

# Reusable Packaging System Design Standard



## Part 6: Reverse logistics

### Summary of Requirements

The [Reusable Packaging System Design Standard](#) provides a foundation to align reuse systems globally so they can share infrastructure and become interoperable. This systemic approach is necessary for reuse to become affordable, efficient, and convenient, and scale across sectors and global regions in a way that provides a solution to both the climate and plastic crises.

This document summarizes the part of the standard that focuses on *reverse logistics*. Reverse logistics start when a used or dirty container is returned at a collection point. The container will then need to be picked up by a logistics company, sorted, washed, and returned to the filler.

The document provides a set of requirements that are intended to help minimize the financial and environmental costs of moving these containers through the reverse supply chain. The requirements allow any company to easily plug into the system while assuring containers are safely reused numerous times.

For more detailed requirements and guidance, see the full document: [Part 6: Reverse logistics](#).

### Collection requirements

- Used containers that are part of the reuse ecosystem must be kept in movable bins that can be collected by the logistics provider(s).
- Bins must follow collection schedules that are consistent with regulatory sanitation standards and industry best practices for waste and recycling.
- Employees must use gloves to handle collection bins and wash hands and replace gloves if switching between collection and distribution roles. If a glove rips while handling dirty foodware or bins, the employee must immediately wash hands.
- Between uses, collection bins must be cleaned and sanitized with a sanitizing solution that is approved by the FDA or another local governing body-approved for use on nonfood-contact surfaces
- Bin handling procedures must be printed and kept in all vehicles, sorting, storage and washing facilities for reference. Specific handling requirements are listed in the full standard.
- The collection date and location must be logged for each container collected in the system.
- Collection vehicles that handle both collection bins with used/dirty containers and collection bins with clean containers for distribution must have separate and designated dirty and clean areas. Vehicle operators that do not have separate dirty and clean areas and switch between collecting dirty bins and distributing clean containers must wash and sanitize vehicle storage areas between uses.
- Boxes of clean, latex gloves must be available in vehicles or near each collection point.

## Recovery requirements

- Recovery facilities must ensure that each container that enters the facility is logged according to where it was collected.
- Containers must be sorted and aggregated at the recovery facility for the most efficient washing or redistribution.
- When washing facilities are not co-located with recovery facilities, washing facilities must ensure that each container that enters the washing facility is logged according to the recovery facility it came from
- Washing facilities must ensure a count of each container washed at the facility according to the method used.

## Redistribution requirements

- Clean containers must be stored and transported in sealable bins that are approved by FDA, NSF and/or another governing body.
- Bins must be sealed during transport and storage.
- In the case that collection bins and storage/distribution bins are used interchangeably, they must be washed and sanitized between each use according to **Part 7: Washing** and clearly labeled as “clean” or “used.”
- Storage/distribution bins must align with local infrastructure, e.g. where box trucks are used for collection, bins are designed for easy loading and fitting into trucks, including flexible connectors wherever possible to ensure adaptability.
- Bin handling procedures must be printed and kept in all vehicles and storage facilities for reference. Specific handling requirements are listed in the full standard.
- The distribution date and location must be logged for each container collected in the system.
- Redistribution vehicles that handle both collection bins with used/dirty containers and distribution bins with clean containers must have separate and designated dirty and clean areas. Vehicle operators that do not have separate dirty and clean areas and switch between collecting dirty bins and distributing clean containers must wash and sanitize vehicle storage areas between uses.

## Performance metrics

- Containers in a pool must achieve an average of at least 10 use cycles per container. Container owners are responsible for calculating this average on a timescale that is appropriate for the average cycle lengths of the packaging. For example, a cup or bottle may be used for many months or years before it is decommissioned because of damage or wear. Sample methods for this calculation are provided in the full standard.
- Containers in a pool must achieve an average return rate of at least 90%. Container owners are responsible for calculating this average on a timescale appropriate for the average cycle lengths of the packaging. For example, a container for a manufactured good, such as soap or oil, may not be returned for many months, whereas a cup used at a sporting venue will be returned the same day. A sample method for this calculation is provided in the full standard.

Details related to these requirements and additional recommendations are provided in the full [Part 6: Reverse logistics](#).