Food Waste Measurement Protocol
Sectoral Focus - Prepared Food Producer

Food Waste CHARTER

Developed to help Irish food and drink companies measure food waste consistently, the Food Waste Measurement Protocol enables businesses to identify all food waste related flows and compare their destinations against the food use and waste hierarchy. Several businesses joined a pilot study to test the Protocol, which helped highlight issues and actions required.

Background

An Irish manufacturer producing sauces, relishes and mayonnaise faced challenges due to the thickness of their products. These are blended and cooked in batches, and the consistency makes cleaning difficult, requiring large volumes of water and resulting in high organic loads.

What the Protocol identified

During discussions on which food flows to include, it became clear that product losses occur throughout the cleaning process:

- Ingredients containers, cooking vessels, pumps and packaging lines are cleaned at the end of each shift.
- Batches are prepared in large plastic containers before being pumped into smaller cooking vessels.
- The mixer and guard design leaves product at the bottom of the vessels.
- Small volumes are lost to drain with every batch because of this setup.

Although vessels are scraped as thoroughly as possible, any remaining product from the cooking vessels or pump lines enters the wash water, which is sent to the wastewater treatment plant. Product fill lines are also water cleaned at the end of each shift. The volume of lost product has never been quantified.

Solutions

1. Reconfigure pump and guard design to reduce material left in the drum. The resulting increase in yield will reveal how much product was previously being lost.
2. Introduce line cleaning using a "pig"—propelled by compressed air or crushed ice—to recover more product and minimise the load on the wastewater treatment plant.