



GEMI Contaminated Plastics Work Group

Mission / Vision / Objectives

Last Revised, January 2022

Vision: to engage key stakeholders across the value chain to foster precompetitive collaborative cross industry dialogue and develop business driven solutions that can enhance domestic recycling and material management capabilities for potentially contaminated industrial plastics while increasing value for stakeholders across the value chain.

Mission: To identify and pursue new ideas, connections, and solutions with potential to address challenges in recycling industrial combo liner wastes contaminated with food residues, and apply learnings from process to help address other food contaminated plastics.

Background

There can be various technological and economic barriers to developing scalable end-to-end reuse / recycling solutions for certain industrial plastic materials, such as material weight, composition, and volumes, storage, transportation / logistics processes, end market demand, regulatory requirements, and the current economics of waste and recycling markets for certain material types. Additionally, food residues and other contaminants can significantly limit recycling opportunities and often require new solutions to address.

The GEMI contaminated plastics work group is currently leading a project focused on challenges in recycling industrial plastics contaminated with food residues and intends to apply learnings from this process to understand and address challenges with other contaminated plastic materials going forward.

Key topics of interest to the work group include, but are not limited to:

- **Advanced Recycling & End Market Development** – identification of members' top recycling challenges and exploration of new / additional potential end markets for challenging materials; education on advanced recycling technologies able to accept contaminated plastics as direct feedstocks and produce recycled materials for use in same / similar applications; cleaning / separation solutions to address food residues and other contaminants prior to introduction into recycling processes.
- **Industry Goals & Practices** – review of industry waste and recycled materials targets, definitions, and parameters; compilation of playbooks / specifications to support circularity of targeted materials along the value chain; collection of data to support new recycling business model development.
- **Transportation / Logistics Models** – transportation and logistics solutions to enable efficient collection and transportation of materials; exploration of milkruns and other shared logistics opportunities to improve recycling efficiencies across organizations.

Focus Issues for 2022

Through the end of 2021, the contaminated plastics work group has made meaningful progress in qualifying the challenge with recycling plastics contaminated with food residues and identifying recycling solutions with potential impact. We expect continued opportunities for investigation and information sharing on additional advanced recycling options and barriers as we move forward. Based on the work group's discussions to date, we also anticipate that new business models and collaborative approaches will be needed in many cases to move new opportunities forward at scale and cost-effectively.

In 2022, GEMI will work with work group volunteer leaders from **Sealed Air, Smithfield Foods, and WM**, alongside a team of GEMI member companies and project participants to further explore and address key challenges and opportunities associated with recycling plastics contaminated with food residues, such as:

- Assessing regional/ site-level information on contaminated material volumes, compositions, and potential outlets for recycling.
- Exploring models for spoke & hub collection, cleaning and transportation; considering opportunities to develop consortiums to build economies of scale

- Sharing information on public-private partnership models and potential grant funding that may be available to support pilot and model development (e.g. EPA, DOE, State programs)
- Sharing information on industry requirements and leading practices for waste management, handling, sortation, storage at processing sites
- Evaluating playbooks / specifications to support circularity along the value chain (packaging supplier, processor, transport / logistics, recycler)

The work group strategy and activities will be led by GEMI members with facilitation support from GEMI staff. The next phase of the work group effort will begin in the first quarter of 2022 and will be led and supported through quarterly virtual working sessions throughout the year.

How to Get Involved

GEMI invites interested companies and industry associations to apply to join this work group and work with us to identify and develop business-driven solutions to key challenges in closing the loop on contaminated plastics. GEMI members may participate in this effort at no-cost as part of their annual membership contribution. Non-member organizations may apply to join this work group in 2022 for a fee of \$4,500.

To learn more about how to get involved, please contact Kellen Mahoney at kmahoney@navista.net.