

# **Implementation of ISPM-15 in the United States**

- Information has shown that pests can be transported by wood packaging material (WPM).
  
- Prior to 2001 certification of WPM as being free of pests was done on an individual country basis.
  - resulted in lack of standardization between countries
  
  - confusion for exporters.

- In 2000, the North American Plant Protection Organization (NAPPO) developed
  - Regional Standards for Phytosanitary Measures (RSPM) 11 *Import Requirements for Wood Dunnage and Other Wood Packing Materials into a NAPPO Member Country*
    - ✓ Used within NAPPO countries “to prevent the introduction and spread of quarantine pests on wood dunnage and other wood packing materials”
    - ✓ Dunnage and WPM treatments included
      - kiln drying to <20% MC or
      - Fumigated with MB or
      - other treatments or pests management systems approved by the NPPO of the importing country

- Potential to disrupt trade led United Nations through its Food and Agriculture Organization (FAO) division to request International Plant Protection Convention (IPPC) to write an international standard to regulate WPM.
- NAPPO RSPM 11 was used as a guide by the IPPC to develop the International Standard for Phytosanitary Measures 15 (ISPM 15)

- Around the same time as the ISPM 15 standard was being developed, the European Union implemented its emergency measures on softwood WPM to address issues with the pinewood nematode.
- ISPM 15 was broadened to include softwood and hardwood as well as more quarantine pests
- Treatments included in ISPM 15
  - heat treatment to 56<sup>0</sup>C for a minimum of 30 consecutive minutes throughout the wood profile (including the core)
  - Fumigation with MB

- ISPM 15 was not developed in a vacuum
  - many countries, organizations, scientist and others had input during the development stages
  - input from all IPPC countries during the mandatory country comment period that proposed IPPC standards are submitted to before being accepted as an IPPC standard
  - during these developmental stages any interested party could have input through various organizations

- The ISPM 15 standard is for use between governments.
- ISPM 15 is implemented by national plant protection organization (NPPO) of each country.
- The Animal Plant Health Inspection Service (APHIS) under the Department of Agriculture is the NPPO for the US.
- ALSC was an advisor to APHIS at meetings of the IPPC where the draft standard for WPM was developed.

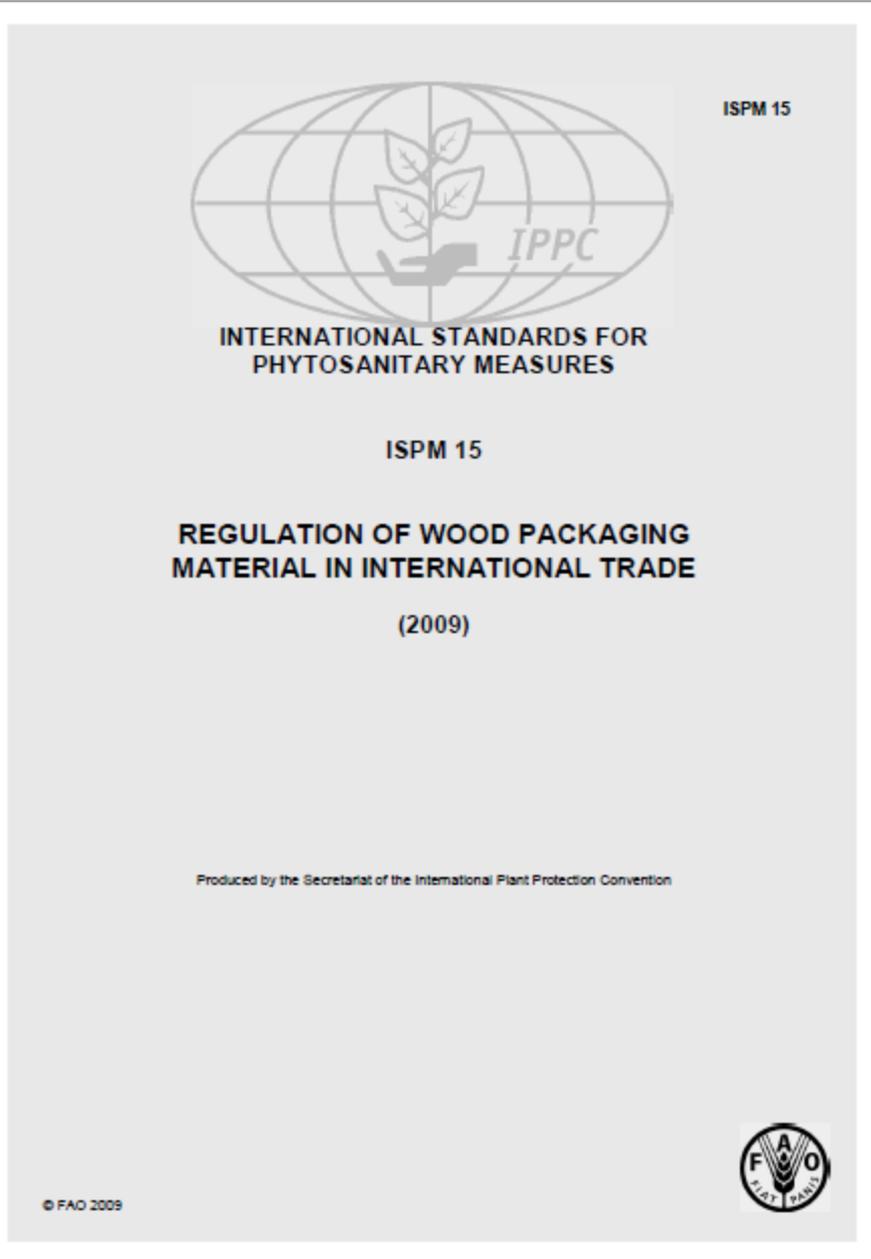
# International Plant Protection Convention (IPPC)

Part of Food and Agriculture Organization  
(FAO) of the United Nations

## ISPM 15

- is a multilateral international treaty dealing with preventing the spread and introduction of plant pests
- harmonizes requirements between approximately 181 signatory countries
- each signatory country implements its own regulation for implementation of ISPM 15

International Standards help to **ensure that import requirements have a scientific basis and are not used as unjustified trade barriers.**



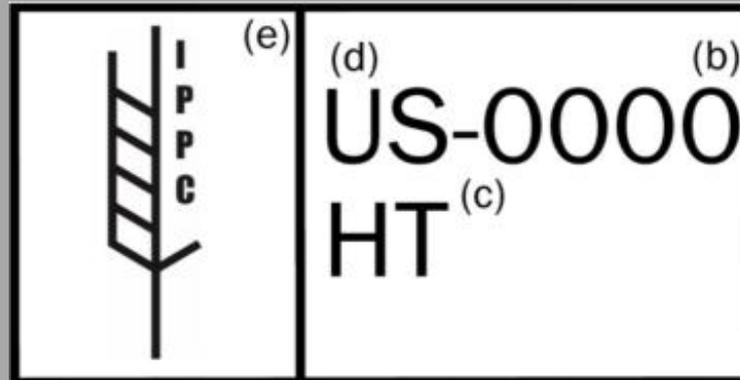
# ISPM 15

➤ An International Standard Phytosanitary Measure:

- **directly addresses** the need to treat wood packaging materials (WPM) of a thickness greater than 6mm, used to ship products between countries.
- main purpose is to prevent the international transport and spread of disease and insects that could negatively affect plants or ecosystems.
- affects all WPM (pallets, crates, dunnage, etc.) requiring that WPM must be made from debarked wood and then heat treated or fumigated with methyl bromide

# ISPM 15

- Provides for a compliance mark to be applied to WPM complying with ISPM 15



- b. Facility Identification – product manufacturer name, brand or assigned facility number
- c. Heat Treated mark
- d. Country Code – the two letter ISO country abbreviation
- e. Approved International symbol for compliant wood packaging material

# ALSC INVOLVEMENT

- APHIS asked ALSC to develop an accreditation program for agencies using the heat treatment portion of ISPM 15 standard.
- In 2001 APHIS and ALSC entered into a memorandum of understanding whereby ALSC would monitor the performance of agencies that audit heat treated WPM manufactured and labeled under ISPM 15 standard.
- The Board of Review of the ALSC discharges this function by accrediting and monitoring the performance of those agencies that label HT WPM under ISPM 15 .

# American Lumber Standard Committee

- Office located in Germantown, MD
- Total staff of 12--7 Field Representatives living in CA, ID, BC, MS, GA, NC and NY and 5 support staff in Germantown, MD
- 501-c3 organization
- Total budget approx. \$2.6 million
- Staff time spent on the various programs
  - 53% for the WPM program
  - 41% for the lumber program
  - 4% for the treated wood program
  - 2% on the densified fuel program
- Operate programs in 16 countries

# AMERICAN LUMBER STANDARD COMMITTEE, INCORPORATED

A Consensus Standard For The Formulation And Enforcement  
Of Lumber Grading Rules And Design Values

1941—U.S. court directs present formulation of American Lumber Standard under which standard is promulgated under Department of Commerce procedures and Department of Commerce appoints American Lumber Standard Committee (ALSC)

1952—Court finds ALSC and Board of Review are impartial agencies adequately constituted to determine competency of grading agencies and that the standards employed by the Board of Review are “adequate to promote competency in grading and in the public interest”

## PS 20 American Softwood Lumber Standard

- involvement of U.S. Forest Products Laboratory (Department of Agriculture) and National Institute of Standards & Technology (Department of Commerce) in formulation of design values in lumber grading rules
- acceptance of foreign lumber under the American Lumber Standard
- provides executive officer and staff for administration of ALSC, Board of Review, National Grading Rule Committee and field inspection staff
- General Counsel provides legal services for American Lumber Standard Committee, Board of Review and National Grading Rule Committee

### American Lumber Standard Committee, Incorporated

- membership appointed by Secretary of Commerce every 5 years
- Secretary of Commerce to maintain proper balance among rules writing agencies, non-rules writing agencies, retailers, wholesalers, engineers, homebuilders, consumers, general contractors, architects, wood using industries, intermediate manufacturers, government representatives, wood treating industry.

### Independent accreditation board (Board of Review)

- nominated by ALSC
- reviewed by Department of Commerce
- elected by ALSC
- can have no affiliation with industry

### National Grading Rule Committee membership includes:

- rules writing agencies, non-rules writing agencies, architects, building code officials, distributors, home builders, consumers, Canadian agencies, engineers
- Has responsibility for keeping national grading rule (NGR) for dimension lumber current

Has responsibility for keeping the Standard current

Prepares policies to implement the Standard system and enforcement regulations for use by accreditation board (Board of Review)

Certifies grading rules as conforming to VPS 20

- NeLMA
- NLGA
- NSLB
- RIS
- SPIB
- WCLIB
- WWPA

Accredits agencies to grade under certified rules and label HT only

-AFPA	-CFPA	-CI
-CLA	-CMSA	-COFI
-CSI	-MLB	-NeLMA
-NLPA	-NSLB	-OLMA
-PLIB	-QFIC	-RIS
-RRA	-SIWP	-SPIB
-TP	-WCLIB	-WWPA

- approximately 935 grading mills and 930 HT only mills subscribe to accredited agency services
- approximately 98% of softwood lumber consumed in U.S.

Agencies accredited to label HT only

-AWIS	-C&R	-CIS	-EWPI
-LIWP	-MFPA	-PRL	-WRD

Accredits agencies to supervise treated wood using AWPA standards

-BI	-SPIB
-TP	

- approximately 94 plants subscribe to accredited agency services

Accredits agencies to supervise labeling of wood packaging material using IPPC guidelines

-AWIS	-CI
-C&R	-CIS
-EWPI	-FP
-LIWP	-NeLMA
-MFPA	-PLIB
-RIS	-RRA
-PRL	-SIWP
-SPIB	-TP
-WCLIB	-WR
-WWPA	

- approximately 5140 facilities subscribe

Accredits agencies to supervise labeling of wood pellets using PFI standard:

AFPA	CIS
CMSA	C&R
NeLMA	PFS
PLIB	PRL
SPIB	TP
WCLIB	WWPA

Accredits laboratories to analyze wood pellets manufactured to PFI standard:

- University of Maine
- Canadian Bio-Energy Centre
- Timber Products
- Twin Ports Testing
- Minnesota Valley Testing Laboratory

Maintains an ongoing program to monitor and enforce agency performance

# How the ALSC Program Works

The ALSC program is a three tiered program with oversight.

**ALSC** -- establishes policies and procedures that are used to develop a quality control program for the labeling of lumber, treated wood, wood packaging material and densified fuel. ALSC continually reviews these procedures to assure appropriateness.

**Board of Review** – accredits agencies and implements the ALS quality control program in accordance with ALSC polices and procedures.

**Agency** -- provides service to the operations that produce products under the various programs to be labeled as complying with the ALSC requirements.

# BOR Monitoring

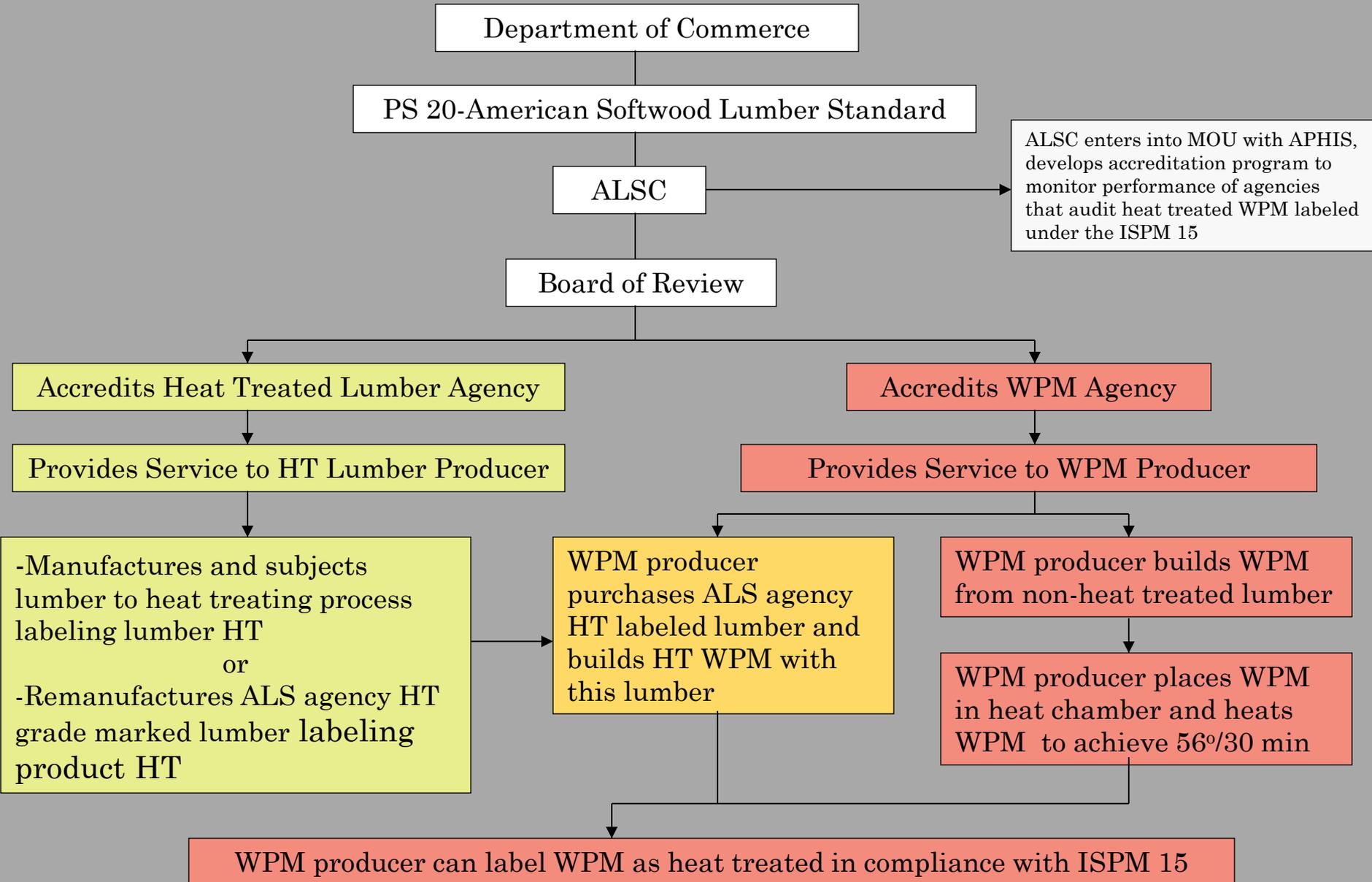
Uses a full time staff to continually monitor each accredited agency for compliance with the accreditation requirements by:

- BOR staff makes unannounced inspections at the mills, treating plants, wood packaging material operations or pellet mills to obtain information to judge the competency of the agency providing service.
- When problems are encountered, the product in question is held for correction by the agency. The agency corrects the problem and furnishes a written report to BOR detailing the steps taken by the agency to correct the problem and prevent recurrence.

# BOR Monitoring

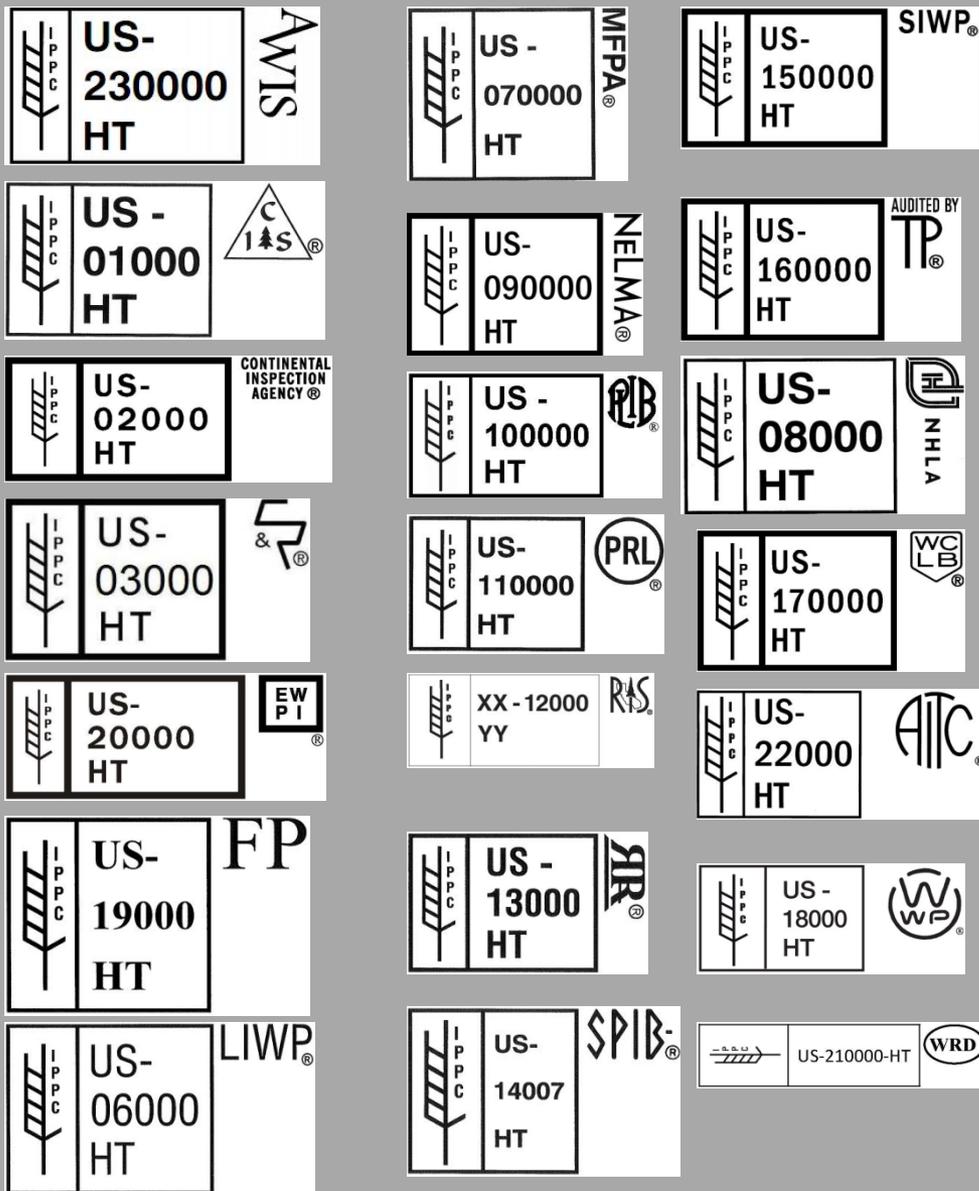
- When a problem is found the mill is placed on a list for return inspections by ALS staff to assure the agency has addressed the problem.
- If the agency does not meet the requirements of the ALSC, the BOR can de-accredit or suspend the accreditation of the agency.
- Since 1970 the BOR had deaccredited:
  - 4 lumber agencies, 2 treated wood agencies, 1 heat treat only agency and 1 wood packaging agency
  - most recent being in August 2009 when the BOR deaccredited Forest Products Services as a heat treat only agency and a wood packaging material agency treated agency for non-compliance to the requirements

# Summary of How the ALSC System Enables WPM to be Labeled Heat Treated in Compliance with the ISPM 15

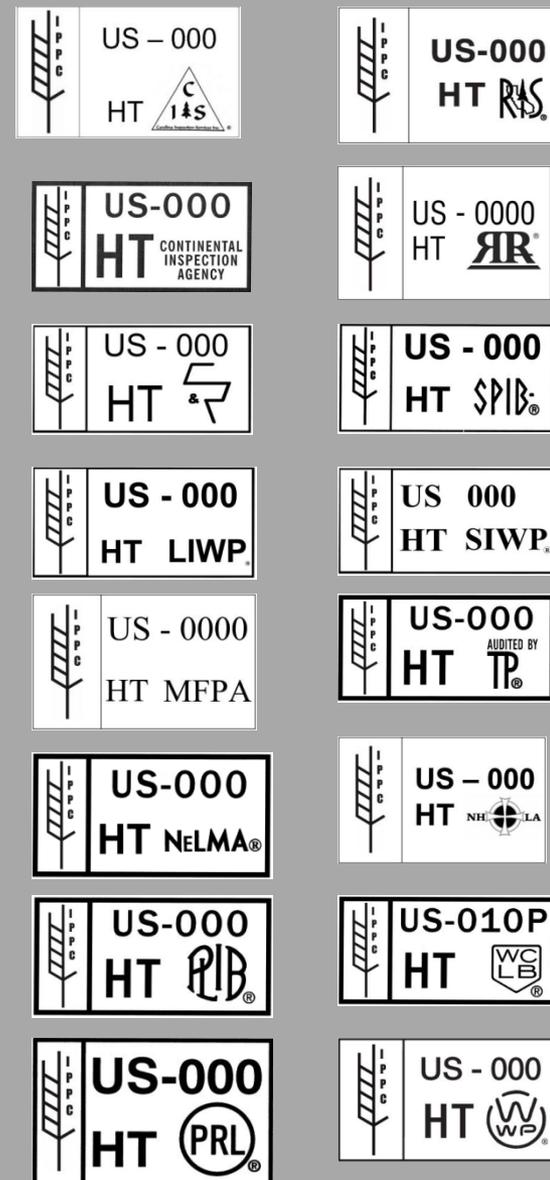


# Typical US WPM Agency ISPM 15 Quality Marks

## New Format



## Old Format



# ISPM 15 Acceptable Treatments

## ➤ Heat treatment

- Various energy sources may be suitable provided they meet the heat treatment parameters
  - ✓ conventional steam heating,
  - ✓ kiln-drying,
  - ✓ heat-enabled chemical pressure impregnation
  - ✓ dielectric heating (microwave, radio frequency) may all be considered heat treatments

## ➤ Methyl bromide

# HT, DH & MB

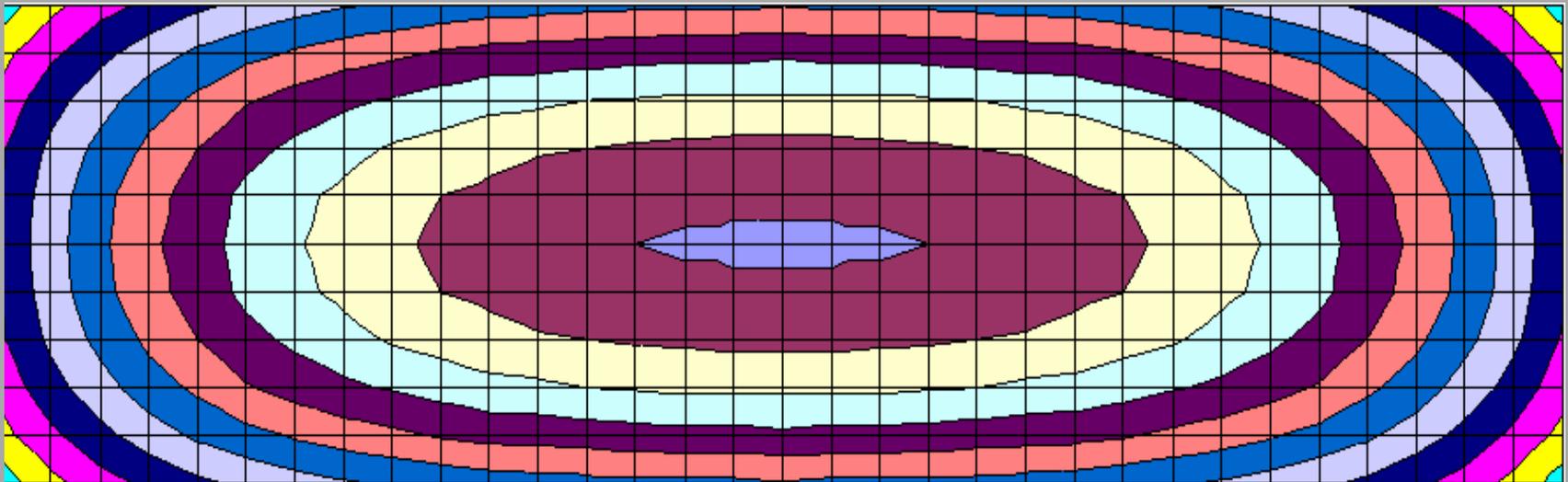
ISPM 15 considers HT, DH and MB treatment to be significantly effective against most pests of living trees associated with wood packaging material based on:

- the range of pests that may be affected
- the efficacy of the treatment
- the technical and/or commercial feasibility.

# Why was 56° C for 30 minutes selected?

- Treatment of wood to a core temperature of 56°C for 30 min was **highly effective for treatment of pinewood nematode-infested wood**
- Heating wood to 56°C for 30 min **will kill most insect life stages**

Typical temperature profile at end of conventional heat treatment through cross-section of 51mm thick by 152mm wide ash wood of 56<sup>o</sup> C.



**Note:** DH (microwave) is generally just the opposite as the core is hotter than the surface ; exception is frozen wood where core is coldest until it thaws.

# Bark Restrictions

## ISPM 15 requires the use of debarked wood

- Irrespective of the type of treatment applied, wood packaging material must be made of debarked wood.
- Any number of visually separate and clearly distinct small pieces of bark may remain if they are:
  - ✓ less than 3 cm in width (regardless of the length) or
  - ✓ greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 square cm.

In English units, 3 cm is about 1-1/8" wide and 50 square cm is about 7.75 square inches (**about the size of a credit card**)

# Why Limit the Size of Bark?

- Extensive experiments using varying amounts of bark and pests to determine the amount of bark that is necessary for the pests to complete a life cycle.
- Patches of bark larger than a credit card in size were sufficient for a number of quarantine pests to colonize and complete a life cycle
- Pests were not as successful completing a life cycle on long narrow strips of bark
- Thus the basis for the bark size limitations listed in ISPM 15

# Standards On the Horizon

# Management of Phytosanitary Risks Associated in the International Movement of Wood

- guidance standard that describes phytosanitary measures intended to reduce the risk of introduction and spread of quarantine pests associated with the international movement of wood (with or without bark)
- pest risk varies among different wood commodities – round wood, sawn wood, mechanically processed wood and processed wood material – depending on the level of processing that the wood has undergone and the presence or absence of bark
- describes various options for phytosanitary measures for managing the pest risks related to wood, including bark removal, treatment, chipping and inspection
- describes the general pest risk profile for each commodity by indicating the major pest groups associated with each one

# Wood products and handicrafts made from raw wood

- will assist NPPOs in assessing the potential phytosanitary risks and establishing suitable phytosanitary measures to manage the risk related to the importation of wood products and handicrafts made from raw wood
- will provide guidance to NPPOs in categorizing the commodities/articles according to the level of risk they pose when moved in international trade (low, medium, high) taking into consideration their intended use
- will propose and describe appropriate phytosanitary measures to reduce the risk of introduction and spread of quarantine pests potentially harboured by this pathway to an acceptable level

2006



FRUIT FLIES  
RALSTONIA

ASIAN  
GYPSY MOTH

FALSE  
CODLING  
MOTH

CACTOBLASTIS  
PHYTOPHTHORA  
RAMORUM

SOYBEAN  
RUST

Canada

United States

Mexico

CITRUS  
DISEASES

EMERALD  
ASH BORER

ASIAN  
LONGHORNED  
BEETLE

POTATO CYST  
NEMATODE  
PLUM POX

SIREX  
NOCTILIO

2007

**MEDFLY**  
2 Outbreaks  
in California

**FRUIT FLIES**

**RALSTONIA**

**LIGHT BROWN**

**APPLE MOTH**

**ASIAN**

**GYPSY MOTH**

**PANICLE RICE MITE**

**FALSE  
CODLING  
MOTH**

**CHRYSANTHEMUM WHITE RUST**

**CACTOBLASTIS**

**GLASSY WING SHARPSHOOTER**

**PHYTOPHTHORA**

**RAMORUM**

**FISCIUS WHITEFLY**

**SOYBEAN  
RUST**

Canada

United States

Mexico

**CITRUS  
DISEASES**

**EMERALD  
ASH BORER**

**RICE CUT WORM**

**ASIAN**

**LONGHORNED  
BEETLE**

**EUROPEAN  
GYPSY MOTH**

**POTATO CYST**

**NEMATODE**

**BEE COLONY COLLAPSE**

**PLUM POX**

**RED PALM MITE**

**SIREX**

**NOCTILIO**

# MAPS CLEARLY ILLUSTRATE

- NAPPO COUNTRIES - Canada, Mexico, US  
Continuously under attack from the introduction and establishment of foreign pests, diseases and pathogens
- Risk to agriculture and forest resources is continuous and expanding exponentially
- World travel and trade pressure – the ever increasing volume and speed are the greatest challenge to protecting agriculture production and forest resources worldwide

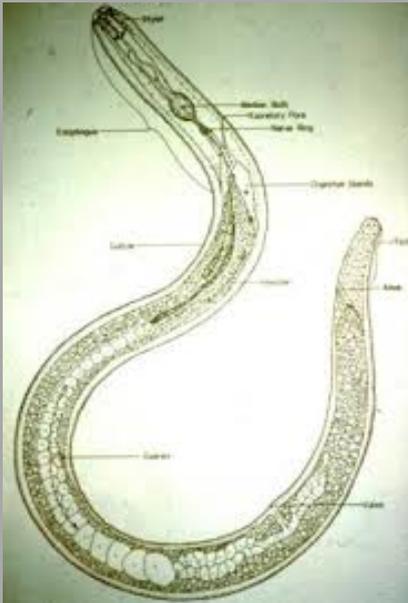
# Emerald Ash Borer



*Sirex noctilio*



# Pinewood Nematode



# Asian Longhorned Beetle



# ASIAN GYPSY MOTH



# European Gypsy Moth



# Glassy-winged Sharpshooter



# INFORMATION

- Visit the ALSC website address at:

**[www.alsc.org](http://www.alsc.org)**

- ALSC phone number 301.972.1700
- ALSC fax number 301.540.8004
- ALSC email **[alsc@alsc.org](mailto:alsc@alsc.org)**
- Contacts John McDaniel or Russell Reck

**THANK YOU!!!**