Produce Traceability Initiative
Best Practices for Repacking and Commingling

(Revision 1.1)

About this Best Practice Guideline

Best practices are generally accepted, informally-standardized techniques, methods or processes that have proven themselves over time to accomplish given tasks. The idea is that with proper processes, checks and testing, a desired outcome can be delivered more effectively with fewer problems and unforeseen complications. In addition, a "best" practice can evolve to become better as improvements are discovered. The Produce Traceability Initiative (PTI) is a voluntary U.S. produce initiative. The best practice documents are the recommendations created and agreed to by all facets of the produce industry supply chain and PTI Leadership Council.

Consent between trading partners may replace specific recommendations as long as the minimum traceability information requirements are met in good faith.

Revision History

This section itemizes the changes from the last published Best Practice.

<table>
<thead>
<tr>
<th>Version No.</th>
<th>Date of Change</th>
<th>Changed By</th>
<th>Summary of Change</th>
</tr>
</thead>
<tbody>
<tr>
<td>1.0</td>
<td>December 2009</td>
<td>Supplier Subgroup</td>
<td>Original Best Practice</td>
</tr>
<tr>
<td>1.1</td>
<td>03/15/2012</td>
<td>Implementation Working Group (IWG)</td>
<td>Minor clarification in sections 2(b), 3(a) and 4(b)</td>
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Objectives

The objectives for establishing best practices for repacking and commingling are to:
- meet the requirements of the Produce Traceability Initiative (PTI);
- create and maintain efficient shipping, receiving and communication processes for buy and sell arrangements involving repacking and commingling; and
- maintain effective document reconciliation processes and formalize current industry practices.
**Table 1: Cross-Referenced Terms and Definitions**

Listed below are terms used by the produce industry and their definitions.

<table>
<thead>
<tr>
<th>Sector Term</th>
<th>Definition</th>
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<tbody>
<tr>
<td>Repacking</td>
<td>The process of handling the product inside the pack.</td>
</tr>
<tr>
<td>Commingling</td>
<td>The process of taking multiple GTINs and/or batch/lot numbers and combining (commingling) them in the original pack or a new pack.</td>
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</table>

**How do we define repacking?**
For the purposes of this document, repacking typically refers to the process of handling the product inside the pack. Repack can occur for many reasons including quality assurance culling where the original product is not commingled and is returned to the original pack or the product is being moved from one pack to a new pack and may be commingled with other products.

**How do we define commingling?**
For the purposes of this document, commingling typically refers to the process of taking multiple GTINs and/or batch/lot numbers and combining (commingling) them in the original case or a new case.

**What is the traceability challenge with repacking or commingling product?**
Traceability requires any operation to track product one step forward and one step back. In a repack operation, products being handled have the potential for contamination or some contaminated product could be commingled with good product. It is important to be able to track the input GTIN and batch/lot numbers for the products to the output GTIN and batch/lot numbers for the products included in the repack.

**What information is needed for repacked or commingled product?**
1. The GTIN and batch/lot number from each input that is used in the repacking or commingling process.
2. A new GTIN and batch/lot number for the output product must be assigned. See the best practices section below for more details and exceptions.
3. The repacker is required to maintain documentation to link the output GTIN and batch/lot number to the input GTIN and batch/lot number for each repack run.

**In the event of a recall, what product could potentially be implicated?**
It is important to understand that, by the very nature of mixing products with different lots into one product with one final lot, in the event of an incident requiring trace back all of those original lots will be implicated. Further analysis may identify that the repack process was the contaminator or the source product was the cause of the contamination. This limits the input recall but all repacked product containing the contaminated product will need to be included in the recall.
**Best Practices**

All the standard PTI best practices must be referred to for GTIN assignment, batch/lot number and case labeling. The following best practices are in addition to the above and specific to repack and commingling of product.

1. **Assignment of GTIN:**
   a. A new GTIN must be assigned to output product where the brand owner or packing of the output product is different from the input product.

2. **Assignment of Batch/Lot Numbers:**
   a. A new batch/lot number should be assigned to the output product to relate all input and output product to this repack run.
   b. Exceptions
      i. A new GTIN is not required where the product is only being reconditioned for quality, provided that all of the product is from the same batch/lot number.
      ii. A new batch/lot number is not required when product is being reconditioned for quality and a majority of the batch/lot will be reconditioned. Note: If only a portion of the batch/lot is reconditioned, then the whole batch/lot may be included in a potential recall. The repacker may limit the scope of the recalled batch/lot based on their internal tracking system determining where product may have been shipped.

3. **Case Labeling**
   a. When new labels are applied to a previously labeled case, the original label should be removed or covered by the new label. When a new label is applied, the old one should have an “X” drawn over it to indicate it is no longer valid.

4. **Link Input and Output Product**
   a. The repacker is required to maintain documentation to link the input and output product for a repack run.
   b. A repack run should be related to a specific task with defined product GTIN and batch/lot number inputs and outputs. The repack run should have a defined start and finish which should both be within the same work shift.
   c. A unique reference number should be assigned to each repack run. This reference number is recommended to be used as the batch/lot number for the output product. Reference Section 4 of the *PTI Best Practices for Formatting Case Labels* for batch/lot numbering guidelines.
   d. All companies are expected to maintain records that will facilitate timely and accurate traceability to support product recalls.

5. **Other Sources of Supply**
   a. Maintain records of other product inputs (e.g. packaging materials).
6. **Data Retention**
   a. It is recommended that your company establish your internal data retention policy based on the following considerations:
      i. Government and market requirements
      ii. How long your product may exist in the supply chain

**Business Examples:**

**Example of a Repacked Product:**

**Who are the trading parties?**
Precision Packing is a produce packing company that operates a repack facility where product is received bulk from a grower/shipper. The product Precision Packing receives will all be the same product, green apples, but will carry the grower/shipper’s GTIN and batch/lot numbers. Precision Packing will repack the produce into cases containing 5lb bags to be delivered to Precision Packing’s customers.

**Diagram of the repack process:**

![Diagram](image)

**What needs to be traced?**
Precision Packing will repack product with a grower/shipper’s GTIN and batch/lot number into new cases containing 5 lb. packages with a new GTIN and batch/lot number assigned. Each new case will have a new GTIN and a batch/lot number which links back to the input GTIN and batch/lot number of the input product. Precision Packing must record the grower/shipper’s GTIN and batch/lot number and link them to this new batch/lot number and maintain that information in their records.
Example of a Commingled Product:

Who are the trading parties?
Co-Mingle Packers is a produce packing company that operates a repack facility where product is received from growers/shippers, through the services of Global Fresh Import Company, an importer who delivers packed product to Co-Mingle Packers facilities. The product Co-Mingle Packer receives will be from multiple growers and batch/lot numbers which will be co-mingled into the same package to be delivered to Co-Mingle Packers’ customers.

Diagram of the commingling process:

What needs to be traced?
Co-Mingle Packers will combine product with multiple GTINs and batch/lot numbers into a new package where a new GTIN and batch/lot number will be assigned. Each lot of product repacked will need to have a lot number assigned to track the input product to the output product. Co-Mingle Packers must record all the GTINs, batch/lot numbers and quantities of each input to this new batch/lot number.
Example of Repack records to be maintained for a recall:

<table>
<thead>
<tr>
<th>Work Order</th>
<th>Brand Owner</th>
<th>Product</th>
<th>GTIN</th>
<th>Batch/Lot#</th>
<th>Cases</th>
</tr>
</thead>
<tbody>
<tr>
<td>WO112233</td>
<td>First Farms</td>
<td>Green Peppers</td>
<td>101234560000015</td>
<td>052309222</td>
<td>100</td>
</tr>
<tr>
<td>WO112233</td>
<td>Good Earth Farms</td>
<td>Yellow Peppers</td>
<td>10245894332241</td>
<td>220524X23</td>
<td>100</td>
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<tr>
<td>WO112233</td>
<td>Fresh Pepper Farms</td>
<td>Red Peppers</td>
<td>10445678443563</td>
<td>65521331</td>
<td>50</td>
</tr>
<tr>
<td>WO112233</td>
<td>Fresh Pepper Farms</td>
<td>Red Peppers</td>
<td>10445678443563</td>
<td>65522355</td>
<td>50</td>
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<tr>
<td>WO112233</td>
<td>Global Fresh Imports</td>
<td>Stop Light Peppers</td>
<td>10888976450008</td>
<td>WO112233</td>
<td>300</td>
</tr>
</tbody>
</table>

Reference to link the input and output in a repack

Batch/Lot Number of input products and new Batch/Lot Number for the output product