Informal meeting on Code of Practice for Packing of Cargo Transport Units

at the request of the United Nations Economic Commission for Europe Working Party on Intermodal Transport and Logistics

Geneva and virtual, 29-30 March 2023

Prevention of pest contamination of containers: Joint Industry Guidelines for Cleaning of Containers

Submitted by World Shipping Council

Background

The Bureau International des Containers (BIC), the Container Owners Association (COA), the Institute of International Container Lessors (IICL) and World Shipping Council (WSC) have launched an updated version of the Joint Industry Guidelines for the Cleaning of Containers.

The original version of the *Guidelines*, published in 2017, was well received by regulators and industry, and has become a valued source of guidance when it comes to preventing pest contamination. Since then, we have learned more about the transfer of pests, our climate conditions have changed, and trade has grown, and so a decision has been taken to update them.

This document provides the update guidelines for information.

World Shipping Council

BIC

Container Owners Association

IICL

Prevention of Pest Contamination of Containers: Joint Industry Guidelines for Cleaning of Containers

March 2023

Prevention of pest contamination of containers: Joint Industry Guidelines for Cleaning of Containers

Jointly prepared by:

The Bureau International des Containers (BIC) was founded in 1933 under the auspices of the ICC as a neutral, non-profit, international organization. BIC seeks to promote efficiency, safety, security, standardization and sustainability in the container supply chain. Publisher of the BIC Code Register since 1970, BIC also operates other industry databases, including the BoxTech Global Container Database (bic-boxtech.org), the BIC Facility Code Database, and the Global ACEP Database. BIC holds official observer status at IMO, WCO, and UN/CEFACT. BIC participated in developing the CTU Code.

More information is available at: www.bic-code.org

CONTAINER OWNERS ASSOCIATION

The Container Owners Association is the international organisation representing the common interests of all owners of freight containers. The principle aims of the COA are to provide global expertise, to promote common standards and to facilitate international lobbying.

More information is available at: www.containerownersassociation.com

The Institute of International Container Lessors (IICL) is the leading trade association of the container and chassis leasing industry. The IICL's membership engages in leasing marine cargo containers and chassis to vessel operators and other organizations on a broad international basis. Members own or manage a significant portion of the global leased container and U.S. chassis fleets.

More information is available at: www.iicl.org

World Shipping Council

The World Shipping Council (WSC) is the united voice of liner shipping, the international container and vehicle carriers that make global trade possible. We work with policymakers and industry groups to shape the future growth of a socially responsible, environmentally sustainable, safe, and secure shipping industry. We are a non-profit trade association with offices in London, Brussels, Singapore and Washington, D.C. The WSC has observer status with the IMO and the WCO and was actively involved in the development of the CTU Code. WSC has for the past several years also been actively involved in efforts to minimize pest risks in the sea container pathway at the IPPC; it is also a member of the North American Sea Container Initiative (NASCI).

More information is available at: www.worldshipping.org

Introduction

There is international consensus among competent authorities that containers and their cargoes can carry and facilitate the introduction and spread of pests that may pose a serious risk to agriculture, forestry, and natural resources. The packing of sea containers with cargo is the most likely stage in the sea container supply chain at which pest contamination can occur. Shippers and packers, acting on behalf of shippers, should implement measures to minimise pest contamination during packing. Others in the international container supply chains should also implement measures to reduce the risk of pest contamination while the container is in their control.

These measures, referred to as best practices, should be in accordance with the parties' roles and responsibilities in the supply chains and should take into consideration all safety and operational constraints.[1]

Minimizing pest contamination of containers and their cargoes is a shared responsibility and by applying best practices described in this Guide these parties can keep containers and their cargoes clean. This will help to prevent the introduction and spread of pests through international commerce. Containers are also likely to move through ports and reach their final destinations faster and with less expense if they are clean.

These guidelines are complementary to the guidance given in various guidelines published by the IPPC and in the IMO/ILO/UNECE Code of Practice for Packing Cargo Transport Units ("CTU Code") regarding prevention of pest contamination of containers.[2]

Chapter 4 of the CTU code, "Chains of Responsibility and Information" states in para.4.1.4:
"All persons involved in the movement of CTUs also have a duty to ensure, in accordance with their roles and responsibilities in the supply chain, that the CTU is not infested with plants, plant products, insects or other animals…".

The purpose of this document is to provide guidance on how this may be achieved by the various container custodians in the supply chain for those containers that are in their direct control.

These guidelines are not intended to replace individual container operators' cleaning guidelines. Nor do they replace applicable local regulatory pest contamination measures and requirements.

Finally, these guidelines are additional to industry guidelines regarding container cleanliness for non-pest contamination such as paint, oil etc.; such non-pest contaminations fall outside the scope of this document.

[1] *Sea container supply chains and cleanliness, IPPC, March 2020. (https://www.fao.org/documents/card/en/c/ca7963en)*
[2] *The CTU Code can be accessed at: (https://www.imo.org/en/OurWork/Safety/Pages/CTU-Code.aspx)*

Interchange Events and Custodial Responsibilities

The following tables* identify the various points of change of custody ("interchange events") of a container in the supply chain and responsibility for measures that, in accordance with the guidance from the IPPC and in the CTU Code are required to minimise visible pest contamination.

In conformance with the CTU Code, "pest contamination" means visible forms of animals, insects or other invertebrates (alive or dead, in any lifecycle stage, including egg casings or rafts), or any organic material of animal origin (including blood, bones, hair, flesh, secretions, excretions); viable or non-viable plants or plant products (including fruit, seeds, leaves, twigs, roots, bark, intact or broken wood packing material, including dunnage); or other organic material, including fungi; or soil, or water; where such products are not the manifested cargo within the container.

Note: The tables are without prejudice to existing local requirements at either the export, import, packing and/or unpacking locations

Custodial Responsibilities* for Pest Prevention – a Schematic Description

	EXPORT								
	Empty Release								
	Depot	Terminal	Rail Yard	Pack Point		Depot	Rail Yard	Terminal	Loading on Vessel
Carrier Haulage[3]									
Interchange event	Empty Gate-out	Empty Gate-out	Empty Gate-out	Empty IN	Full OUT	Full Gate-in	Full Gate-In	Full Gate-In	Full Loading
Custodial responsibility	Carrier's Haulier	Carrier's Haulier	Carrier's Haulier	Shipper & Packer	Carrier's Haulier	Depot Operator	Yard Operator	Terminal Operator	Terminal Operator
Merchant Haulage[4]									
Interchange event	Empty Gate-out	Empty Gate-out	Empty Gate-out	Empty IN	Full OUT	Full Gate-in	Full Gate-In	Full Gate-In	Full Loading
Custodial responsibility	Shipper's Haulier	Shipper's Haulier	Shipper's Haulier	Shipper & Packer	Shipper's Haulier	Depot Operator	Yard Operator	Terminal Operator	Terminal Operator

	IMPORT								
							Empty Return/Position		
	Discharge from Vessel	Terminal	Depot	Rail Yard	Unpack Location		Terminal	Depot	Rail Yard
Carrier Haulage									
Interchange event	Full Discharge	Full Gate-out	Full Gate-out	Full Gate-out	Full IN	Empty OUT	Empty Gate-In	Empty Gate-In	Empty Gate-in
Custodial responsibility	Terminal	Carrier Haulier	Carrier Haulier	Carrier Haulier	Client	Carrier Haulier	Terminal Operator	Depot Operator	Yard Operator
Merchant Haulage									
Interchange event	Full Discharge	Full Gate-out	Full Gate-out	Full Gate-out	Full IN	Empty OUT	Empty Gate-In	Empty Gate-In	Empty Gate-in
Custodial responsibility	Terminal	Client's Haulier	Client's Haulier	Client's Haulier	Client	Client	Terminal Operator	Depot Operator	Yard Operator

It is the responsibility of every container custodian in the supply chain to ensure that a container is clean and free from visible pests at every point of interchange above. It is also the responsibility of the receiving container custodian to determine whether the previous custodian has met their responsibility and hold them accountable in case this has not been done.

[3] *Carrier Haulage is when the container transport is organized by the ocean carrier.*
[4] *Merchant Haulage is when the merchant, which may be the cargo owner, consignor or shipper, arranges the container transport through their appointed service providers (e.g. trucking company)*
* *Table shows the new custodial responsibility triggered by the indicated preceding Interchange event.*

Inspections and Actions by Container Custodians

The IPPC has published guidance to national plant protection organizations (NPPOs) on how to inspect and record contamination details in a safe, consistent, and harmonized manner when carrying out sea container cleanliness surveys.[5] Container custodians should consult the IPPC's inspection guidance when planning for and undertaking container inspections.

The table below describes inspection and other measures that container custodians should undertake to minimize pest risks in the sea container pathway:

Where	Interchange event	Inspection	Responsible party	Responsibility / Action
Container depot/Rail Yard	Gate In EMPTY	Structural deficiencies, internal cleanliness, visible[6] pest contamination on the exterior and interior of the container	Depot (for container operator) Haulier	Acceptance of pest-free container Handover of pest-free container to depot
Container depot/Rail Yard	Gate Out EMPTY	Internal cleanliness, overall condition, suitability for cargo, visible pest contamination on the exterior and interior of the container	Depot (for container operator)	Handover of clean, pest-free container only to haulier
Container depot/Rail Yard	Pick up EMPTY for transport to Pack location	Container Number, obvious defects, visible interior, or exterior pest contamination	Haulier	Acceptance of clean, pest-free container only
Pack point	Receipt for packing	Internal cleanliness, overall condition, suitability for cargo, visible pest contamination on the exterior and interior of the container and of the goods to be packed into the container	Shipper or Packer on behalf of shipper	Acceptance of clean, pest free container only, prevent contamination
Pack point	Pick up for transport to Terminal	Container Number, Seal number, obvious major defects, exterior pest contamination	Haulier	Acceptance of pest-free container only
Export Terminal	Gate In	Container Number, Seal number, obvious major defects[7], obvious exterior pest contamination[8]	Terminal	Acceptance of pest-free container only; report presence of pest to container operator, or reject per local protocol

[5] https://www.ippc.int/en/publications/90644/

[6] *"Visible" means detectable by the human eye without the aid of any supporting instruments or aids such as magnifying glasses and microscopes. This applies to both the exterior and interior of the container; however, as discussed, it may not be possible to inspect the roof and undercarriage of the container for visible trace soil and other pest contamination.*

[7] *Exception - Automated gates*

[8] *Obvious external contamination. Automated gates present particular challenges.*

Where	Interchange event	Inspection	Responsible party	Responsibility
Export Terminal	Load on vessel	Container Number, obvious major defect[9], obvious exterior pest contamination[10]	Terminal	Load only pest-free containers, Report presence of pests to container operator and/or to responsible authority as required
Transhipment Terminal	Unload/Load to/from vessel	Container Number, obvious major defect[11], obvious exterior pest contamination[12], seal number	Terminal	Report presence of pests to container operator and/or to responsible authority as required
Import Terminal	Unload from vessel	Container Number, obvious major defect[13], obvious exterior pest contamination[14]	Terminal	Report presence of pests to container operator and/or to responsible authority as required
Import Terminal	Pick up for transport to Unpack location	Container Number, Seal number, obvious major defects, exterior pest contamination	Haulier	Accept pest-free container only, or reject container
Unpack location	Receipt for unpacking	Container Number, Seal number, obvious defects, visible pest contamination on the exterior and interior of the container and of the goods being unpacked from the container	Consignee	Accept pest-free container only, report cargo pest contamination to responsible authority as required; prevent contamination
Unpack location	Prior to return	Internal cleanliness (contractual obligation), visible pest contamination on the exterior and interior of the container	Consignee	Ensure clean, pest-free container; prevent contamination

Note: By accepting the container, the new custodian accepts that the previous custodian has met his responsibilities especially in terms of pest contamination.

[9] *Exception – Automated Terminals*

[10] *Obvious external contamination. Automated Terminals present particular challenges*

[11] *Exception – Automated Terminals*

[12] *Obvious external contamination. Automated Terminals present particular challenges*

[13] *Exception – Automated Terminals*

[14] *Obvious external contamination. Automated Terminals present particular challenges*

Custodial Responsibilities for Pest Prevention - EMPTIES	
Container Terminals	
Empties for loading on Vessels	**Empties discharged from Vessels**
While containers are waiting to be loaded, the measures described in the IPPC guidelines[15] and further detailed in Annex 6 of the CTU Code «Minimizing the risk of recontamination» should apply, based on the principle «gated in clean, stay clean».	After being discharged and while containers are waiting to be released to hauliers, the measures described in the IPPC guidelines and further detailed in Annex 6 of the CTU Code «Minimizing the risk of recontamination» should apply.
Depots & Rail Yards	
Empties for release for packing	Empty returns/Empty positioning
For Clean containers waiting to be released to hauliers, the measures described in the IPPC guidelines and further detailed in Annex 6 of the CTU Code «Minimizing the risk of recontamination» should apply.	Containers should be inspected for visible pest contamination and cleaned of any contamination on receipt and before repair and cleaning/preparation for cargo.

Inspection by terminal operators will necessarily be limited to obvious defects and pest contamination of the exterior and the understructure ("undercarriage").

Such inspection should be done on a best efforts basis. Visual inspection of the exterior and/or understructure of the container may not be possible due to safety requirements or other operational constraints.

Similarly, and due to safety concerns regarding working at heights, container depots typically cannot inspect the roofs of containers for visible pest contaminations.

Prior to inspection by terminals and container depots, the IPPC's inspection guidance should be consulted.

[15] *See footnote 1*

Container Cleanliness

The CTU Code provides that any empty container used for the carriage of dry, special or reefer cargo should, when dispatched from a container depot under the control of the shipping company, be “clean”.

For the purpose of these guidelines, “clean” means that the empty container’s exterior and interior[16] and, for reefer containers, also ventilation inlet grilles and floor drain holes, should, at the time of dispatch, have no visible presence of any of the following:

- Soil
- Plants/plant products/plant debris
- Seeds
- Moths, Wasps, Bees
- Snails, Slugs, Ants, Spiders
- Mould and Fungi
- Frass (insect and bird droppings or waste)
- Egg sacs
- Animals, animal parts/ blood/excreta and reproductive components or parts thereof
- Other contamination that shows visible signs of harbouring pests.

[16] *It is imperative that no attempt is made to enter a container until any unknown residue has been identified and the appropriate safety precautions have been taken.*

Cleaning methods for visible pest contamination

This section contains recommendations on cleaning methods for visible pest contamination. In cases of doubt about how to proceed, the local National Plant Protection Office (NPPO) or, if animal origin contamination, the local Quarantine Office should be contacted for guidance.

Proper consideration should be given to disposal of pest contamination residues to minimize the potential for pests to flourish.

Seeds and Plant parts

Sweep up or vacuum ensuring that all residues collected are sealed in an airtight bag and stored for disposal. Dispose of bags based on advice from the local NPPO or plant quarantine organisation.

Insects, Egg masses and Nests

Minimize risks of escape of live insects. Incapacitate live insects, larvae or pupae using an insecticide spray, fumigation or other means as advised by the local NPPO. All egg masses, nests etc. should be sealed and all inhabitants be rendered incapable of escape and/or incapacitated.

Sweep, vacuum or scrape up ensuring that all residues collected are sealed in an airtight bag and stored for disposal. Dispose of bags based on advice from the local NPPO or plant quarantine organisation.

Soil, Dirt, Mud

When and where deemed safe, remove soil, dirt, or mud on the exterior and interior by scraping, sweeping, or washing. Remove the material from the top down to avoid recontaminating an area already cleaned.

If scraping and/or sweeping is used the residues should be collected and sealed in a bag for future disposal. Dispose of bags based on advice from the local NPPO or quarantine office.

Soil, dirt, or mud removed by washing may, pursuant to local environmental regulations, be allowed to drain away with the wash water, subject to any requirements that wash water residues are appropriately treated to prevent that pests escape to the local environment.

Soil, dirt, or mud on the exterior that can be clearly identified as having come from the depot location, where the cleaning is carried out, may be disposed of in accordance with existing practices for general cleaning residues.

Live animals, snakes, birds etc.

Minimize risks of escape of all live animals and isolate them, if possible, preferably in the container. For rats, mice and other vermin, the services of a Pest Removal company should be considered. For exotic species or domestic animals consult the agency responsible for capture or dealing with such matters e.g., Quarantine Authority, Zoo, or a veterinarian etc. for further action.

Minimize risk of escape of birds found associated with container unless the bird species have been identified as native to the location. Consult the agency responsible for capture or dealing with such matters e.g., Quarantine Authority, Zoo, or a veterinarian etc. for further action.

Minimize risk of escape of all snakes found associated and isolate them, if possible. Even if the species is clearly identified as native to the location they should not be released in, or remotely near, the depot. Consult the agency responsible for capture or dealing with such matters e.g., Quarantine Authority, Zoo, or a veterinarian etc. for further action.

Animal disease risk from livestock and birds should be mitigated by using appropriate disinfectants after cleaning the container to deactivate any remaining disease agents. Consult the local Quarantine authority for recommendations for appropriate disinfectants. The disinfectants used should not contain phenols or strong perfumes as these may give rise to taint problems with future food cargoes.

Treatments and risk management[17]

Under certain circumstances, treatments may be necessary to neutralize contamination. NPPOs or other authorities may have requirements and guidance in place on the use of treatments.

Recipients of sea containers and their cargoes that have moved internationally are encouraged to seek guidance on appropriate risk management actions and disposal of contamination, including wash water, from their respective National Plant Protection Organization if contamination is detected on or in imported containers, including empty containers.

# # #

[17] *SEE DRAFT REVISION OF CPM RECOMMENDATION ON MINIMIZING PEST RISK ASSOCIATED WITH SEA CONTAINER PATHWAY (HTTPS://WWW.IPPC.INT/EN/CORE-ACTIVITIES/GOVERNANCE/CPM/CPM-17/).*

If you want to contact our offices, please go to: worldshipping.org/contact-us
Or email us directly via: info@worldshipping.org

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