



Efficient Consumer Response Australasia

Multi-Coded Pallets Guidelines

2015



AUSTRALIAN
**FOOD &
GROCERY**
COUNCIL

Multi-Coded Pallets Guidelines

These guidelines are supported by the retailer participants of ECRA's Order to Receipt Excellence Standing Working group:



.....and were developed in conjunction with the supplier participants on the group:



.....and industry stakeholder participants:



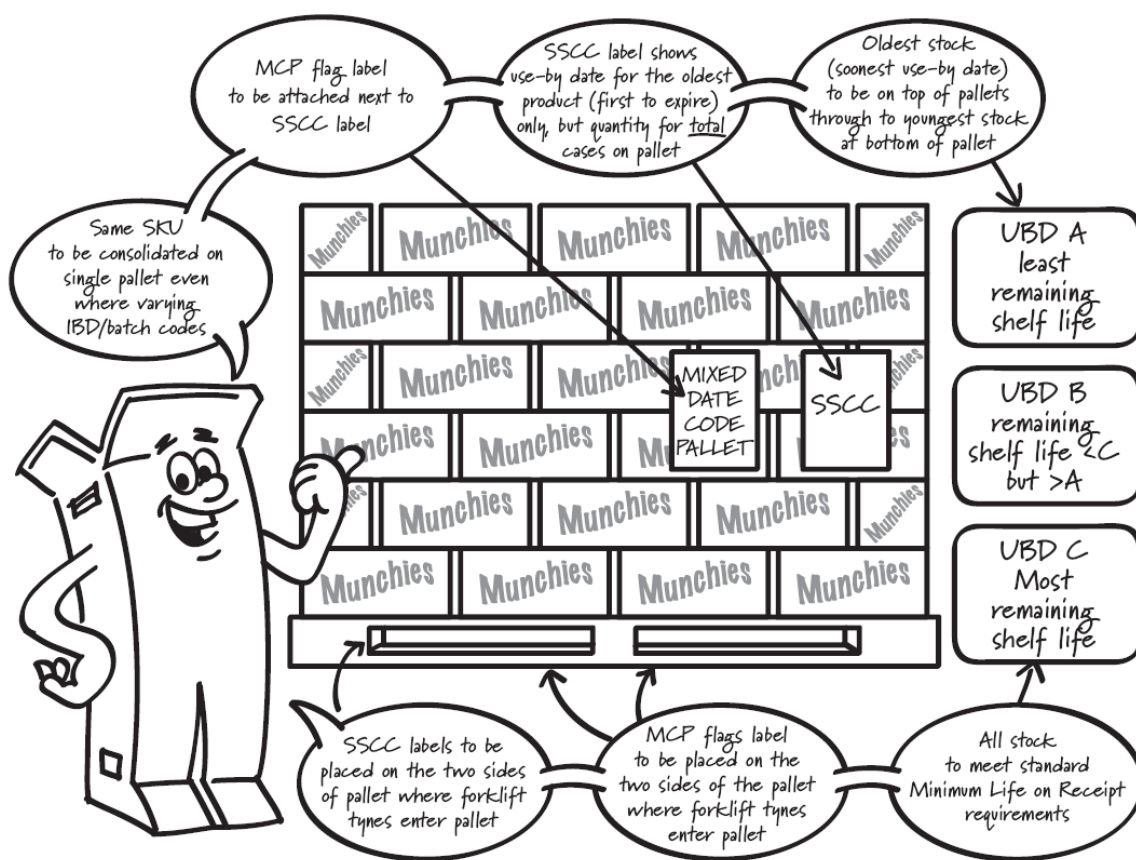
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Multi-Coded Pallets Guidelines

Executive Summary

What a good job looks like:



Multi-Coded Pallets Guidelines

Introduction

The adoption and implementation of standards governing the identification, communication and receipt of products along the fast moving consumer goods (FMCG) retail supply chain is critical to achieving an efficient and effective value chain. When executed well, this results in providing product to shoppers when and where required, at the best quality and best value for money.

Existing processes require suppliers and manufacturers to deliver product to retailers by batch/date code, using first in first out (FIFO) principles. The current practice sees different batch/use-by date codes of the same stock keeping unit (SKU) delivered on separate pallets. In practice this results in thousands of extra pallets moving through the FMCG retail supply chain; impacting transport, distribution and warehouse facilities.

In 2012, Woolworths took steps to review and amend their Packaging and Barcode Specification to facilitate the receipt of a single (full or part) pallet containing an SKU of different batch/use-by codes. Whilst this has delivered positive results for Woolworths, a standard approach across major retailers and wholesalers delivers scale and provides surety and consistency to the FMCG industry.

The Board of Efficient Consumer Response Australasia (ECRA) commissioned a review of existing practices with a view to develop an industry standard approach to enable the receipt of a single (full or part) pallet containing an SKU of multiple batch/use-by codes, referred to as 'multi-coded pallets'.

The intent of this work was to develop a standard operational approach to this initiative which has potential to drive out cost associated with put-away, storing, let-down, picking and transporting of part pallets. The project sought to identify the potential benefits and obstacles, and to develop process guidelines to support implementation.

Work undertaken during 2013 included:

- Reviewing current retailer processes and requirements;
- Surveying retailers and suppliers to understand potential costs and benefits, risks and concerns, and standardisation requirements for implementation;
- Working with Coles, Woolworths and Metcash to identify mutually agreeable standards;
- Working with Suppliers to address rules, requirements and associated system issues; and
- Working with GS1 Australia to address pallet labeling and e-commerce issues.

This document provides an agreed industry standard for the application of Multi-Coded Pallets (MCP's) across Woolworths, Coles and Metcash.

IMPORTANT NOTE:

Implementation of MCP's is NOT mandatory.

MCPs are an option to manufacturers for whom it makes commercial and operational sense and where retailers are willing to accept their stock in MCPs.

A rigorous cost vs. benefit analysis and detailed trading partner discussions

Multi-Coded Pallets Guidelines

Acknowledgement

ECRA would like to acknowledge the input of the following participants who contributed to these guidelines:

Company	Working Group Representative
Woolworths	Lynda Heeley (Co-Chair)
Nestle	Mandeep Sodhi (Co-Chair)
Coles	Con Kontopoulos
Metcash	Michael Haire
CCA	Carlee McGowan
Simplot	Vince Vella
Sanitarium	Iain Myers
Cerebos	Malay Shah
Lion	Scott Dinnie Adam Wade
Primo	Mark Olson
Kimberly-Clark	Abby Phillips Mario Carniato
GS1 Australia	Andrew Steele

ECRA Board Sponsors:

Retailer: Grant Enders, Coles

Supplier: David Hix, Nestle

ECRA Secretariat:

Samantha Blake

John Cawley

Role of ECRA versus Role of Trading Partners:

The determination to convert to MCP (considering costs, risks and benefits) is a matter for decision between trading partners. The role of the ECRA is to drive standardisation in the requirements for MCP's across Coles, Metcash and Woolworths.

Discussions relating to requirements should be pursued prior to any decision to implement.

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Call-to-Action

The Australian food and grocery industry is one in which there is a rapid pace of change. This facilitates the industry staying at the cutting edge by providing product to shoppers when and where required, at the best quality and value for money. The adoption and implementation of standards that govern identification, communication and receipt of products along the FMCG retail supply chain is critical in achieving efficiency and effectiveness in product supply.

In cases where competitive advantage is gained through operational execution, rather than through proprietary intellectual property, a better and timelier outcome can be achieved by developing and implementing industry standard approaches. This is a role that ECRA regularly provides by bringing suppliers and retailers together to develop and implement optimised programs.

In 2013, Coles and Woolworths had each piloted the receipt of MCP's into their respective distribution centers with varying rules and requirements. It is clear that there is benefit to industry in implementing a single standardised approach compared to the complexity and potential for errors in managing different rules and requirements.

As such, ECRA has facilitated an industry standard framework for implementation of MCP to assist industry participants in gaining benefits and avoiding issues associated with MCP introduction.

Multi Coded Pallet Standardised Framework Summary

The MCP guidelines provide for a clear understanding of compliance requirements:

- Multiple batch codes of a single SKU should be consolidated and delivered on single pallet lots
- Multiple use-by codes of a single SKU can be consolidated and delivered in single pallet lots

...BUT, the following rules apply:

- The oldest date code (first to expire) product is at the top of the pallet
- The youngest date code (last to expire) product is at the bottom of the pallet
- One (only) SSCC label needs to be applied to each of the 2 forklift entry sides of the pallet
- The SSCC must state the oldest date code against the total quantity on the pallet
- An 'MCP Flag' needs to be affixed to each of the 2 forklift entry sides of the pallet
- MLOR requirements apply per agreed business practice between trading partners
- ASN requirements regarding quantity and use-by date must be followed

Multi-Coded Pallets Guidelines

What exactly is a Multi-Coded Pallet (MCP)?

MCP's are where multiple use-by dates/batch codes of a given SKU are consolidated onto a single pallet, up to and including the standard full pallet quantity for that SKU, for distribution from a supplier to a retailer.

Multiple batch codes of the same use-by date* code for an SKU should be consolidated and delivered in single pallet lots.

Batch Code Example: A retailer's purchase order requests a full pallet equivalent quantity of an SKU (say 60 cartons) but a supplier can only provide this volume if they ship multiple batch codes of the same use-by date (say 40 cartons of one batch code and 20 cartons with a different batch code of the same use-by date) then the product is to be consolidated to a single pallet of 60 cartons prior to delivery to the retailer i.e. not shipped as 2 separate part pallets. Standard and existing delivery rules apply for product delivered on a single pallet with multiple batch codes.

Multiple use-by date codes for an SKU can be consolidated and delivered in single pallet lots BUT there are rules to apply.

Use-by Date Code Example: A retailer's purchase order requests a full pallet equivalent quantity of a an SKU (say 60 cartons) but a supplier can only provide this volume if they ship multiple use-by date codes (say 40 cartons with one use-by date and 20 cartons with a different use-by date) then the product is to be consolidated to a single pallet of 60 cartons prior to delivery to the retailer i.e. not shipped as 2 separate part pallets.

There are some specific rules as to how the MCP with different use-by dates must be structured, labeled and communicated which are detailed in the Standardised Framework below.



"When we order either a full or part pallet, it is with the expectation that this will consume one slot in our DC racking. When multiple pallets show up and need to be accommodated this impacts our DC processes and drives up costs. Multi-coded pallets alleviate this issue."
Lynda Heeley, Woolworths

***Note:** In this document 'Use-by Date' and 'Best Before Date' (or similar) are interchangeable.

Multi-Coded Pallets Guidelines

Potential Benefits of Multi-Coded Pallets

Benefits associated with MCPs will vary for companies dependent on their operational model and rate of utilisation but the *potential* opportunities can be summarised as:

	Financial Benefit Opportunities	Other Benefit Opportunities
Retailer	Reduction in logistics functions costs: <ul style="list-style-type: none"> • Unload/receipt • Put away • Storage • Let down • Materials 	<ul style="list-style-type: none"> • Reduce trucks on the road • On-shelf availability • Chain of Responsibility • Carbon emission reduction • Reduced write-offs and damages • Alleviate DC space constraints • Reduction in re-working/consolidating part pallets at retail DC • Improved truck turnaround times
Supplier	Reduction in logistics functions costs: <ul style="list-style-type: none"> • Storage • Picking • Wrapping • Loading • Materials • Labelling • Transport 	<ul style="list-style-type: none"> • On-shelf availability • Chain of Responsibility • Carbon emission reduction • Reduced write-offs • Reduced damages • Reduce trucks on the road • Improved truck turnaround times

Industry Benefits - Environmental and Efficiency outcomes are estimated to be:

- A reduction of over 240,000 pallets transported per annum.
- A reduction of over 10,000 truck movements per annum.

Costs and Risk Mitigation in relation to Multi-Coded Pallets

Potential costs to be considered when migrating to the use of MCPs include those associated with each of the logistics functions as noted in the previous table; costs will vary dependent on operational models employed. It will be important to review the impact on operations of migrating to MCP when considering engaging with trading partners.

For example, if a company is unable to consolidate relevant part pallets into MCPs from production or from container, then these are likely to continue to be stored as part pallets within the supplier distribution centre, and then see increased picking costs when they are required to be carton picked to consolidate into an MCP.

Multi-Coded Pallets Guidelines

In the event of a product withdrawal, and to ensure that varying date codes on a MCP are not overlooked, a methodology has been employed to assist in visual recognition of an MCP - see the section in this document regarding labeling requirements of MCPs.

Risk mitigation can require extensive action when a supplier undertakes a product recall. Coles, Woolworths and Metcash isolate all stock of the affected SKU and check the date codes on all pallets. All stock in the pick face is checked for use-by dates in relation to recalls.

GS1 Recallnet in relation to MCPs

GS1 Recallnet processes have been revised to accommodate management of MCP's in the event of product withdrawals and recalls. GS1 has supported this process revision through the provision of background information as well as specific guidance documentation which can be accessed on line through the following links:

- GS1 Website: [Downloads & User Guides | GS1 Recallnet](#) (Note: Fact sheets section)
- Recallnet Website: <https://recallnet.gs1au.org/help> (Select "Fact Sheets")
- 5 page "How to Guide": <http://www.gs1au.org/assets/documents/services/recallnet/GS1-Recallnet-Fact-Sheet-ECRA-MCP-Information.pdf>

Standardised Framework for Multi-Coded Pallets

The following sections of this guide provide information, examples and visual representation for key aspects of MCP and can be considered as a standard industry approach.

Whilst effort has been made to ensure the information remains current and accurate, it is incumbent on trading partners to confirm understanding, application and execution prior to MCP implementation.



"Multi-coded pallets help reduce the total number of pallets being received and slotted by retailers. If this helps ensure we can make timely deliveries at peak times it improves availability of our product to consumers"
Vince Vella, Simplot Australia

Multi-Coded Pallets Guidelines

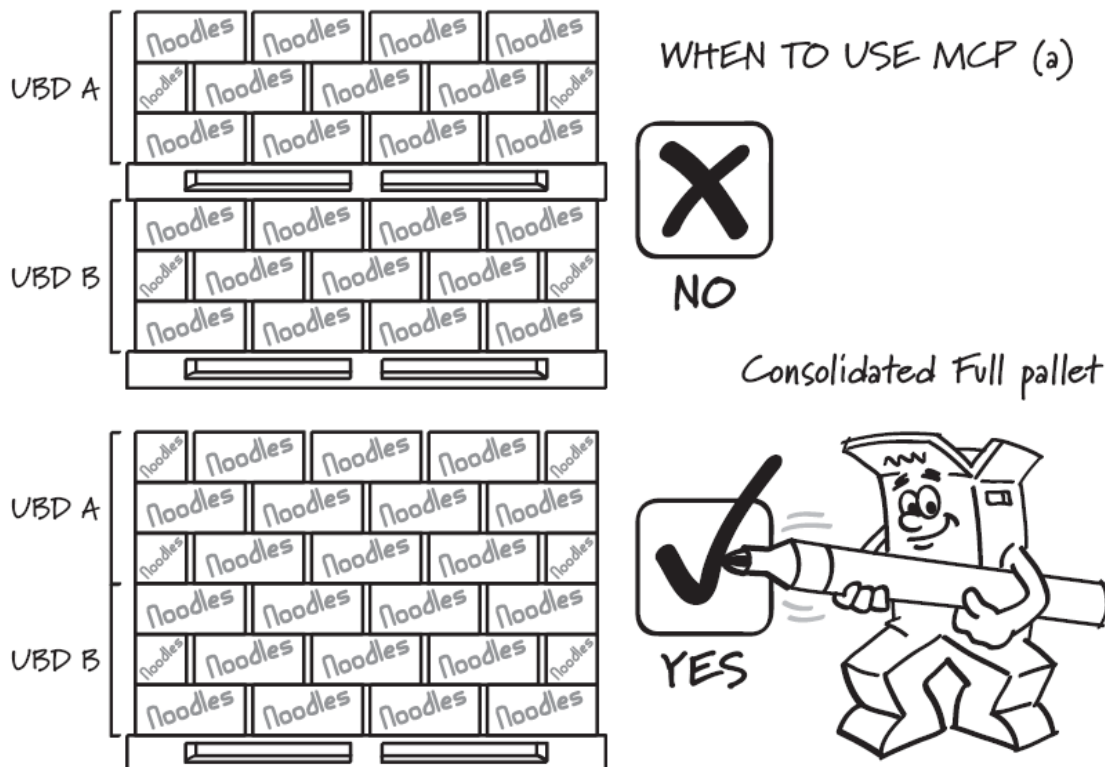
When to Utilise Multi-Coded Pallets

MCP's can be utilised whenever a retailer orders any quantity of a single SKU, but the supplier cannot (or chooses not to) supply the product from a single use-by date/batch code.

Examples:

A: Full Pallet orders

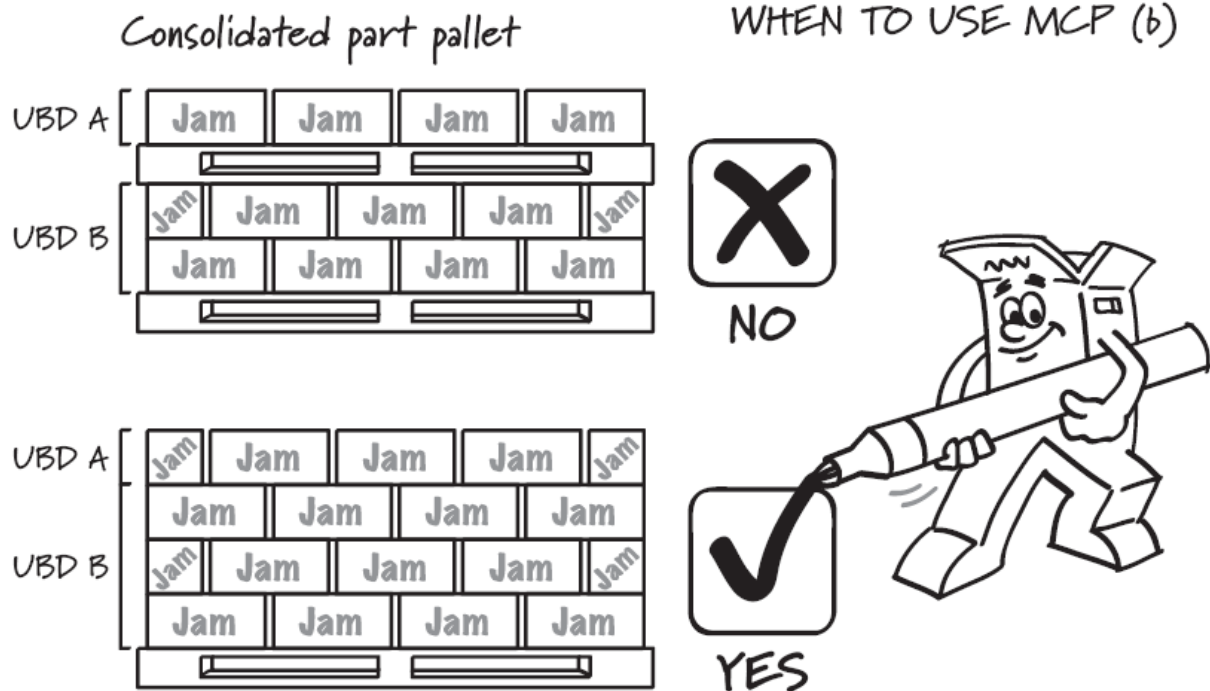
- Product comes in a standard pallet quantity of 100 cartons.
- Retailer orders 100 cartons and plans to receive a single full pallet.
- Supplier has no full pallets left in stock but can fulfill the order by combining 80 cartons with one use-by date code with 20 cartons with a different use-by date code.
- Supplier consolidates use-by dates onto a single pallet and delivers as one pallet.



B: Part Pallet orders

- Product comes in a standard pallet quantity of 100 cartons.
- Retailer orders 60 cartons and plans to receive one part pallet.
- Supplier has opportunity to fulfill the order by utilising 'butt' pallets and combining 40 cartons with one use-by date code with 20 cartons with a different use-by date code.
- Supplier consolidates use-by dates onto a single pallet and delivers as one part pallet.

Multi-Coded Pallets Guidelines



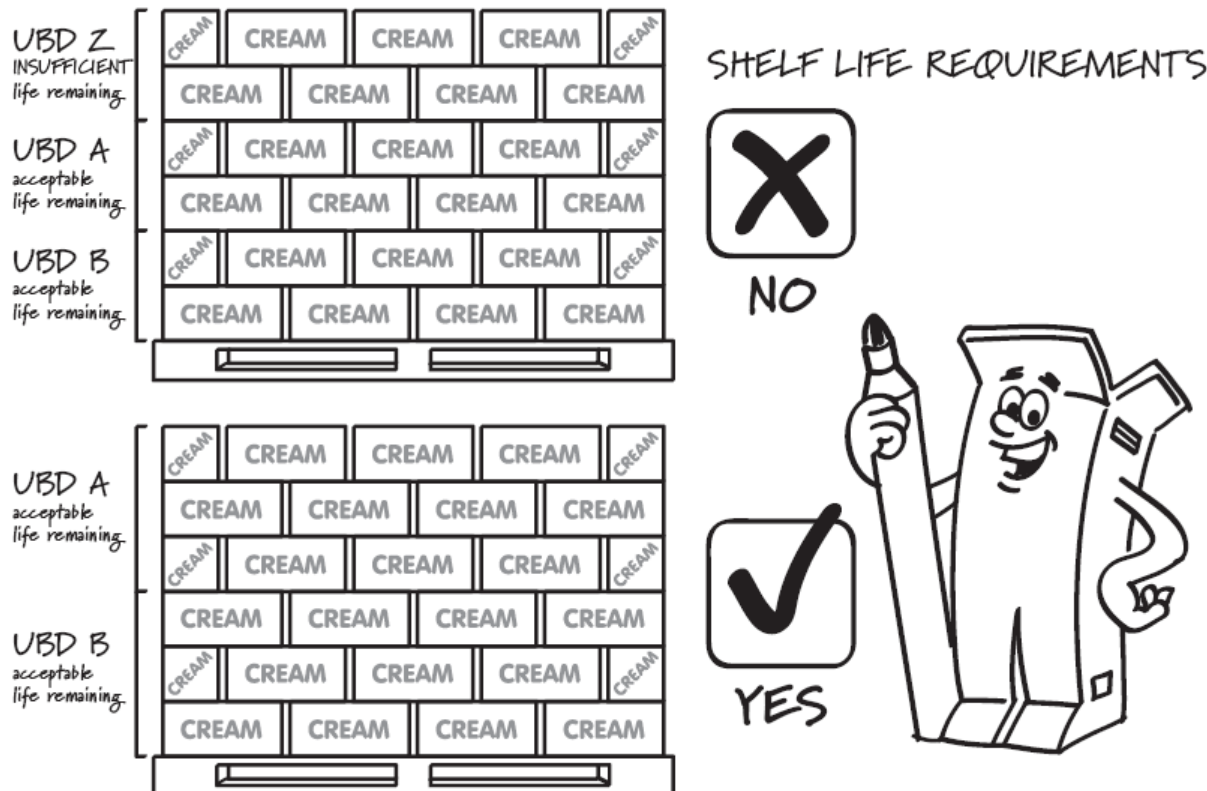
Minimum Shelf Life Requirements of Multi-Coded Pallets

All cartons of product delivered to a retailer on a MCP must meet that retailer’s minimum life on receipt (MLOR) requirements specific to the SKU.

Example:

- The supplier has an arrangement with their trading partner for a given SKU that all stock delivered will have at least 120 days shelf life remaining at time of delivery
- Retailer orders 60 cartons and plans to receive one part pallet.
- Supplier has stock available to consolidate across 3 date codes; 40 cartons are available with 130 days shelf life remaining, 20 cartons are available with 125 days shelf life remaining, and 30 cartons are available with 110 days shelf life remaining.
- Supplier must consolidate the 40 cartons with 130 days shelf life remaining plus the 20 cartons with 125 days shelf life remaining onto the MCP and deliver as one part pallet.
- The stock with 110 days shelf life remaining cannot be used as it does not meet MLOR.

Multi-Coded Pallets Guidelines



NOTES:

1. Products with short shelf life (eg. chilled products):

A supplier with short shelf life products must discuss with their trading partner any specific shelf life requirements prior to entering into an arrangement to deliver MCPs.

2. Products being delivered to retailers out of use-by date code sequence:

A supplier delivering product on a MCP out of use-by date code sequence with previous deliveries should, in advance of the delivery, make the necessary provisions with the retailer, as per existing delivery protocols.



"We are always supportive of a standard approach to supply chain processes when it makes sense for both our business and the industry in general - MCP standards are an example of an opportunity to drive consistency in our industry"
Michael Haire, Metcash

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Structural Requirements of Multi-Coded Pallets

Product delivered to a retailer on a MCP must be stacked according to the product's remaining shelf life. The product with the most shelf life remaining must be stacked at the bottom of the pallet, product with the least remaining shelf life stacked at the top of the pallet. Product should be stacked progressively to facilitate appropriate picking sequence in the retailers distribution centre.

Example:

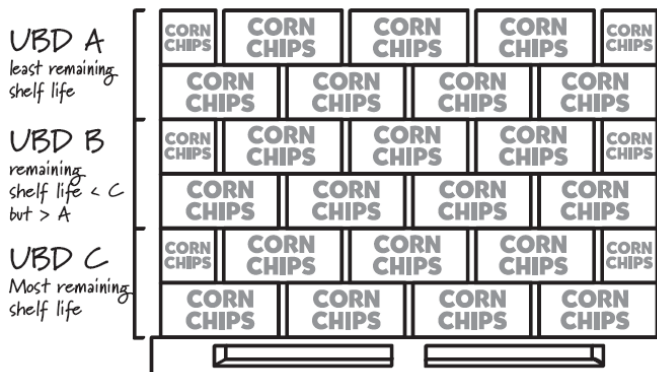
- Product comes in a standard pallet quantity of 100 cartons.
- The supplier has an arrangement with the retailer for a given SKU that all stock delivered will have at least 120 days shelf life remaining at time of delivery.
- Retailer orders 100 cartons and plans to receive a single full pallet.
- Supplier has stock available to consolidate onto a MPC across 3 date codes - 60 cartons are available with 150 days shelf life remaining, 20 cartons are available with 140 days shelf life remaining, and 20 cartons are available with 130 days shelf life remaining.
- Supplier consolidates stock onto a single pallet with 60 cartons of the 150 days shelf life remaining at the bottom of the pallet, then the 20 cartons with 140 days shelf life remaining in the midsection of the pallet, and finally the 20 cartons with 130 days shelf life remaining are placed at the top of the pallet.



STRUCTURAL REQUIREMENTS



NO



YES



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Labeling Requirements of Multi-Coded Pallets

SSCC Labels:

No additional serial shipping container code (SSCC) labels are required/allowed when delivering a MCP. Two (only) SSCC labels are to be affixed the same as for any other regular full or part pallet delivered to the retailer - i.e. one SSCC label on each forklift entry side.

The use-by date code field in the SSCC label must contain (only) the date appropriate to the first to expire use-by date code product on the MCP i.e. the oldest product which has been placed at the top of the pallet when picked as per the previous section of these guidelines. The quantity field is to reflect total cartons on the pallet - i.e. number of cartons of all use-by dates combined.

Example:

- A Supplier picks 100 cartons of stock onto a single pallet; 60 cartons with 150 days shelf life remaining picked first at the bottom of the pallet, then 20 cartons with 140 days shelf life remaining in the midsection of the pallet, and 20 cartons with 130 days shelf life remaining are placed at the top of the pallet.
- The SSCC label is to reflect (only) the use-by date for the product with 130 days shelf life remaining but the total volume of cartons (here 100) on the pallet.

LABELLING REQUIREMENTS

Separate SSCC labels must not be applied for each use-by date on the pallet

X

NO

SSCC label shows use-by date for the oldest product (first to expire) only, but quantity for total cases on pallet

SSCC labels to be placed on the two sides of the pallet where forklift tynes enter pallet

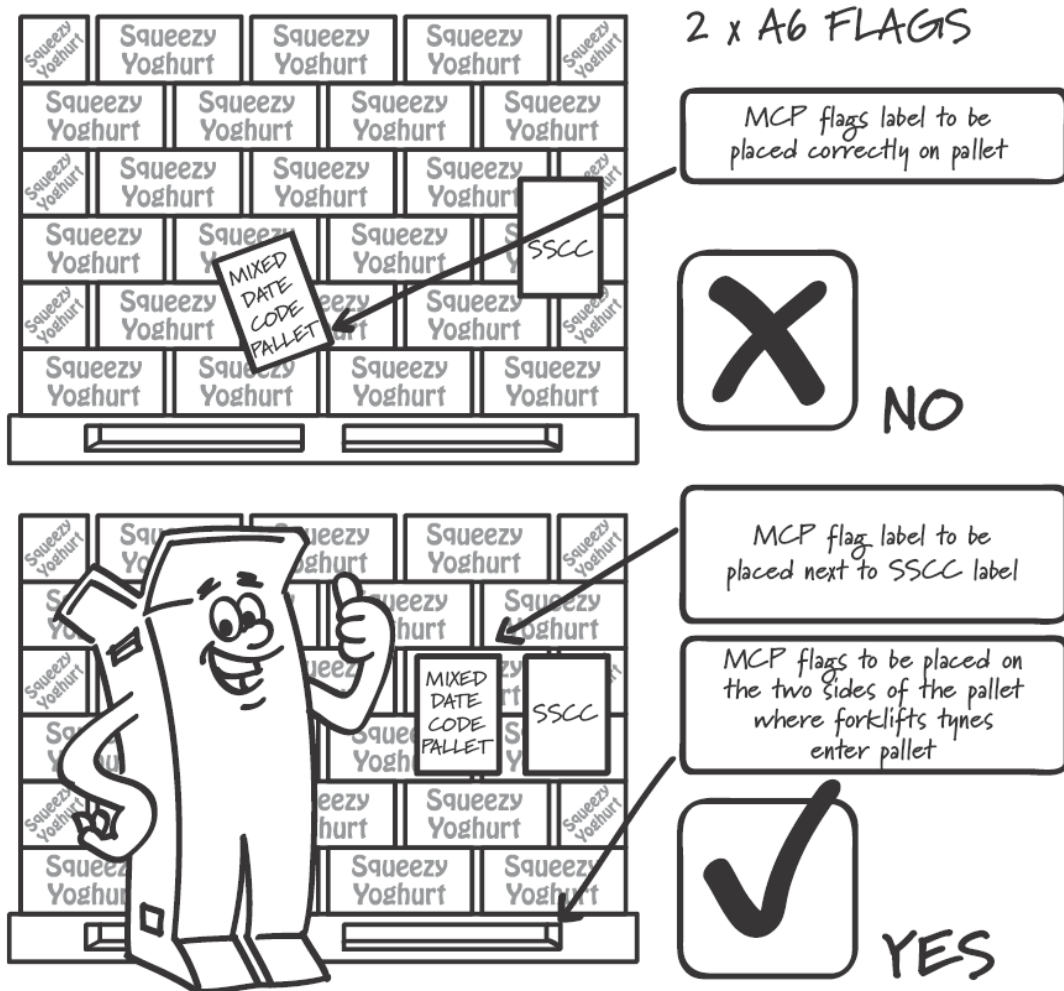
✓

YES

Multi-Coded Pallets Guidelines

Additional Labeling Requirements for MCPs

To provide added surety in the event of a product recall or withdrawal, additional MCP Flag stickers are to be attached outside the pallet wrap next to SSCC label with one MCP Flag to be attached on each forklift entry side (i.e. 2 MCP Flags in total per pallet). The MCP Flag stickers should be A6 sized (the same as an SSCC label) or similar and state the text: "Mixed Date Code Pallet".



"Multi Coded Pallets present businesses with an opportunity to remove waste along the supply chain and positively impact the environment through reduced truck movements and better use of space"
Mandeep Sodhi, Nestlé Australia

ASN Requirements of Multi-Coded Pallets

The ASN (Despatch Advice) e-commerce message caters for multiple batch and/or use-by date codes, however the industry had previously agreed that batch numbers weren't mandatory for the ASN message, and for multiple use-by dates that only the shortest use-by date (least remaining life/first to expire) should be reflected in the ASN message.

ASNs for Multi-Coded Pallets

The critical factor for supplying ASNs to retailers for MCP's is that the retailer is able to read the ASN at an aggregated header level which tells the retailer's system the total number of cartons on the pallet (i.e. across all use-by dates combined) and associates this total quantity of cartons to the oldest use-by date on the pallet. In effect this provides the same detail as that applied in the SSCC label.

Retailer Receipt of Multi-Coded Pallets

All cartons of stock delivered on MCPs are captured into the retailer's system (across item number, volume received and use-by date) utilising the use-by date of the oldest stock delivered i.e. shortest remaining shelf life.

Example:

- A supplier consolidates 100 cartons onto a single pallet; 60 cartons with 150 days shelf life remaining picked first at the bottom of the pallet, then 20 cartons with 140 days shelf life remaining in the midsection of the pallet, and 20 cartons with 130 days shelf life remaining placed at the top of the pallet.
- SSCC label is to reflect (only) the use-by date for the product with 130 days shelf life remaining but the total volume of cartons (here 100) on the pallet.
- Retailer will receipt the 100 cartons of stock into their warehouse management system against the use-by date of the product with 130 days shelf life remaining (i.e. that shown on the SSCC).

Multi-Coded Pallets Guidelines

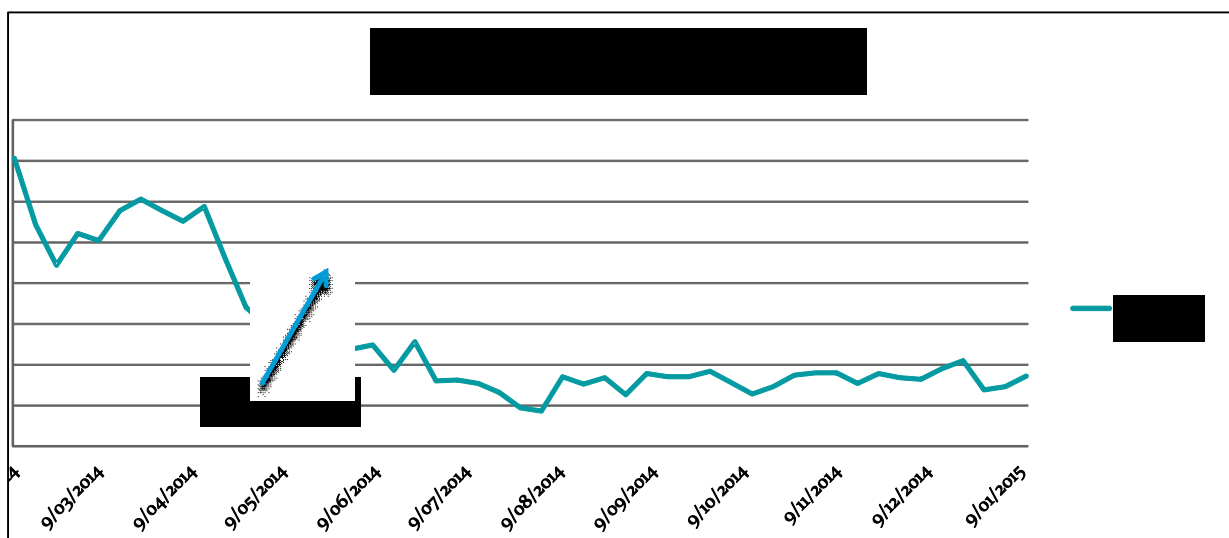
MCP Implementation Case Study: Woolworths and Primo

Woolworths and Primo Smallgoods were aware that the need to provide only a single use-by date code on each pallet shipped from Primo to Woolworths was leading to a situation whereby Primo were delivering a large number of part pallets to Woolworths as it needed to meet internal processes to dispatch stock in date code sequence. This caused significant inefficiencies for both parties as Primo could not optimize truck-fill and Woolworths needed receipt more pallets and find more storage space for these part pallets.

In June 2014 Woolworths and Primo worked together to address the issue through the delivery of multi-coded pallets (MCP) by utilising the ECRA MCP Guidelines as a basis for the program and working together to implement some specific requirements of their businesses through pilot trials and monitoring of stock movements through the supply chain to stores.

Since the implementation pleasing results have been achieved in a reduction of part pallet (and therefore total pallet) movements through the supply chain as can be seen in the following chart. Additionally Woolworths internal studies have shown no negative impacts on levels of dump stock from expiry date or rotation issues at DCs or on satisfaction levels from stores – a great result!

Whilst recognising that MCP may not be a viable solution in all business cases, Woolworths is very much open to discussion with other suppliers who are interested in the opportunities presented.



Key Retailer Contacts and Support for MCP Implementation

Retailer/Wholesaler first contact points for supplier companies wishing to find out more about opportunities to utilise MCP and the associated requirements are:

Coles:

Email: logisticscompliance@coles.com.au

Woolworths:

Email: vendorcapability@woolworths.com.au

Phone: (02) 8885 3361

Metcash:

Email: eBusiness@metcash.com

Phone: 1800 991 097

Reference Materials

The following retailer documents may assist suppliers seeking to engage in utilising MCP:

Coles:

Dedicated supply chain section:

www.supplierportal.coles.com.au

Woolworths:

Packaging and bar code specifications:

<http://www.wowlink.com.au/TopicCentre/SupplyChain/PackagingBarcodes/Specifications>

Metcash:

Packaging, Barcode & Logistics Specifications:

www.metcash.com/supplierinformation/logistics/supplierinformation

Efficient Consumer Response Australasia (ECRA)

Efficient Consumer Response (ECR) is a business concept aimed at better satisfying consumer needs, through businesses and trading partners working together. ECR Australasia (ECRA) reflects a commitment to take costs out of the food and grocery supply chain and better satisfy consumer demands through the adoption of world's best practice.

In an increasingly global food and grocery industry and a retail environment subject to rapid change, the future for Australian and New Zealand suppliers, retailers and wholesalers depends on increased efficiencies, reduced costs and added value for consumers. ECRA focuses on delivering against a robust work plan that includes the key platform of order to receipt excellence, on-shelf availability and supply chain optimisation.

Formally launched in November 1999 and fully supported by the Australian Food and Grocery Council (AFGC), ECRA is an informally constituted joint industry body which brings suppliers, manufacturers, retailers and wholesalers together.

For further information contact:

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