

Phytosanitary Issues For Wood Packaging Material An Overview



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What We Will Discuss

- Regulatory Update
- Impacts/Survival Strategies/Opportunities
- Where To Get Assistance



What is Wood Packaging Material (WPM)

- Pallets, Dunnage, Crating, Drums, Skids, and Similar Products
- Manufactured From Coniferous and Non-Coniferous Wood That Has Not Been Sufficiently Processed To Eliminate Pests
- Does Not Include Pallets and Other Products That Have Been Manufactured From Materials Processed With Heat and Pressure, Such as Plywood, OSB, or Similar Materials



Impact of WPM

- Critical to US and Global Economy
- 429 Million Pallets Produced in 1999
- Annual Production Roughly 95% Wood
- Of 95%, 67% Is Hardwood Species
- Representing Roughly 40% of US Hardwood Production
- Over 50% of \$1.9 Trillion In US Imports/Exports Were Carried on WPM



Impact on Exports

- 65 to 71 Million Pallets in Export Applications – From a 2003 Survey Conducted by the University of Minnesota



Top US Suppliers In 2002

<u>Imports</u>	<u>Value</u>	<u>% Of Total Imports</u>
Canada	\$209 Billion	18%
Mexico	\$135 Billion	12%
China	\$125 Billion	11%
Japan	\$121 Billion	10%
Germany	\$ 63 Billion	5%
UK	\$ 41 Billion	4%
Korea	\$ 36 Billion	3%
Taiwan	\$ 32 Billion	3%
France	\$ 28 Billion	3%
Italy	\$ 24 Billion	2%



Risks Of WPM

- WPM Can Carry Pests That Are Environmentally and Economically Devastating
- Outbreaks Of Asian Longhorned Beetle, Pine Shoot Beetle and Emerald Ash Borer Have Been Linked To WPM
- Pinewood Nematode Is Also A Target Pest



International Reaction

- Proliferation Of National Standards Requiring Treatment Of WPM
- Attempt At Standardization Started In 2000 Under The Auspices Of The International Plant Protection Convention (IPPC)



IPPC

- Based On An International Treaty Designed To Secure A Common And Effective Action To Prevent The Spread And Introduction Of Pests Of Plants And Plant Products, And To Promote Appropriate Measure For Their Control
- Over 200 Countries Participating



IPPC Standard

Guidelines For Regulating Wood Packaging Material In International Trade (ISPM 15)

- Globally Accepted Measures To Minimize The Introduction Of Forest Pests
- Two Treatment Methods For WPM
- Requires Official Programs Operated Through Each Countries NPPO (National Plant Protection Organization)
- Establishes Official Marks To Be Applied To Treated Material
- No Additional Documentation Is Necessary

Treatment Alternatives

- Heat treatment (HT)



- Methyl bromide (MB) fumigation





Heat Treatment

- WPM Must Be Heated To 56°C (133°F) At The Core For 30 Minutes



Two Ways To Certify Products

- Heat Treat Unit/Finished Product
- Build From HT Or KDHT Marked Lumber

Chain Of Authority – Heat Treatment

**United States Department of Agriculture
(USDA)**



**Animal & Plant Health Inspection
Service (APHIS)**



**American Lumber Standard Committee
(ALSC)**



Certified Inspection Agencies



Certified Inspection Agencies

- Carolina Inspection Services, Inc.*
- Continental Inspection Agency, LLC
- Lee Inspections and Consulting Services*
- Missouri Forest Products Association*
- National Hardwood Lumber Association*
- Northeastern Lumber Manufacturers Association*
- Pacific Lumber Inspection Bureau
- Package Research Laboratory*
- Redwood Inspection Service
- Renewable Resource Association, Inc.
- Southern Pine Inspection Bureau*
- Stafford Inspection and Consulting, LLC*
- Timber Products Inspection*
- West Coast Lumber Inspection Bureau*
- Western Wood Products Association

*Operating In The Eastern Hardwood Region



ALSC Certification Requirements

- WPM Facility Must Contract With An ALSC Accredited Inspection Agency
- Agency Will Inspect Facility 12 Times Per Year
- Agency Audits Facility Records Of Incoming And Outgoing HT Lumber And/Or Treating Records
- Agency Examines Any Product On Hand For Stamp Legibility and Product Compliance
- Non-Conformance Is Addressed By The Agency



Inspection Costs

- Monthly Inspection Fees - \$240 - \$330
- Some Charge Travel Expenses (Generally Those With Lower Monthly Costs)
- Monthly ALSC Fee (May Be Incorporated Into Monthly Fee)
- Refundable deposit may be required
- Cost Of Hand Stamps (\$0 - \$40)
- Miscellaneous Costs (Generally To Certify A Heat Treatment Chamber)



Methyl Bromide

- Methyl Bromide Fumigation – Must Meet Approved Fumigation Schedules
- Schedules Specify Wood Temperature, Minimum Concentrations of Methyl Bromide, And Fumigation Time
- Wood Must Be 52°F In Order To Be Treated

Chain Of Authority – Methyl Bromide

**United States Department of Agriculture
(USDA)**

**Animal & Plant Health Inspection Service
(APHIS)**

**National Wooden Pallet & Container
Association (NWPCA)**

Certified Inspection Agencies





Certified Inspection Agencies Methyl Bromide

- Lee Inspection and Consulting Services
- Package Research Laboratory
- Stafford Inspection & Consulting Services, LLC
- Timber Products Inspection



Inspection Costs Methyl Bromide

- Monthly Inspection Fees (\$265 - \$450)
- Travel Expenses – Included
- NWPCA Fees - \$15 per facility per month or 2 cents per unit treated
- Initiation Fees – None
- Cost of Hand Stamps – (\$0 - \$45)
- Miscellaneous Costs - None

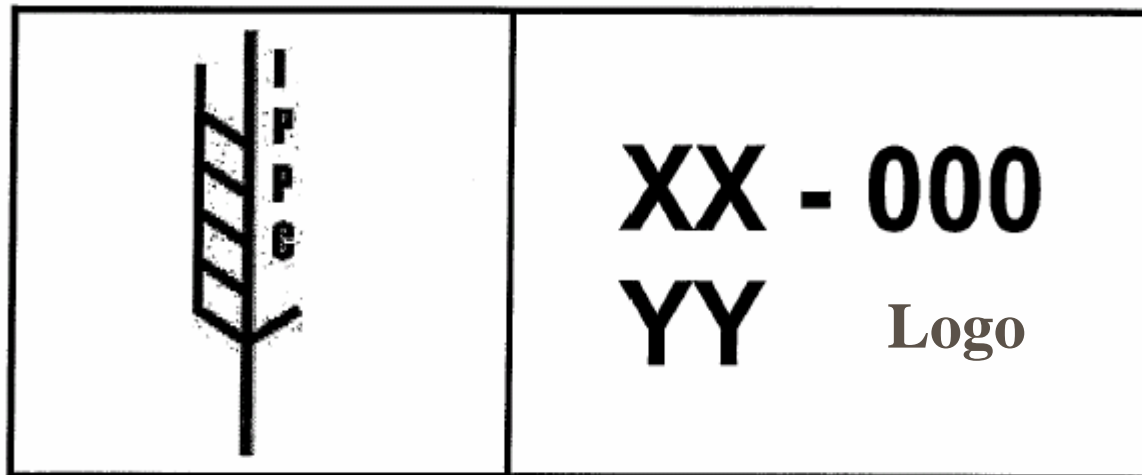


Treatment Options – Methyl Bromide

- Fumigator With a Mobile Stamp Treats at WPM Site
- WPM Facility Holds Certified Stamp and Engages a Registered Fumigator to Perform Treatment (Currently 60 Registered Fumigators)
- Request an Inspection Agency to Oversee the Fumigation Activity

Approved Mark

- 2-Letter Country Code (XX) (e.g., US)
- 3-Digit Producer Code (000)
- 2-Letter IPPC Abbreviation Of Treatment (YY) (e.g., HT or MB)
- Inspection Agency Logo





Implementation Of Regulations

- Each Participating Country Is Responsible For Implementation Of Regulations Through Their NPPO (National Plant Protection Organization)
- ISPM 15 Serves As The Basis For Regulations
- Countries Can Choose To Be More Restrictive Than ISPM 15



Countries Currently Enforcing ISPM-15

- Argentina
- Australia
- Bolivia
- Brazil
- Bulgaria
- Canada
- Chile
- China
- Colombia
- Costa Rica
- Dominican Republic
- Ecuador
- Egypt
- European Union
- Fiji
- Guatemala
- Honduras
- Hong Kong
- India
- Indonesia
- Jordan
- Lebanon



Countries Currently Enforcing ISPM-15 (Continued)

- Mexico
- New Caledonia
- New Zealand
- Nicaragua
- Nigeria
- Oman
- Panama
- Paraguay
- Peru
- Phillipines
- Seychelles
- Singapore
- South Africa
- South Korea
- Sri Lanka
- Switzerland
- Syria
- Tanzania
- Trinidad & Tobago
- Turkey
- United States
- Urkraine



Countries Currently Enforcing ISPM-15 (Continued)

■ Venezuela

■ Vietnam



Countries That Have Not Adopted ISPM 15

- Japan – has initiated a process that may lead to adoption of ISPM-15
- Taiwan – regulations apply only to lumber and other wood products and not WPM



IMPACTS OF ISPM 15

Hardwoods Lose Their Exemption Status

- May Lead To Some Reduction In Low Grade Hardwood Markets
- ISPM 15 Compliance Increases WPM Costs



IMPACTS OF ISPM 15

Developed vs. Undeveloped Countries

- Developed Countries Leading The Charge
- Undeveloped/Underdeveloped Countries Forced To Move Ahead With ISPM 15
- Implementation Will Continue To Vary Country By Country



IMPACTS OF ISPM 15


Customer Response

- Customers Using WPM To Ship Their Products Will Demand ISPM 15 Compliance Before Countries Officially Implement ISPM 15
- Can't Count On End-Users Making Separate Purchases For Domestic and International Markets



Opportunities/Survival Strategies

- Assess The Profitability/Importance Of Your Markets For Export WPM
- Is The Additional Expenditure Of Time And Resources To Comply With ISPM 15 Justified?



Opportunities/Survival Strategies

Possible Low Volume Options


- Purchase HT Lumber and Fabricate WPM
– Still Requires Enrollment in a Certification Program
- Engage The Services of a Custom HT Treater – WVU/AHC is Maintaining a Directory of Custom Heat Treaters; Currently Have 113 Companies Listed



Opportunities/Survival Strategies

Location Of Custom HT Treaters


- OH (22)
- PA (15)
- MO (14)
- NY (11)
- KY (8)
- IN (7)
- SC (6)
- AR (4)
- GA (3)
- WI (3)
- IA (3)
- CT (2)
- IL (2)
- LA (2)
- MN (2)
- VA (2)
- WV (2)
- AL, KS, MD, ME, MS, NH, RI (1 each)



Opportunities/Survival Strategies


Expanding Packaging Options

- Adding Alternatives To Your Product Line That Are Exempt From ISPM 15
- The Additional Cost For Complying With ISPM 15 May Allow Alternatives To Become Competitive With WPM




Opportunities/Survival Strategies Alternative Packaging Materials

- Wood Fiber-Based Pallets – Made from pre- and post-consumer waste, molded under high heat and pressure. Are water resistant and can be stored outside. Truckload quantities available at \$6.50 per pallet.



Opportunities/Survival Strategies Alternative Packaging Materials

- Corrugated/Paper Pallets – are 1/3 the weight of wood pallets and price competitive with new wood pallets. Cannot be stored outside.



Opportunities/Survival Strategies Alternative Packaging Materials

- Plastic Pallets – Blend of polyethylene and polypropylene. Available starting at \$8-\$10 per pallet.



Current Issues

- Debarking – EU vs. US

Debarking – Removal of bark from roundwood
(does not necessarily make the wood bark-free)

Bark-Free Wood – Wood from which all bark excluding the vascular cambium, ingrown bark around knots, and bark pockets between rings of annual growth has been removed

- A draft debarking standard is being considered



Current Issues

- Dunnage

Wood packaging material used to secure or support a commodity but which does not remain associated with the commodity

- Must be treated and marked. Mark will contain “DUN” or “DUNNAGE” designation




Current Issues

- Recycle, Remanufacture, and Repair All Require Re-Treatment, Re-Certification, and Re-Marking
- Re-Use Does Not Require Re-Treatment
- Fraud is a Concern for Recycle, Remanufacture, and Repair Activities



Resources

- Animal and Plant Health Inspection Service (APHIS) – www.aphis.usda.gov
- International Plant Protection Convention (IPPC) – www.ippc.int
- American Lumber Standards Committee (ALSC) – www.alsc.org
- National Wooden Pallet & Container Association (NWPCA) – www.nwPCA.com
- Customs and Border Protection – www.cbp.gov



WVU-AHC Phytosanitary Project

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