



CTPAT™

YOUR SUPPLY CHAIN'S STRONGEST LINK.

Agricultural Security



U.S. Customs and
Border Protection

Subjects

- Importance of the New Category
- New Category Focus
- Wood Packaging Materials (WPM) Regulations
- What can be done to remove contaminants?



Agricultural Security



Agriculture is the largest business sector



Contaminants are found in all types of transportation

(All forms/types of cargo-352 pests discovered daily by CBP)



Pollutants harbor pests and diseases



Threatening the agro-industry



We know it ... and so do the terrorists



Objective - Destroy our Economic Viability

New category

Invasive species cause more than \$138 billion annually in economic and environmental losses. Removing contaminants from transportation and cargo can reduce stops, delays, and returns and treatments of the merchandise.



Bioterrorism (intentional)

- Bioterrorism is a threat not only to our **health and safety, but also to the economic security of the US.**
- Effective September 11, 2011, Congress passed the Public Health Security and Bioterrorism Preparedness and Response Act of 2002 (“The Bioterrorism Act”), which specifies **protecting the safety and security of the food and drug supply** as one of five titles.
- A 2012 FBI report emphasized that **terrorists believe that agriculture and food production can be targeted.** In particular, the food supply is among the most vulnerable and least protected targets.
- A terrorist attack on the food and agricultural industries would likely involve contamination of these resources. To mitigate this threat, the government and private sector must improve collaboration on resources, expertise, and initiatives to achieve shared safety and emergency preparedness goals.








Contamination (incidental)

- Like bioterrorism, contamination poses a threat to our **health and safety as well as to the economic security of the US.**
- Agriculture is the largest industry and employment sector in the US, and one of the main **risks to its success are contaminants and non-native pests.**
- Contaminants such as soil, manure, seeds, plant and animal material can harbor invasive pests and diseases. Invasive species **have caused economic and environmental losses of more than \$138 billion annually in the US.**
- **Contamination of the mode of transport is found in all routes of entry:** sea, air, land and rail; Furthermore, contaminants are found in regulated agricultural products and cargo in general, not just perishable agricultural products. **By eliminating contaminants, stoppages and delays in loading and transportation, and product rejections or treatments are reduced.**

Agricultural Security

Insects and Snails	Plants and Seeds	Garbage and organic matter
 <p data-bbox="402 611 496 639">Snails</p>	 <p data-bbox="975 611 1080 639">Weeds</p>	 <p data-bbox="1544 611 1658 639">Manure</p>
 <p data-bbox="341 846 563 875">Grasshoppers</p>	 <p data-bbox="932 846 1118 875">Spilled seed</p>	 <p data-bbox="1505 846 1717 875">Animal blood</p>
 <p data-bbox="364 1079 555 1108">Egg masses</p>	 <p data-bbox="932 1079 1118 1108">Weed seeds</p>	 <p data-bbox="1582 1079 1640 1108">Soil</p>
 <p data-bbox="341 1318 563 1346">Khapra beetle</p>	 <p data-bbox="932 1318 1118 1346">Cotton seed</p>	 <p data-bbox="1544 1318 1679 1346">Garbage</p>

Agricultural Security

		What is that?	What is the risk?
Insects and their eggs		Visible organisms, insects, especially Egyptian moths or other invertebrates (dead or alive, at any stage, including eggshells and molt)	<ul style="list-style-type: none"> • May cause shipping damage • May infest local vegetation • May harbor illnesses harmful to local people
Plant products and seeds		Viable or non-viable plants or plant products (including fruits, seeds, leaves, twigs, roots, or bark)	<ul style="list-style-type: none"> • May carry plant pathogens and/or insect infestations • Many of the non-native weed seeds are considered federally harmful in the US.
Soil		Organic material, including fungi or soil	<ul style="list-style-type: none"> • Can host insects and weed seeds • Can harbor nematodes, which can be harmful for plants and are very difficult to eradicate • Soil is a carrier of animal diseases
Snails		Visible organisms (alive or dead, at any stage, including shell remains)	<ul style="list-style-type: none"> • Many snails are destructive agricultural pests • Snails are very difficult to eradicate once established • Snails are carriers of diseases that affect humans and animals
Trash and organic material		Organic material of animal origin (including blood, bones, hair, meat, secretions or excretions)	<ul style="list-style-type: none"> • Can harbor and spread non-native diseases that affect animals • May contain prohibited infested vegetable material

New Category: Removing contaminants from the supply chain helps decrease withholding of cargo by CBP, delays in cargo arrival at its destination, and the need to re-export or treat (fumigate) merchandise.

MSC Section 8 - 1 Single Criterion - Focus

Other requirements related to agricultural safety in other criteria categories.

8.1 - Written procedures to prevent pest contamination, including compliance with wood packaging materials (WPM) regulations.

- All pest contamination
- IMO Definition of pest contamination: Visible
- Emphasis on Wood Packaging

Agricultural Security



Definition of Pest Contamination - International Maritime Organization

Pest contamination is defined as **visible** animals, insects or other invertebrates (alive or dead, at any stage of the biological cycle, including egg shells) or any organic or animal material (including blood, bones, hair, tissue, secretions, excretions); viable or non-viable plants or plant products (including fruits, seeds, leaves, branches, root, bark); or other organic material, including fungi; or soil, or water; where such products are not part of the manifested cargo within international traffic instruments (e.g., containers, unit load devices, etc.)

Visible = Specialized equipment not required to perform the inspection.

Agricultural Security



Definition of Wood Packaging Materials:

Wood or wood products (excluding paper products) used to hold, protect or transport a product (including dunnage).

Agricultural Security

Examples of wooden packaging materials:



Bars
Boxes
Crates
Containers
Reels
Wooden Crates

Cages
Brackets
Planks
Drums
Pallets



Agricultural Security



Wooden packaging material does not include:

- ✓ Packaging made entirely of thin wood (6mm thick or less).
- ✓ Packaging made entirely of processed wood material, such as plywood, particle board, oriented strand board, or veneer sheets that have been created using glue, heat or pressure, or a combination thereof.
- ✓ Sawdust, shavings and wood wool

Agricultural Security



Wood Packaging Materials- IPPC - ISPM 15 (NIMF 15) and 7 CFR 319.40

Meet the International Plant Protection Convention's (IPPC) International Standards for Phytosanitary Measures No.15 (ISPM 15) .

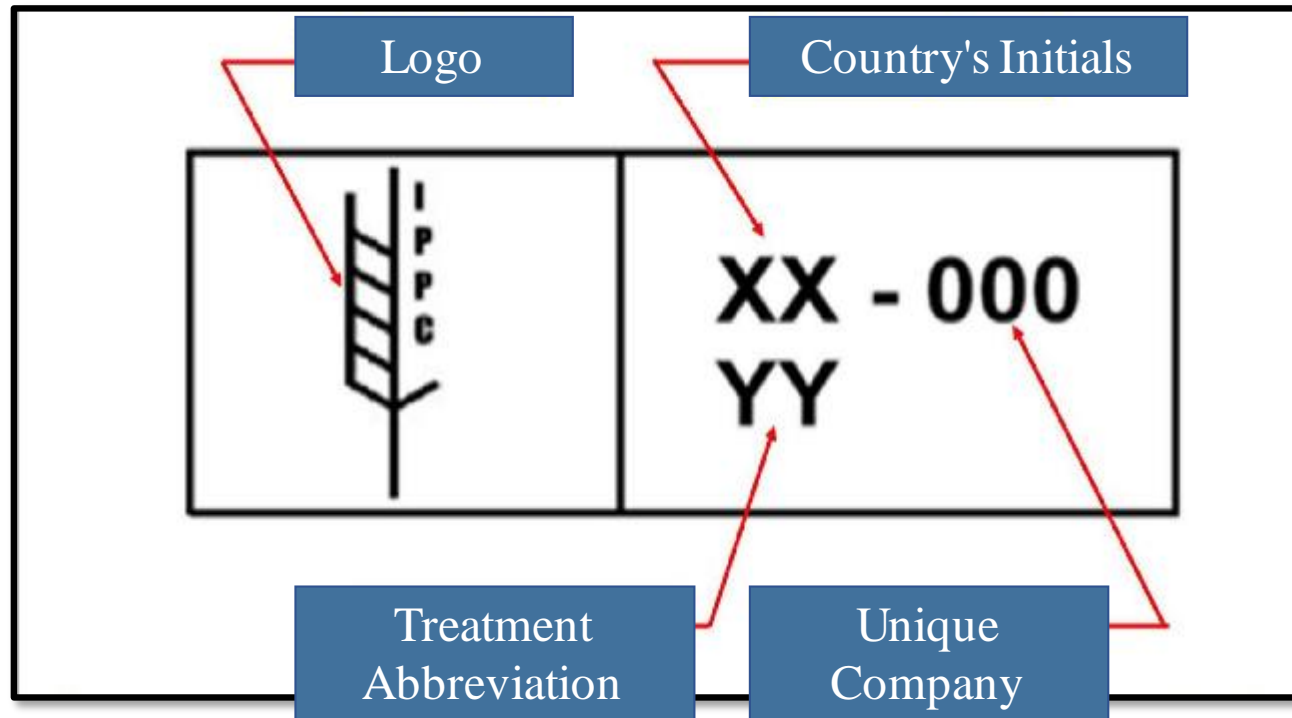
IPPC - Treaty under the supervision of the United Nations' Food and Agriculture Organization

ISPM 15 - Internationally-accepted measures which require that:

- ✓ WPM is debarked and subsequently heat-treated or fumigated with methyl bromide;
- ✓ Stamped or branded with the IPPC mark of compliance ("wheat stamp")

Agricultural Security

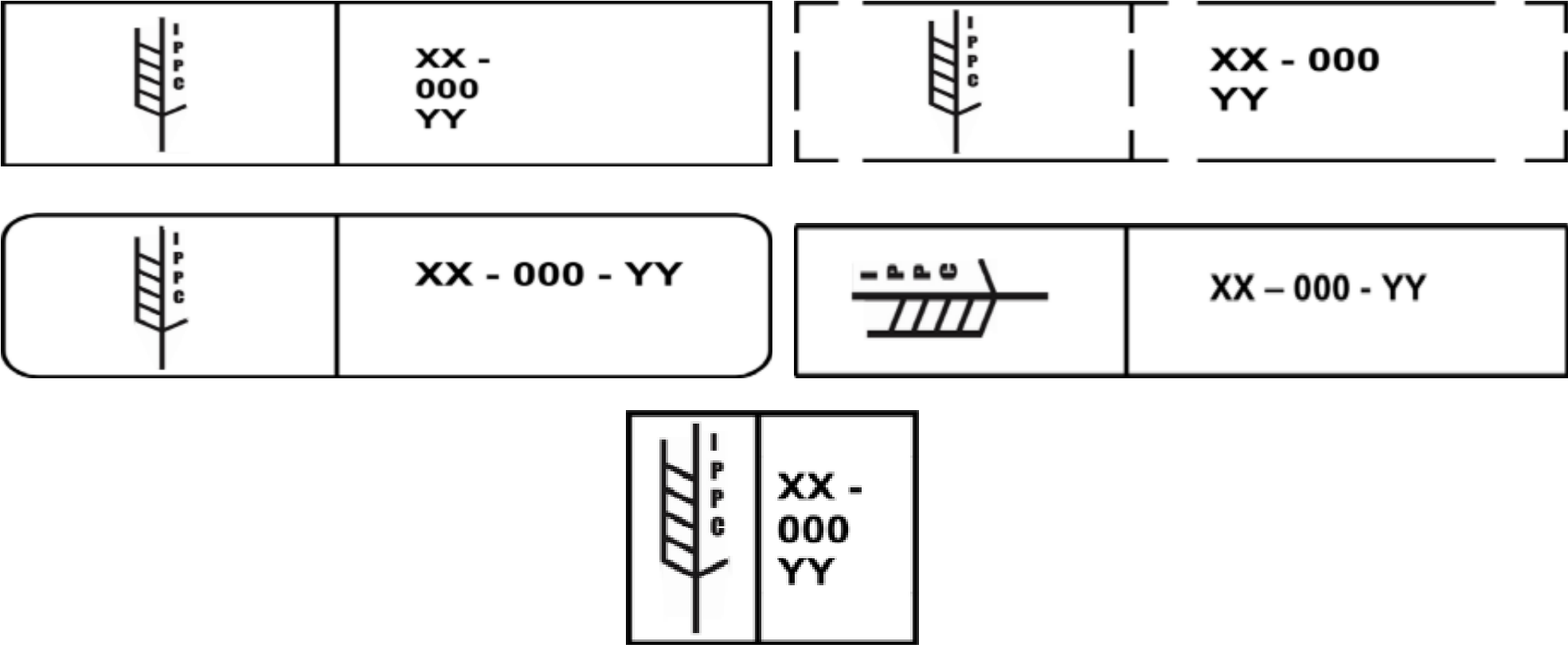
International Plant Protection Convention (IPPC) Logo



Each unit of WPM must be marked

Agricultural Security

Compatible brand variations

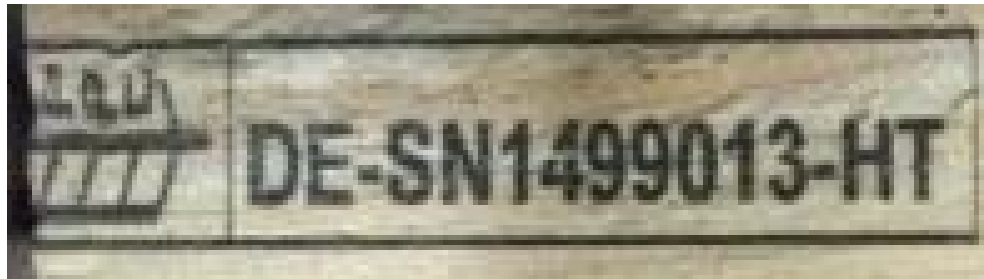


Agricultural Security



Correct Logo

Agricultural Security



Correct Logo

Agricultural Security



WPM Marked Inappropriately

Agricultural Security



WPM Marked Inappropriately

Agricultural Security



New Wood

Old wood

WPM condition

- New
 - Cool; green; visible sap
 - High probability of pests
- Old
 - Very low moisture content
 - Visually damaged
 - Low probability of pests
- Repaired
 - Mix of good and bad

Indicators of pest presence



Sawdust



Tunnels

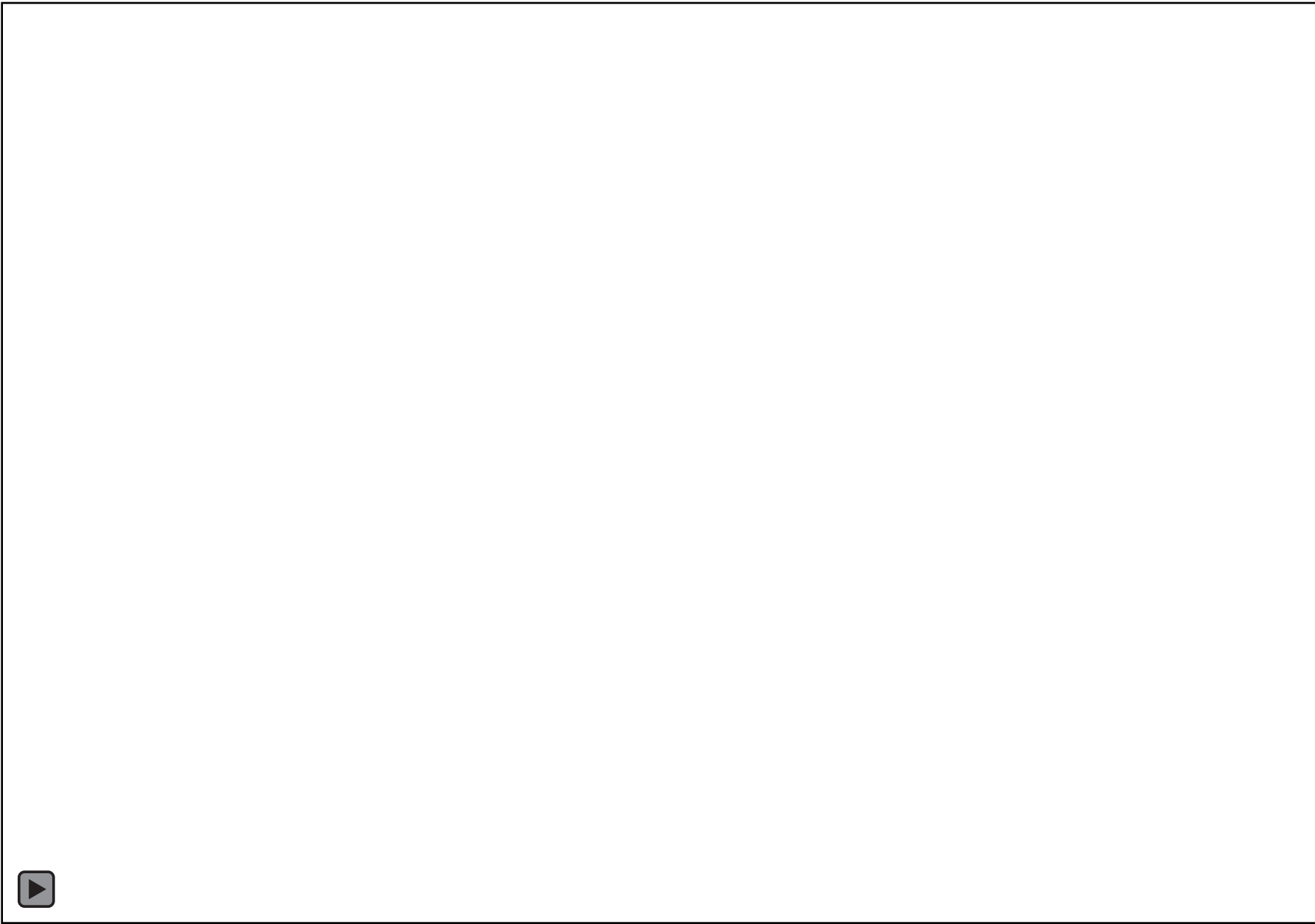


Exit Orifice

Agricultural Security



Pest presence



Agricultural Security

No indicators of pest

Nail holes

- ✓ May have nail rust
- ✓ Perfectly round or consistently-shaped hole
- ✓ It is not connected to a tunnel



Agricultural Security



High-Risk Countries

- Mexico
- China
- Italy
- India
- Turkey
- Russia

High-Risk Goods

- Wooden packaging
- Machinery (Auto parts)
 - Metal Products
- Stone Products (tiles)
 - Electronics
- Finished Wood Products
- Vegetable and Food Products

Consequences for Standard non-compliance

- Wooden packaging without the ISPM 15 stamp - **Will be re-exported**
- Wooden packaging with the ISPM 15 stamp but with wood insects - **Will be re-exported**
- Wood Packaging Materials with the ISPM 15 stamp but with pests (not associated with wood) MAY be fumigated by the US Department of Agriculture (USDA)

Agricultural Security

USDA for ISPM 15 - Compliant Wood Packaging Materials



In the US - Four Options

1. Buy heat-treated wood packaging material that carries the quality stamp of an American Lumber Standard Committee (ALSC), alsc.org, Accredited Agency.
2. Buy and use ALSC-accredited brand heat-treated lumber to build WPM
3. Use a registered facility to treat Wood Packaging Materials with heat treatment or by fumigation
4. Become a Wood Packaging Materials manufacturer in compliance with ISPM 15

Other Countries - Use materials from registered and accredited manufacturers that have been heat treated or by fumigation in accordance with the International Plant Protection Convention (IPPC) regulations. Importers should contact the shipment country of origin's National Protection Organization for more information. A list of country contacts is available on the IPPC website: <https://www.ippc.int/en/countries/all/contactpoints/>

Transportation and Instruments of International Traffic (IIT) Security

5.2 - The inspection process must have written procedures focused on agricultural inspections.

5.3 - Before loading, you must carry out agricultural and safety inspections

5.7 - If contamination is found, clean the IIT / SIN = Secure, Isolate, Notify

5.9 - AGM Pre-Departure Certificates (Ocean Carriers Only)

5.10 - Agricultural and safety inspections for Air Carriers

Agricultural Security



Procedural Security

7.2 - Loading areas must be inspected - Free from contamination by pests

7.11 - Trash must be stored and disposed of properly - Only for Ocean Carriers

7.12 - Driver must discard or declare personal garbage - Highway / Crossing Carriers; 3PLS

Education, Training and Awareness

12.2 - Agricultural Inspection Training

12.7 - Agricultural Contaminant Prevention Training

Agricultural Security



The mitigation techniques listed below are best practices to protect against contaminants, **but it does not fully guarantee that shipments, containers, and cargo remain free of contaminants.** Ensuring that agricultural pest and contaminant requirements are met depends on **each entity**



5.3 - Perform an Agricultural inspection in accordance with CTPAT on Instruments of International Traffic (IIT) / Transport



Ensure that transportation is clean before loading the goods



Keep vegetation near the facilities cut down, as these areas can harbor insects and rodents.



Sweep, vacuum, wash, steam and/or pressure wash the Instruments of International Traffic (containers, "cookie sheets," trailers, etc.) before loading merchandise



Avoid loading when insects swarm



Vacuum seeds from the Wooden packaging Materials



Properly store and cover Instruments of International Traffic (platforms, bars, crates, etc.)



Spray contaminated Instruments of International Traffic



Park trailers away from green areas and/or avoid placing them on the ground or on vegetation.



Bright lights attract insects, especially at night. Keep container doors closed while the merchandise is not being loaded

Agricultural Security

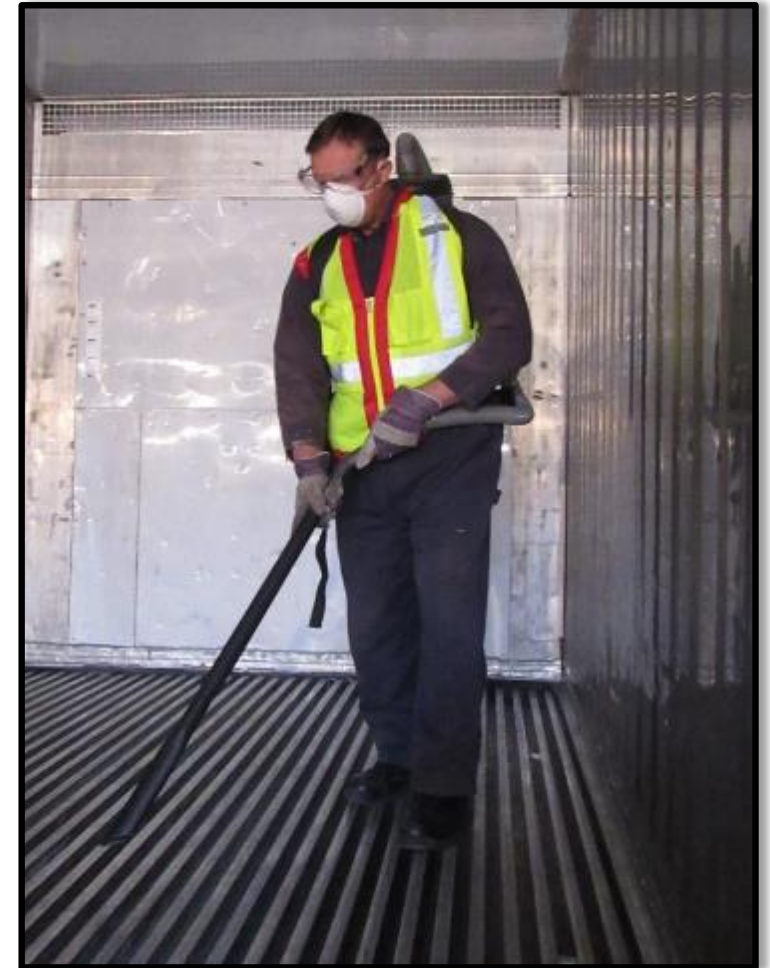
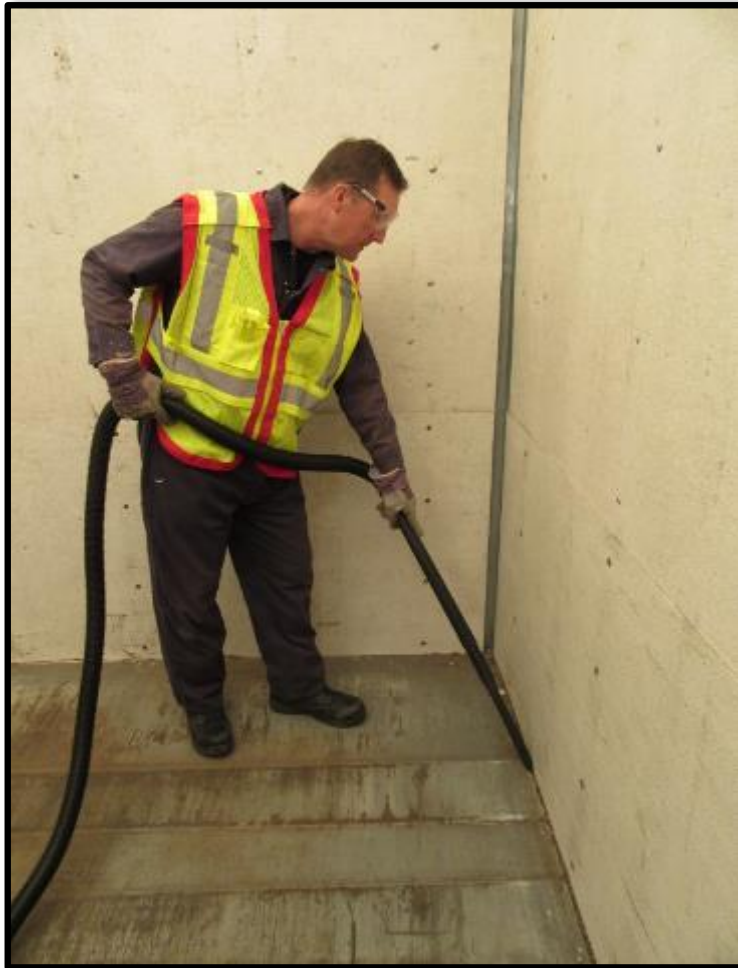


Plant leaves on container floor



Spilled seed on container floor

Agricultural Security



Eliminating Contaminants - Vacuum, Broom, Blower

Agricultural Security



**Start with a Clean Container
Before Loading**



**Use Paved Lots to Avoid
Contamination**

Consequences for Non-compliance

- Load will be **re-exported**
- Load may be **fumigated** by USDA

8.1 HC/LH/3PL/IMP/EXP/SEA/AIR/RAIL/FM/CON

- CTPAT members **MUST** have written procedures designed to prevent visible pest contamination, including compliance with Wood Packaging Materials (WPM) regulations.
- The Measures Concerning Wood Packaging Materials **MUST** comply with the International Plant Protection Convention (IPPC)'s International Standards for Phytosanitary Measures No. 15 (ISPM 15).
- Measures to prevent visible pests must be adopted throughout the supply chain.



Agricultural Security



What can you do to comply with the standard?

- Make sure your wood packaging materials supplier is accredited (ISPM 15).
- Educate your supply chain on the requirements of ISPM 15
- Find alternatives to WPM - Cost Benefit Analysis

Wood Boring Insects Found in Wood Packaging Material

Weevils *Curculionidae*



Woodwasps *Siricidae*



Clearwing Moths *Sesiidae*



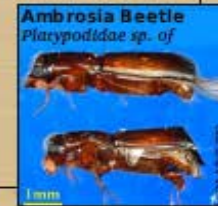
Carpenter Moths *Cossidae*



Metallic Beetles *Buprestidae*



Ambrosia Beetles *Platypodidae*



Bark Beetles *Scolytidae*



Longhorned Beetles *Cerambycidae*



U.S. Customs and Border Protection

Contact CBP Agriculture at _____



Get the Bugs Out!

Help Protect America from Invasive and Destructive Pests

Galleries

Galleries are tunnels or passageways made by insects. Usually found under the bark, galleries may also be found throughout the wood.



Bark

A typical place to find insects is under the bark. Bark is prohibited on wood packaging material.



Frass

Frass or insect waste is a sign of insect activity. It varies in color from pale to almost black and may be fine and powdery, coarse like wood shavings or any texture in between.



Exit/Entrance Holes

Insect entrance or exit holes may look like nail holes. Nail holes typically have some rust.



Concealed Solid Wood



Insects

Presence of possible foreign insects poses a risk. Adults and larvae can both be destructive.



U.S. Customs and Border Protection

Contact CBP Agriculture at _____



Agricultural Security

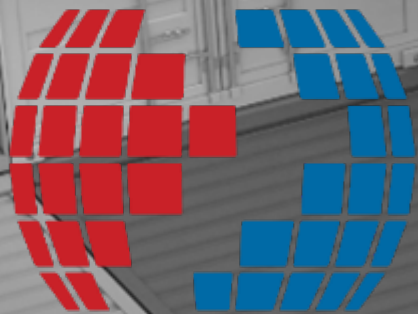


USDA - Wood Packaging Materials Frequently Asked Questions -

https://www.aphis.usda.gov/aphis/ourfocus/planthealth/sa_export/sa_wood_packaging/ct_wpm_faqs







CTPAT™

YOUR SUPPLY CHAIN'S STRONGEST LINK.



U.S. Customs and
Border Protection