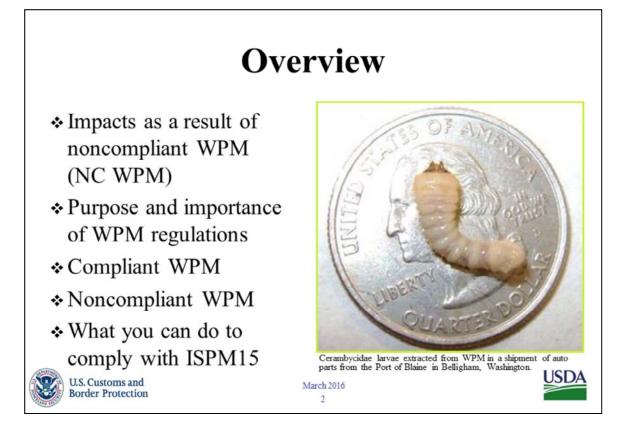


INTRODUCTION

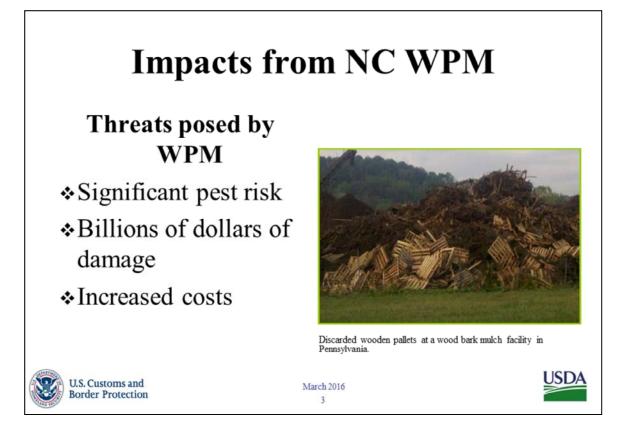
- This document provides some basic information related to wood packaging material (WPM) as used in cargo environments.
- Given today's global trade and marketing system, the likelihood of finding noncompliant WPM is possible in any pathway



Material Covered

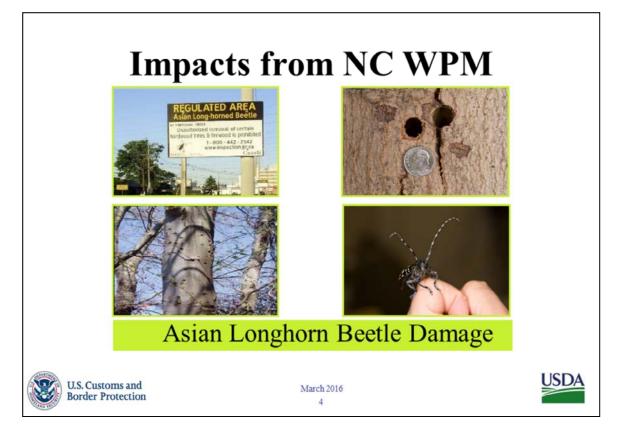
- Forest pests introduced with noncompliant WPM in the past into the U.S. which have caused devastating ecological and economic damage.
- Definition and intent of the WPM regulations
- Examples of compliant WPM
- Examples of noncompliant WPM (what to look for)
- How can import & trade components reduce risk associated with wood packaging material.

ISPM 15 = International Standard for Phytosanitary Measures 15: Regulation of wood packaging material in international trade. Published 2016. Produced by the Secretariat of the International Plant Protection Convention.



Impacts from NC WPM

- Significant pest risks are associated with WPM which may threaten American agriculture and forests.
- Unchecked spread of wood boring pests could cause billions of dollars of damage to ornamental trees and forests and lumber industries
- Trading partners could experience increased costs due to noncompliant WPM

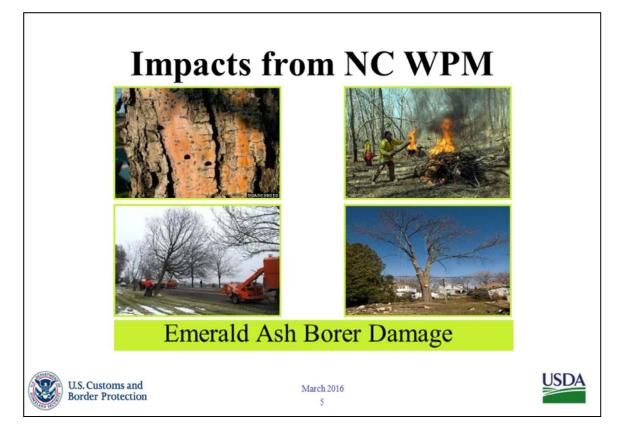


Ecological and Economic Impact of Asian Longhorn Beetle

- In the 1990's, the Asian Longhorned Beetle (ALB) was accidentally introduced into the U.S. with noncompliant WPM.
- The ALB has spread from its original introduction to other urban environments. If ALB were to become established in natural forests, it has the potential to seriously alter the ecological diversity of the natural forests in North America, with additional impacts on wetlands. The potential impact to forests is the loss of 71 billion trees valued at over \$2 trillion dollars.¹
- Another impact of Asian Longhorn Beetle in the United States is the cost of eradication measures. Collectively, from 1997-2006, the United States Department of Agriculture, Animal and Plant Health Inspection Service (APHIS), and the states of New York, Illinois, Massachusetts, Ohio, and New Jersey, plus local government agencies, have spent more than \$800 million on ALB eradication measures.²
- As of 2015, APHIS and state personnel are fighting ALB infestations in 3 States: New York, Massachusetts, and Ohio.
- Resources threatened by ALB include trees that may serve for fuel, fiber, lumber, or maple syrup production. In addition, damaged to tees may impact landscaping, windbreaks, fish and wildlife habitat, or watershed conservation.

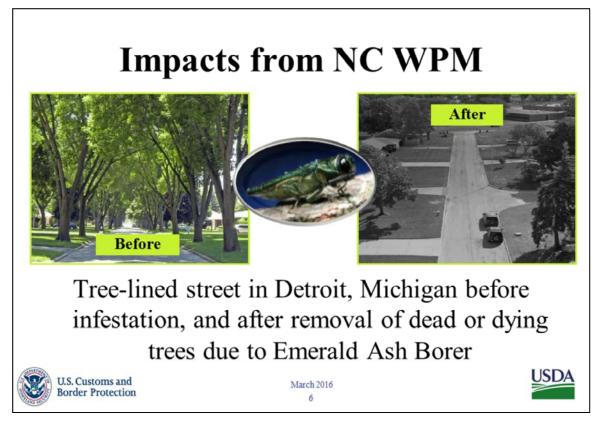
¹ GAO 2006

² Smith and Wu 2008



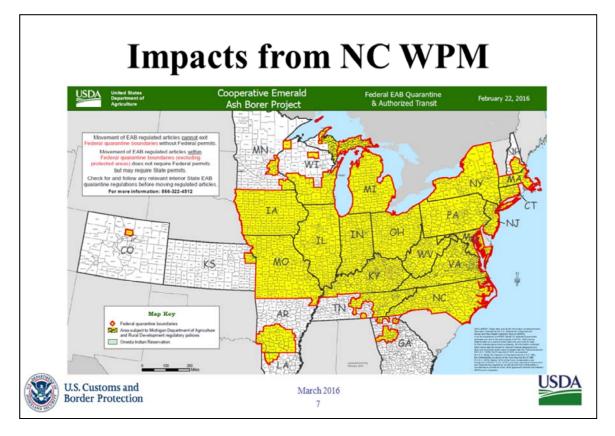
Ecological and Economic Impact of Emerald Ash Borer

- Emerald Ash Borer (EAB) is believed to have been introduced in the state of Michigan in the 1990's with noncompliant WPM from Asia, but not detected until 2002.
- As of 2011, more than 50 million trees have been cut down due EAB.
- Infestations have been detected in 25 states: Arkansas, Colorado, Connecticut, Georgia, Illinois, Indiana, Iowa, Kansas, Kentucky, Louisiana, Maryland, Massachusetts, Michigan, Minnesota, Missouri, New Hampshire, New Jersey, New York, North Carolina, Ohio, Pennsylvania, Tennessee, Virginia, West Virginia, and Wisconsin. It is also established in Windsor, Ontario.
- EAB has:
 - Killed tens of millions of ash trees in various states within the United States
 - Caused regulatory agencies and the USDA to enforce quarantines and fines to prevent potentially infested ash trees from moving out of areas where EAB occurs
 - Cost municipalities, property owners, nursery operators, and forest products industries tens of millions of dollars



Ecological and Economic Impact of Emerald Ash Borer

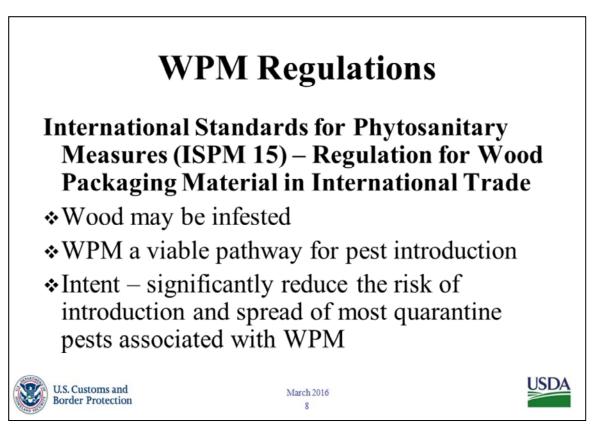
- When Emerald Ash Borer was found initially in 2002, the insect had already spread over 2500 square miles in Michigan.
- EAB kills trees, which in turn, fall onto power lines and cause extensive power outages during storms.
- Losses are estimated in the tens of millions of dollars.
- EAB is so aggressive that ash trees may die within two or three years after they become infested.



Yellow area on map shows the extent of the spread of EAB in February 2016 from its introduction into Michigan in the 1990's. Eradication efforts are ongoing, but have failed to stop the spread of this pest.

Note: the data on this map is updated monthly. For current information on EAB check on the link below:

https://www.aphis.usda.gov/aphis/ourfocus/planthealth/plant-pest-anddisease-programs/pests-and-diseases/emerald-ashborer/ct_emerald_ash_borer



International Standards for Phytosanitary Measures (ISPM 15) – Regulation for Wood Packaging Material in International Trade.

- Wood originating from living or dead trees may be infested by plant pests.
- WPM is frequently made of raw wood that may not have undergone sufficient processing or treatment to remove or kill pests and, therefore, remains a pathway for the introduction and spread of quarantine pests.
- Dunnage, in particular, has been shown to present a high risk of introduction and spread of quarantine pests.
- WPM is very often reused, repaired, or remanufactured.
- The true origin of any piece of wood packaging material is difficult to determine, thus its phytosanitary status cannot easily be ascertained.
- The normal process for analyzing pest risk to determine if measures are necessary (and the strength of such measures) is frequently not possible for WPM.
- The IPPC standard (ISPM 15) describes internationally accepted measures that may be applied to WPM. Its purpose is to reduce significantly the risk of introduction and spread of most quarantine pests that may be associated with wpm.

WPM Regulations

Wood packaging material is defined as:

Wood or wood products (excluding paper products) used in supporting, protecting, or carrying a commodity.



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WPM Regulations				
Wood packagin limited to:	g material inclu	ıdes, but is not		
Bins	Boxes	Bracing		
Cable Spools	Cases	Crates		
Dunnage	Load Boards	Pallets		
Pallet collars	Skids			
U.S. Customs and Border Protection	March 2016 10	USDA		

• WPM may be used to import agricultural and non-agricultural products.

WPM Regulations

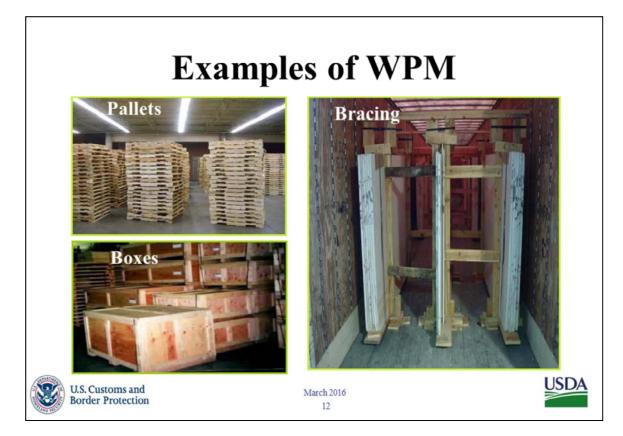
In general, WPM does not include:

- Packaging materials made entirely from thin wood 6 mm or less in thickness.
- Packaging made wholly of processed wood material such as plywood, particle board, oriented strand board or veneer that has been created using glue, heat or pressure, or a combination thereof.
- Sawdust, wood shavings and wood wool.

U.S. Customs and Border Protection

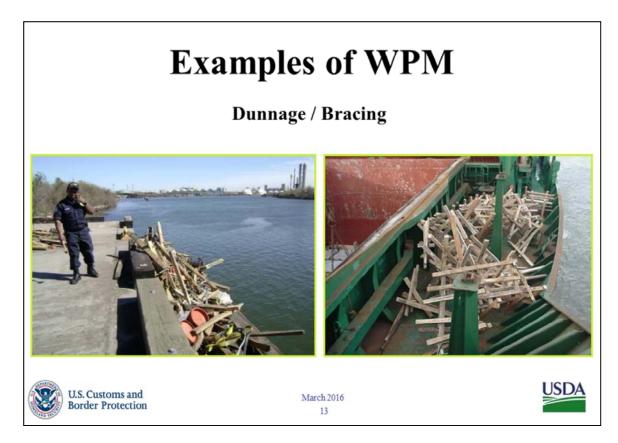
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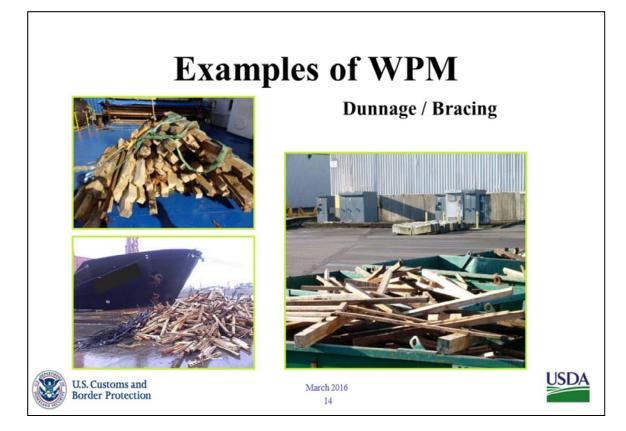
Examples of WPM

- Pallets are used with a variety of cargo and may be found within all conveyances
- Boxes may be built with a combination of WPM and non-WPM
- Bracing is solid wood used to stabilize large pieces of cargo



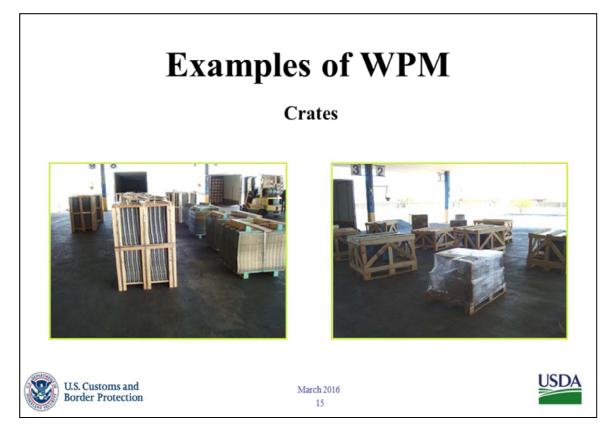
Examples of WPM

Discarded bracing/dunnage from a maritime vessel

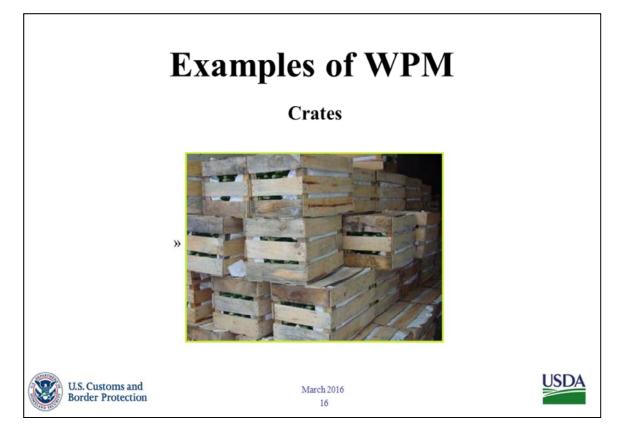


Examples of WPM

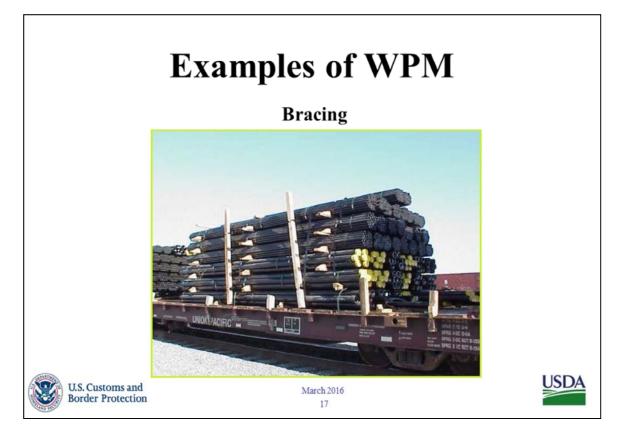
Dunnage/Bracing from maritime vessels



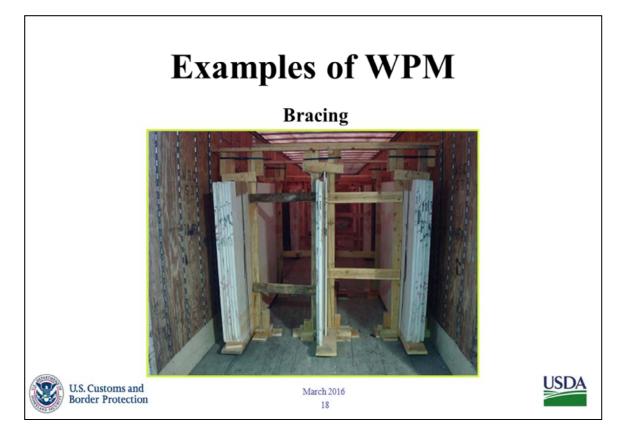
- Crates may be associated with a variety of cargo and may be found within all conveyances.
- Pictured here with non-agricultural products.



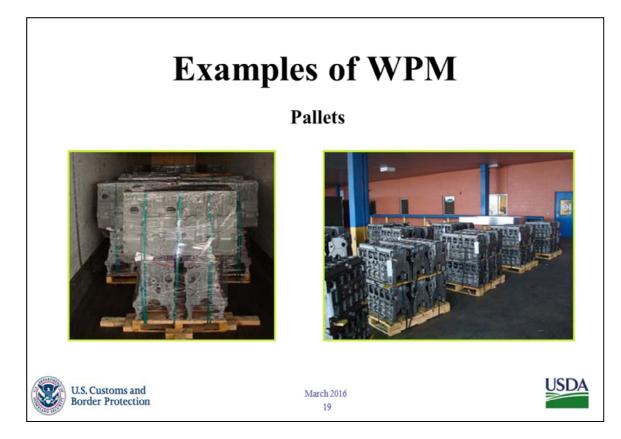
• Example of crates being used to ship agricultural product (melon).



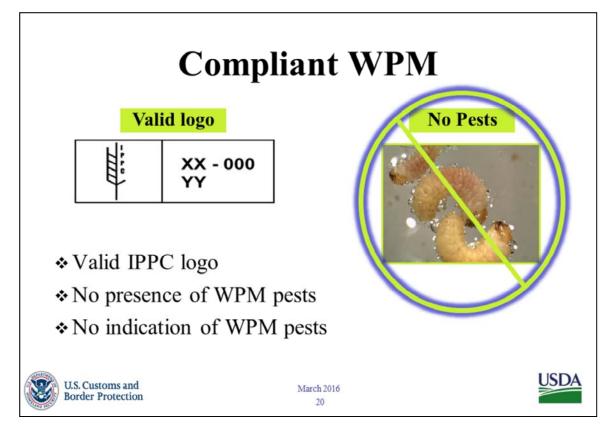
• Example of bracing being used with non-agricultural cargo on an open rail car.



• Bracing of cargo in a container.

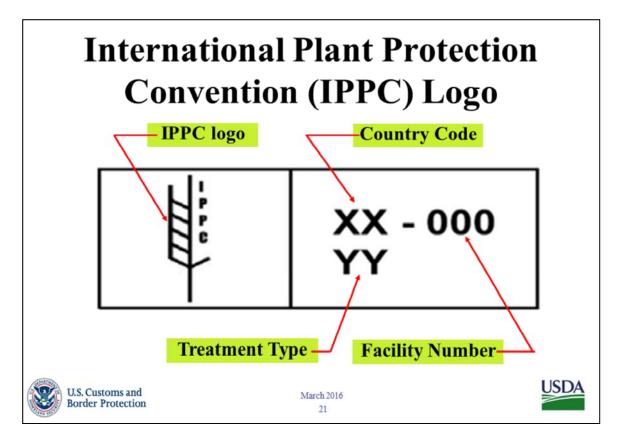


• Examples of non-agricultural cargo staged on pallets.



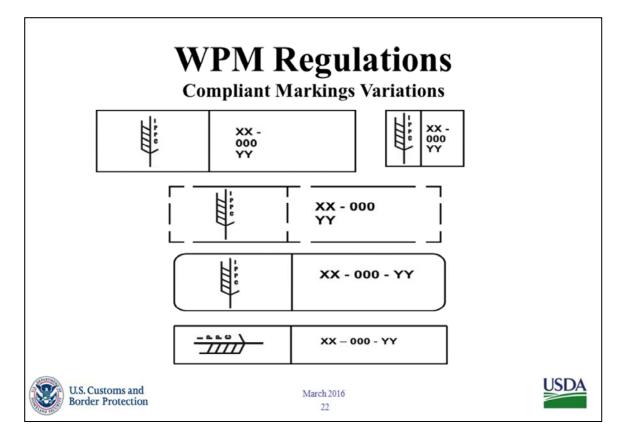
WPM must meet requirements to be compliant

- It must display, in a least two sides, a visible, legible, and permanent International Plant Protection Convention (IPPC) valid mark certifying treatment.
- No presence of timber pests
- No indication of timber pests

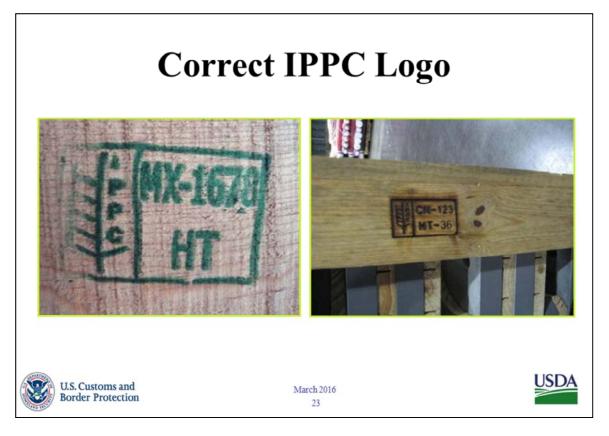


INTERNATIONAL PLANT PROTECTION CONVENTION (IPPC) logo

- IPPC is multilateral international treaty dealing with preventing the spread and introduction of plant pests with 163 signatory governments formed through the Food and Agriculture Organization (FAO) of the United Nations. Annex 2 of the ISPM 15 provides the standard that the IPPC logo must follow.
- The required components are:
 - IPPC logo must resemble closely that shown on the picture and must be to the left of the other components enclosed within boundaries.
 - The country code as a two-letter code from the International Organization for Standards. Represented by XX in the picture above. Must be separated from the other components by a hyphen.
 - The facility code is represented by 000, but not limited to 3 digits. This is a unique code assigned by the national plant protection organization of that country to the treatment provider of the wood packaging material.
 - The treatment code is represented by YY. The current accepted codes and treatments are: **HT** = heat treatment; **MB** = methyl bromide treatment.
- WPM that is marked and certified in compliance with ISPM 15 may be reused regardless of country of origin.
- ISPM 15 compliant WPM that has been repaired or remanufactured must be recertified under the HT or MB options.

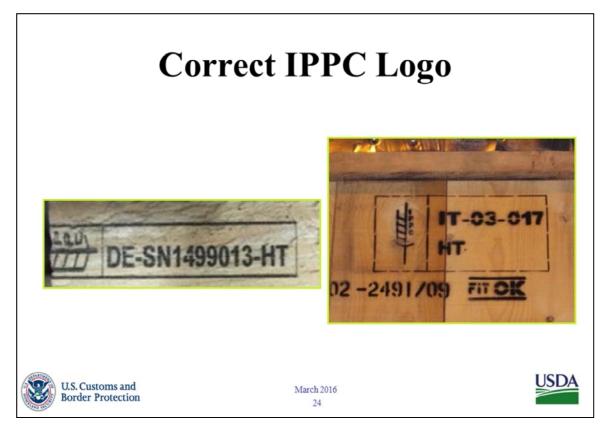


The ISPM 15 gives the above examples as acceptable variants of the required components of the mark.



Correct IPPC Logo

- WPM found to be properly marked with no presence of WPM pests or evidence of WPM pests, and has been treated by either of the approved methods identified under 7 C.F.R §319.40-3(b)(1) is compliant.
- These are examples of correct IPPC logos.



Correct IPPC Logo

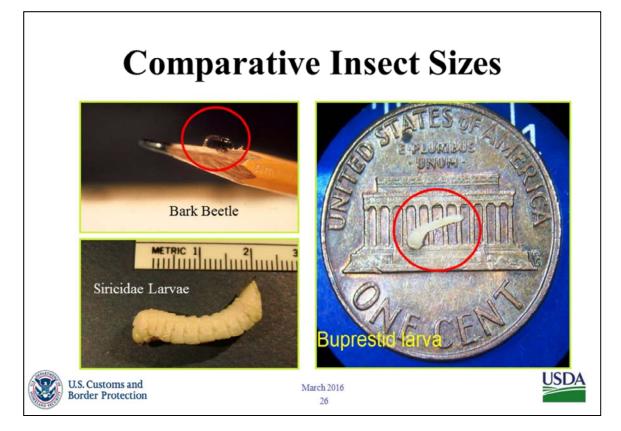
Here are other examples of correct IPPC logos.

Pests of Concern			
Buprestidae	Metallic beetles		
Cerambycidae	Long horned beetles		
Cossidae	Carpenter moths & Leopard moths		
Curculionidae	Bark weevils		
Platypodidae	Pinhole borers		
Scolytinae	Bark beetles (most common intercept)		
Sesiidae	Clearwing moths		
Siricidae	Wood wasps		
U.S. Customs and Border Protection	March 2016	SDA	

Pests of Concern:

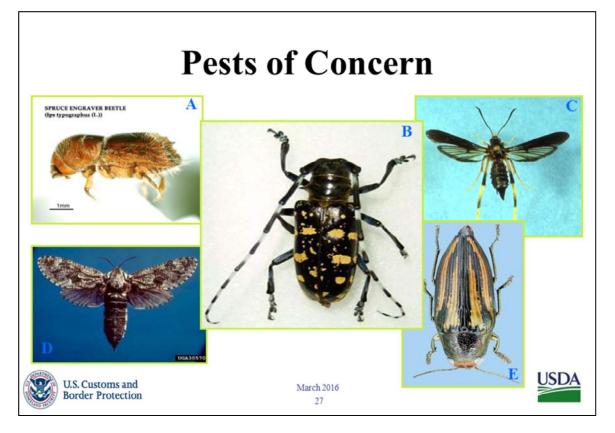
This is a list of the eight families and subfamilies of plant pests of concern, which are associated with WPM. Infestation of WPM by any one of these eight plant pest families/subfamilies confirms that the WPM was not treated in accordance with 7CFR 319.40-3(b)(1).

- Buprestidae Metallic beetles (*e.g.* Emerald ash borer)
- Cerambycidae Longhorned beetles (*e.g.* Asian longhorn beetle) **second most** prevalent interception found by CBP on noncompliant WPM
- Cossidae Carpenter moths and leopard moths
- Curculionidae Bark weevils
- Platypodidae (subfamily within Curculionidae) Pinhole borers
- Scolytinae (subfamily within Curculionidae) Bark beetles Most prevalent interception found by CBP on noncompliant WPM
- Sesiidae Clearwing moths
- Siricidae Wood wasps



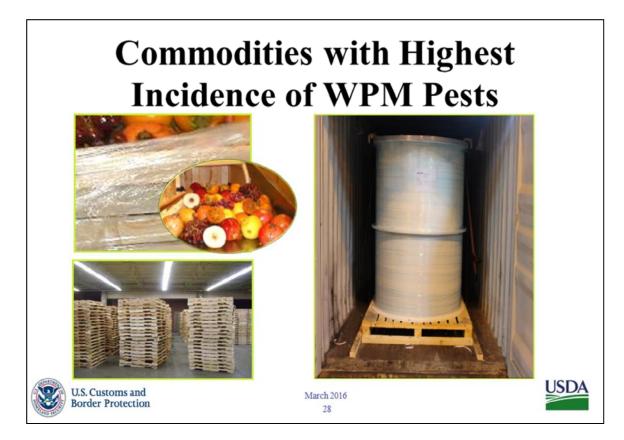
Comparative Insect Sizes

 Insects and growth stages vary in size. Note the very small Buprestidae larvae on the penny and the adult Scolytinae (Bark Beetle) on the pencil tip.



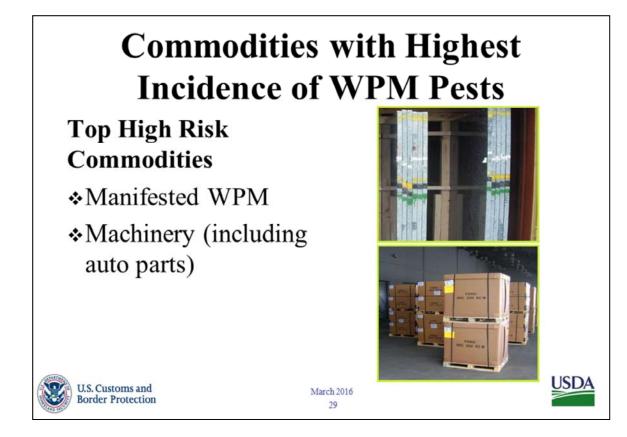
Pests of Concern

- Adults and larvae are found on noncompliant WPM. Here are a few examples of some adult plant pests.
 - A. Scolytinae spruce engraver beetle
 - B. Cerambycidae asian longhorned beetle
 - C. Siricidae wood wasp
 - D. Cossidae carpenter moth
 - E. Buprestidae metallic wood-boring beetle



Top Commodities Found with Infested WPM

- A wooden crate filled with fresh fruits
- Pallets
- Heavy products on pallets



Top High Risk Commodities Found on Infested WPM

- Manifested WPM (e.g. pallets)
- Machinery



Top High Risk Commodities Found on Infested WPM

- Metal Products
- Stone Products

Commodities with Highest Incidence of WPM Pests





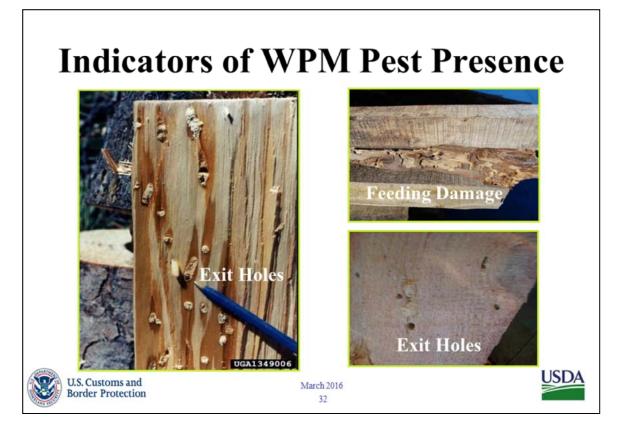
Additional High Risk Commodities

- 1. Electronics/Electronic Components
- 2. Finished Wood Articles
- 3. Plant Products and Foodstuffs



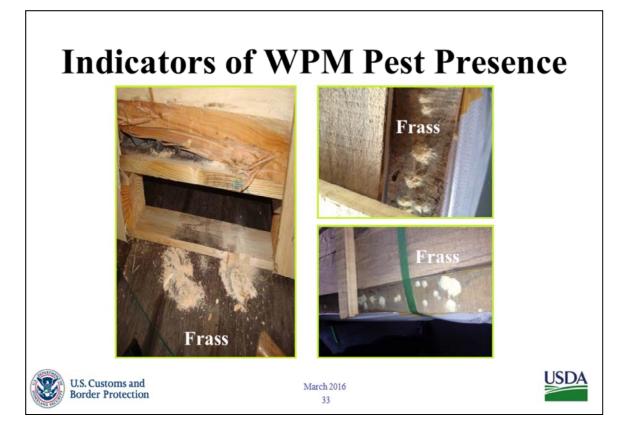
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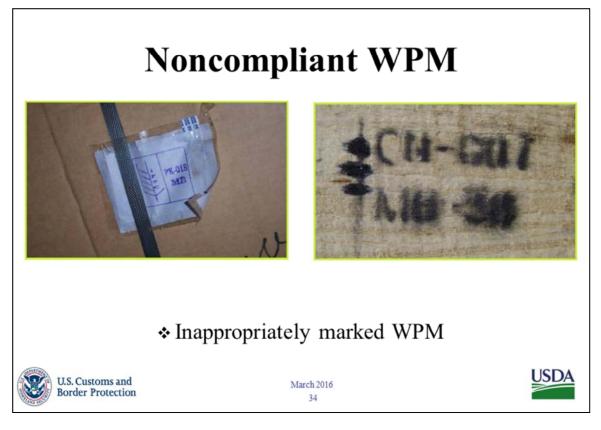
Indicators of WPM Pest Present

- Large round exit holes
- Feeding damage
- "Engravings"
- Snake-like trails



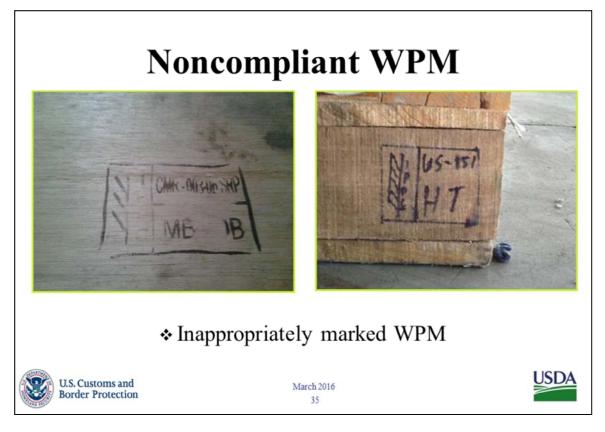
Indicators of WPM Pest Present

Presence of frass (looks like sawdust)



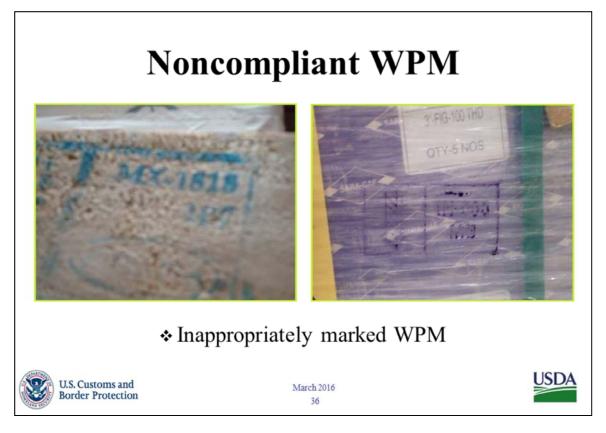
Noncompliant WPM

- WPM encountered by CBP during the course of inspection and found to be inappropriately marked or illegibly marked is assumed to be untreated by either of the approved methods identified under 7 C.F.R §319.40-3(b)(1).
- This is an example of inappropriately marked WPM.



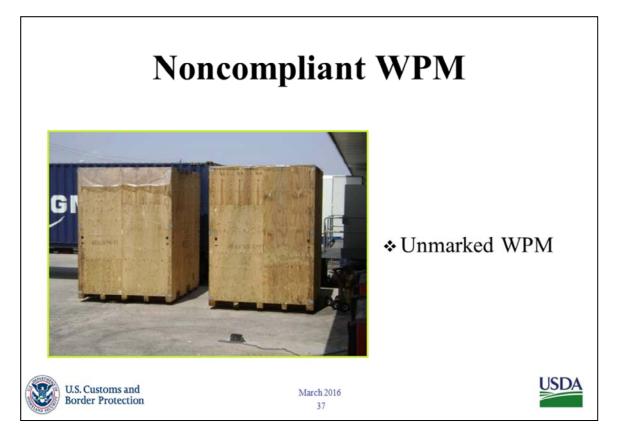
Noncompliant WPM

- WPM encountered by CBP during the course of inspection and found to be inappropriately marked or illegibly marked is assumed to be untreated by either of the approved methods identified under 7 C.F.R §319.40-3(b)(1).
- This is another example of inappropriately marked WPM.

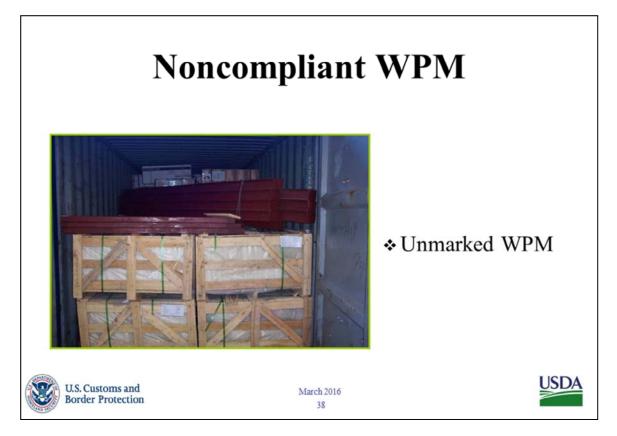


Noncompliant WPM

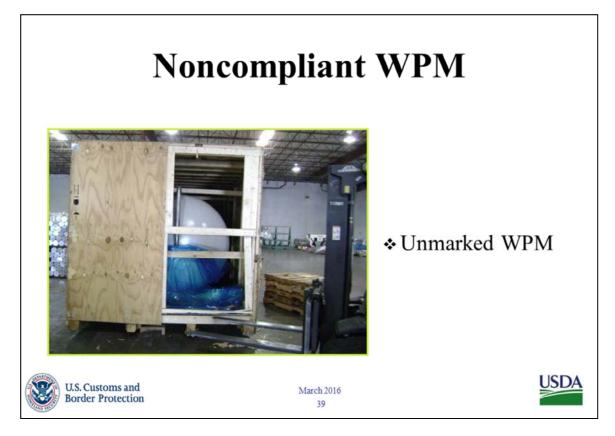
- WPM encountered by CBP during the course of inspection and found to be inappropriately marked or illegibly marked is assumed to be untreated by either of the approved methods identified under 7 C.F.R §319.40-3(b)(1).
- Another example of inappropriately marked WPM.



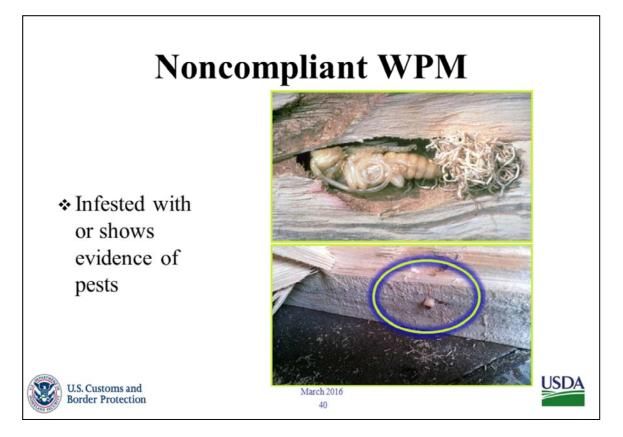
- WPM encountered by CBP during the course of inspection and found not bearing the required treatment and markings required under 7 C.F.R. §319.40-3(b)(1) and C.F.R. §319.40-3(b)(2) is non-compliant.
- These are examples of unmarked WPM.



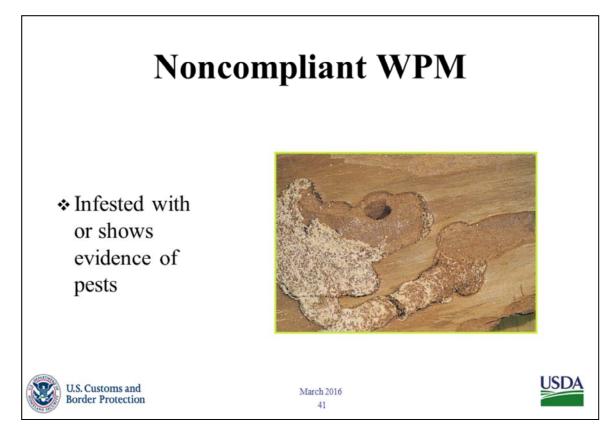
- Unmarked WPM encountered by CBP during the course of inspection and found not bearing the required treatment and markings required under 7 C.F.R. §319.40-3(b)(1) and C.F.R. §319.40-3(b)(2) is non-compliant.
- These are examples of unmarked WPM.



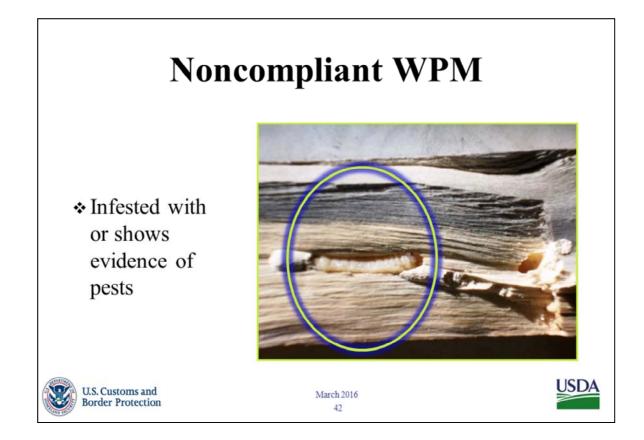
• These are additional examples of unmarked WPM.



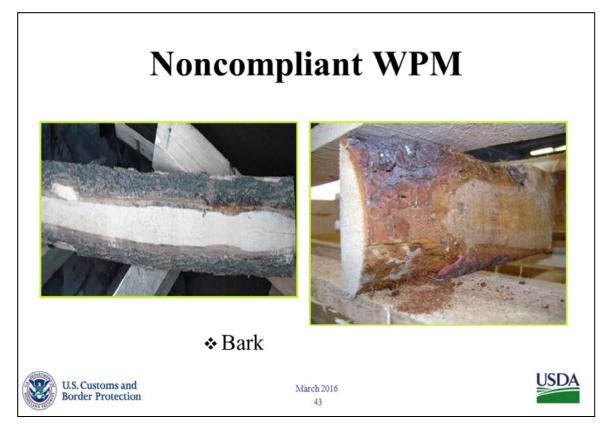
- WPM infested with timber pests confirms that the WPM has not been treated in accordance with 7 C.F.R §319.40-3(b)(1).
- This is an example of WPM infested with a pest.



• This is another example of WPM infested with a pest.



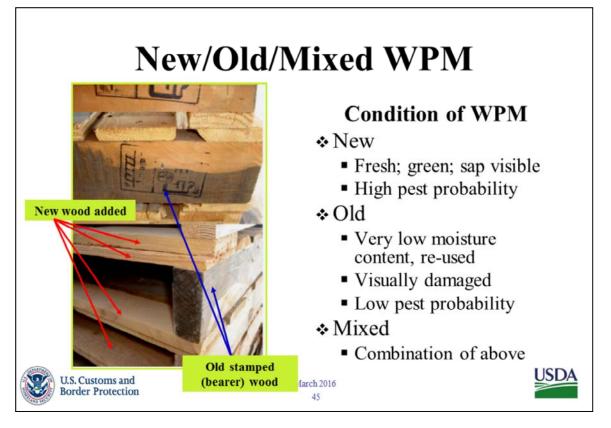
• This is another example of pest infested WPM.



- WPM with bark that is unmarked is non-compliant.
- This is an example of bark on WPM.

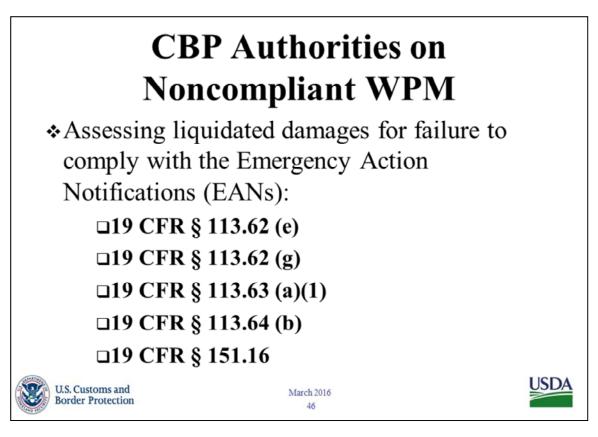


- This is another example of unmarked WPM with bark.
- The noncompliant pallets were accompanied by a prepared statement from the shipper indicating that they were made from plywood and complied with the IPPC standard for wood packaging materials. Upon further inspection, the pallets were found to be noncompliant composed of solid wood *concealed* by an outer veneer sheet.



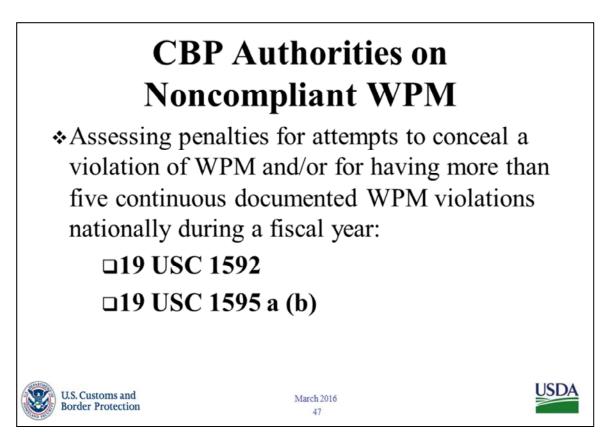
New/Old Mixed WPM

- New
 - Fresh, green cut sap visible
 - Higher pest probability
- Old
 - Very low moisture content, re-used
 - Visually damaged
 - Lower pest risk
- Mixed
 - \circ Combination of above



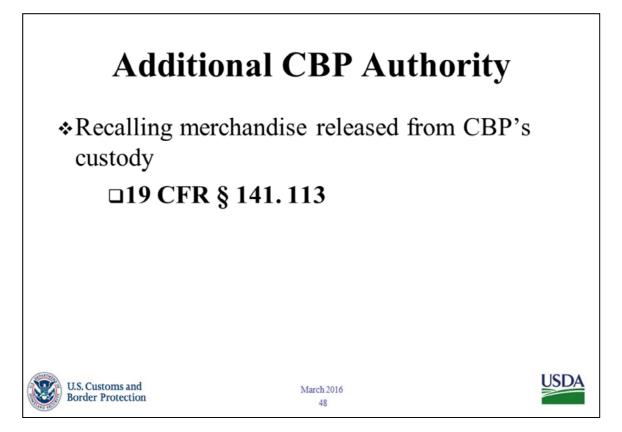
CBP Authority on Noncompliant WPM

CBP can assess liquidated damages in cases where there is failure to comply with the Emergency Action Notifications.



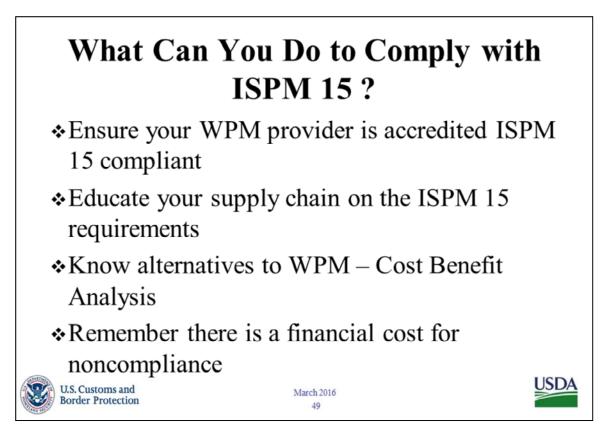
CBP Authority on Noncompliant WPM

 CBP has the authority to assess penalties in addition to claims for liquidated damages for attempts to conceal a violation of WPM 19USC 1592 or 1595a(b); and for having more than five continuous documented WPM violations nationally during a fiscal year.



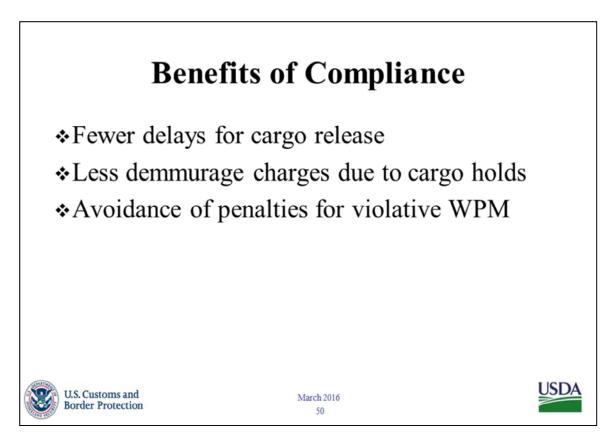
Additional CBP Authority

• CBP has the authority to recall merchandise already released from CBP custody.



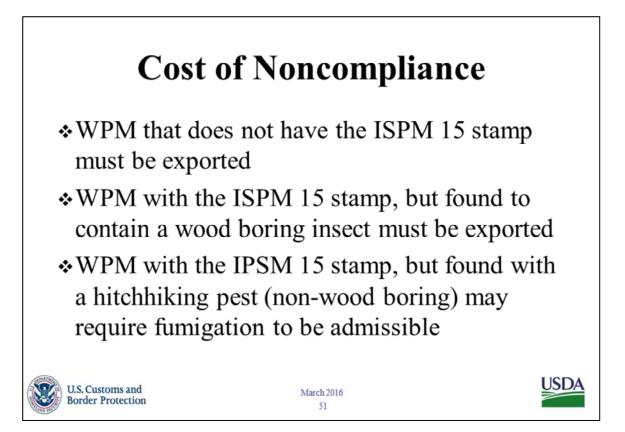
What can Your Business Do to Comply with ISPM 15?

- Noncompliance can be a serious problem for your ocean freight export or import.
- Ask your WPM provider if they are ISPM 15 compliant and accredited.
- Provide information on the ISPM 15 standard. Alternatives to WPM:
 - Plastic or metal pallets
 - Pallets and crating manufactured from manufactured wood products (Oriented strand board, Plywood, Cardboard)
- Do a cost benefit analysis if considering alternatives to wood packaging materials.
- Be aware of U.S. and foreign countries' timelines for implementation.
- Realize there is financial cost to the supply chain and potential ecological cost to the natural resources of the United States.



Benefits of Compliance

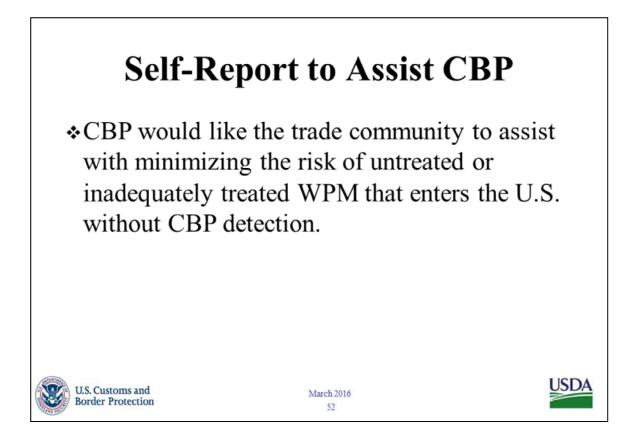
- Fewer delays for cargo release
- Less demmurage charges due to cargo holds
- Avoidance of penalties for violative WPM



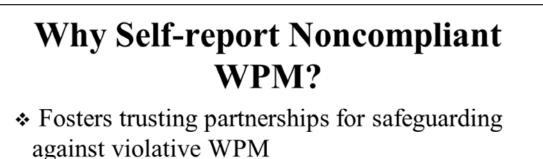
Cost of Noncompliance

- WPM that does not have the ISPM 15 stamp must be re-exported.
- WPM that has the ISPM15 stamp, but is found to contain a wood boring pest must be re-exported.
- WPM that has the ISPM 15 stamp, but is found with a hitchhiking pest (non wood boring) may require fumigation to be admissible.

Costs of remediation are incurred by the responsible party of the shipment.



CBP wants to establish a pathway for trade to report to CBP when their goods enter the U.S. on infested WPM without CBP detection. The objective is to mitigate the pest risk.



Consistent self-reporting may lead to mitigating factors in the event of civil penalties or liquidated damages related to violative WPM

Stakeholders with a track record for wpm compliance may attract more business

U.S. Customs and Border Protection

Why Self-report Noncompliant WPM

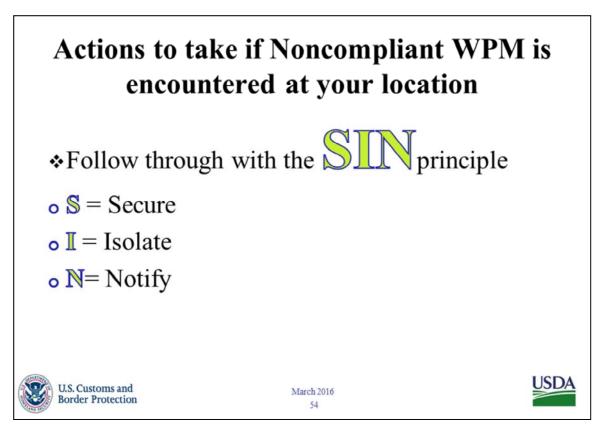
 By implementing self-inspection practices for WPM, importers demonstrate to CBP that they can be trusted partners for safeguarding against violative WPM. In turn, this may result in a reduction in CBP inspections of WPM.

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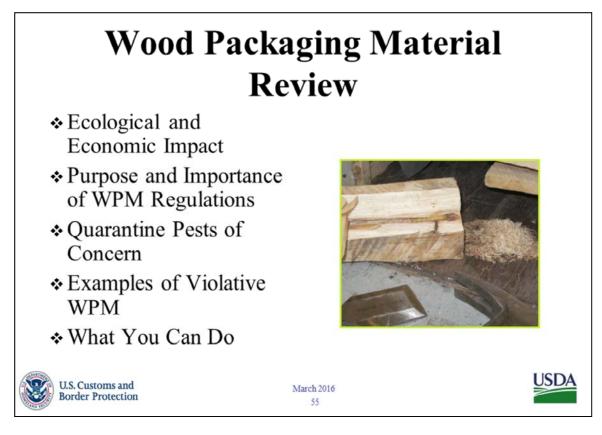
- This translates into substantial monetary savings.
- Consistent self-reporting may also be considered as a mitigating factor in the event of civil penalties or liquidated damages related to noncompliant WPM.
- Importers will have increased business certainty because a system with internal controls helps to ensure compliant transactions.

USDA



Actions to Take

- Adhere to the SIN principle Secure, Isolate, and Notify.
- Secure: If there are pests or evidence of a pest, cover the shipment with tarp or shrink wrap. If possible, return the shipment to a container and seal the container door.
- Isolate: Separate the shipment or container from compliant shipments.
- Notify: Contact your local CBP office or the local U.S. Department of Agriculture, Animal and Plant Health Inspection Services office to advise of the noncompliant WPM.
- If pests are found in or around the port of entry, contact CBP.



WPM Review

- Ecological and Economic Impact of infested WPM
- Purpose and Importance of WPM Regulations
- Quarantine WPM Pests of Concern
- Examples of Violative WPM
- What you can do to reduce the risk posed by WPM pests.

Note: If you or your employees find wood boring insects, or wood packaging material that is inappropriately marked, unmarked, or shows signs of insect activity, please keep the shipment in a secure location, preferably a sea container or trailer. Contact U.S. Customs and Border Protection to speak to an Agriculture Specialist so prompt quarantine action can be taken.

For More Information Contact:		
	Department of Homeland Security	
U.S. Customs and Border Protection		
Office of Field Operations		
Agriculture Programs and Trade Liaison		
Office:	gram Manager - Safeguarding (202) 344-3298 DHS, CBP, OFO, APTL 1300 Pennsylvania Ave., NW Room 2.5B	
	Washington, D.C. 20229	
U.S. Customs and Border Protection	- Maich 2010	USDA

For more information:

• Contact CBP in your local area for more information.