

**Diane Herndon**  
**Speaker 2016 TPA Sustainability Summit**  
***Recover Flexible Packaging! Optimizing Materials Recover Facilities to Sort & Recover Flexible Packaging***



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Diane Herndon works with expert teams across Purina in the US to improve and communicate the sustainability of the company. She works with purchasing teams and non-governmental groups to track Purina's priority supply chains and verify adherence to Nestlé's responsible sourcing guidelines. She works with the operations teams as they implement energy, greenhouse gas, water and waste reduction projects. Package recycling is an important area for Purina as a way to protect the product and connect with consumers. With Packaging colleagues, Diane developed an online pet food package recycling tool and she is currently working with a cross-industry group to find ways to recycle flexible plastic pet food bags through community recyclers.

- **Why is flexible plastic package recovery important?**

Flexible packaging includes plastics such as the crinkly bag that holds your chips, the large dog food bags, and the stand-up pouches that deliver all kinds of foods. Each year tons of flexible plastic packaging ends up in landfills because most MRFs don't have the space, equipment, or economic incentive to recycle it. And consumers are becoming more recycling savvy in the US. They not only want to recycle more themselves, but they look for recyclability of the package in the products that they purchase.

What if a business case could be developed to demonstrate that there is value in sorting these materials? That is the impetus for this research – Materials Recovery For the Future (MRFF).

Major companies are coming together, including Dow, PepsiCo, P&G, Nestlé Purina and Nestlé U.S., Sealed Air, and SC Johnson, as well as the Association of Plastic Recyclers (APR), the Flexible Packaging Association (FPA), and the Society for the Plastics Industry (SPI), to find a way to sort the packaging at MRFs and enable more plastic packaging to be recovered.

- **How new is this technology and where it is being used?**

***This has never been done before in the US. It is breaking new ground for flexible plastic recovery.***

Rome wasn't built in a day, and this program may take several research steps/ iterations to develop a viable process.

The first phase of the research involved renting a MRF that already uses advanced sorting technologies, such as optical scanners.

Instead of materials going to landfill, a more efficient system could be to capture and direct back into the market these valuable resources *before* they get to the landfill.

Data from this pilot will help work toward the goal of diverting recoverable material from landfill.

- Why is packaging so important to sustainability?**

Packaging protects the product. The least sustainable thing that can happen along a product's journey from factory to consumer is for the package to fail and all of the contents, with their embedded natural resources, quality and expertise be lost. The priority then is to have a package that performs well. Beyond that, Nestlé Purina and many other companies are working to use less material to make a package, use plant based materials when that makes sense, use more homogenous materials for easier recycling, and use recycled content when possible.
- What are the challenges in recovering flexible packing? What innovations have you seen that are solving these challenges?**

Most Material Recovery Facilities (MRFs) were set up many years ago to recycle paper, glass and aluminum. Waste streams have changed and today, a range of flexible plastic packages are increasingly a component of our trash bins. Flexible plastics, like pouches and bags, can get wrapped up in MRF separation equipment and create problems. New separation technologies, like optical sorters and disc separators, offer better opportunities for recovering these plastics and putting them to beneficial use. That is what the Material Recovery for the Future (MRFF) pilot seeks to do.
- Why is it important to have partners up and down the supply chain on this issue?**

Helping to open the bottleneck at Material Recovery Facilities for flexible plastic packaging is a societal issue. If we don't want to continue to fill landfills with "permanent branded litter" in the form of our packages then it makes sense for those of us with flexible plastic packaging to pool our resources and work together toward a common solution for keeping these materials in a closed loop system where waste is turned into useful products.
- What has been the biggest innovation to packaging, in the way of sustainability, in the last ten years?**

Perhaps the most dramatic shift has been the significant growth in the use of high performance stand-up pouches. By using a small amount of several different polymers, packagers have been able to provide product protection and consumer convenience in a format that is lightweight and uses fewer resources to produce than the packaging it replaces. Another big development in the packaging life cycle has been greater consumer access to single stream packaging collection. This development has raised consumer awareness and expectations that more of their waste be recyclable.
- What do you hope attendees will get out of your session?**

People who attend this session will get a better understanding about the complexities of separating plastics from other elements of the waste stream. They should know that the companies behind the brands as well as the plastics manufacturers and the whole industry care about the environment and are trying to reduce our impact by keeping our packages out of landfills. We also want to help consumers who want to recycle effectively. This pilot is an attempt to evolve the packaging recovery infrastructure in the U.S. so that it creates shared value for all members. Our vision is to share a future without the words "waste" and "scrap" when we think of trash and replacing them with the possibility of "resource" and "value".