFs can produce this to spec. What is MassDEP doing to facilitate this and encourage DOT to make this a preferable fill material?

A: MassDEP would be happy to engage in further conversation on this issue.

Q: What about solar panel glass that contains cadmium and lead?

A: MassDEP is in the process of learning more about solar panels: what the decommissioning process is like, what recyclable processes exist, etc. Also, what other states and countries are doing. This research will inform our future efforts and we expect solar to be a future topic of conversation in this group.

Q: Are state by state Extended Producer Responsibility laws practical when they have different requirements? How does a manufacturer respond to 50 different EPR requirements?

A: Manufacturers aren't thrilled with a patchwork approach. Oregon is really divergent, for instance. But there's not a high probability for a national EPR bill anytime soon. A national framework could be productive. Even if individual states adopt policies, they could at least be on the same page and have consistent attributes. Or if industry brings this about, with states using it as a building block, it would probably be a better way to go. There has to be a way to account for individual states needs without making it hard on producers.

Q: With respect to chemical recycling – does that mean recycling chemicals themselves, or packaging?

A: Just a different way of recycling plastics, as opposed to mechanical (chopping them up). Chemical recycling refers to breaking the plastics down. There are many types of technology – different ones for different plastic feedstocks – and some even apply to dirty plastics. The end product might be fuel, chemicals, solvents, even plastic that's as good as virgin material. Is it recycling? Most people think it is if it results a product. Maybe not a fuel. That would be recovery, not a new product. It allows plastics that aren't readily recyclable to be recycled: carpets, biohazard bags, etc.

Link: Town of Dennis, MA Glass Recycling Program Glass Recycling Success on Cape Cod, MA | Northeast Resource Recovery Association (nrrarecycles.org)

C: Clean Seas has a process to convert mixed plastic waste – anything that can't be mechanically recycled - into ultra-low sulfur diesel or even hydrogen. We don't call it recycling but believe there's value in diverting plastic from landfill.

Q: Is there any momentum at the national level to move back to dual stream since China implemented National Sword?

C: There are a fair number of places moving back to dual stream. It's better in terms of high quality materials but creates more impact on local roads. Some municipalities collect fibers one week, and containers the next to keep truck traffic down.