

# EXPORT WOOD PACKAGING MATERIAL FUMIGATION POLICY

June 2009

The Export Wood Packaging Material Fumigation Enforcement Committee (also known as the Enforcement Committee) is authorized to accredit and monitor the activities and performance of inspection agencies that, in turn, inspect and audit the effective fumigation of wood packaging materials (WPM), dunnage and lumber. The criteria for accreditation are based on performance, efficiency, reliability, and integrity of an inspection agency to inspect and audit fumigation, WPM and lumber facilities. Moreover these criteria are consistent with the International Standard for Phytosanitary Measures (ISPM) Publication No. 15 *Guidelines for Regulating Wood Packaging Material in International Trade*<sup>1</sup> for fumigation, which consists of:

- New, used, remanufactured, repaired, combo, or recycled WPM (i.e. pallets, pallet collars, skids, containers, crating/crates, bins, boxes, cable drums, spools, reels), dunnage and lumber must be fumigated with methyl bromide in accordance with a schedule that achieves the minimum concentration-time (CT) product over 24 hours at the temperature and final residual concentration listed specified below:

<b>Temperature</b>	<b>CT (g*h/m<sup>3</sup>) over 24 hours</b>	<b>Minimum final concentration (g/m<sup>3</sup>) after 24 hours</b>
21°C (70°F) or above	650	24
16°C (61°F) or above	800	28
10°C (50°F) or above	900	32

This CT must be achieved throughout the wood, including at its core, although the concentration would be measured in the ambient atmosphere. The minimum temperature of the wood and its surrounding atmosphere must be not less than 10°C and the minimum exposure time must be not less than 24 hours. Monitoring of gas concentrations must be carried out at a minimum at 2, 4 and 24 hours (in the case of longer exposure times and weaker concentrations, additional measurement should be recorded at the end of fumigation).

- The schedule that may be used for achieving the minimum required CT for WPM, dunnage and lumber treated with methyl bromide (initial doses may need to be higher in conditions of high sorption or leakage):

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<sup>1</sup> International Plant Protection Convention (IPPC). 2009. Guidelines for regulating wood packaging material in international trade. International Standards for Phytosanitary Measures (ISPM) Publication No. 15. FAO, Rome, Italy. 16 p.

Temperature	Dosage rate		Minimum concentration (g/m <sup>3</sup> )(oz./1000 ft. <sup>3</sup> ) at:			
	(g/m <sup>3</sup> )	(lbs./1000 ft. <sup>3</sup> )	2 hrs.	4 hrs.	12 hrs.	24 hrs.
21°C (70°F) or above	48	3.0	36	31	28	24
16°C (61°F) or above	56	3.5	42	36	32	28
10°C (50°F) or above	64	4.0	48	42	36	32

The following factors must be appropriately addressed by the fumigators involved in the application of methyl bromide treatment:

1. Fans are used as appropriate during the gas distribution phase of fumigation to ensure that equilibrium is reached and should be positioned to ensure that the fumigant is rapidly and effectively distributed throughout the fumigation enclosure (preferably within one hour of application).
2. Fumigation enclosures are not loaded beyond 80% of their volume.
3. Fumigation enclosures are well sealed and as gas tight as possible. If fumigation is to be carried out under sheets, these must be made of gas-proof material and sealed appropriately at seams and at floor level.
4. The fumigation site floor must either be impermeable to the fumigant or gas-proof sheets must be laid on the floor.
5. Methyl bromide is often applied through a vaporizer ('hot gassing') in order to fully volatilize the fumigant prior to its entry into the fumigation enclosure.
6. Methyl bromide treatment is not carried out on WPM, dunnage and lumber exceeding 20 cm in cross section. Wood stacks need separators at least every 20 cm to ensure adequate methyl bromide circulation and penetration.
7. When calculating methyl bromide dosage, compensation must be made for any gas mixtures (e.g. 2% chloropicrin) to ensure that the total amount of methyl bromide applied meets required dosage rates.
8. Initial dose rates and post-treatment product handling procedures take account of likely methyl bromide sorption by the treated WPM, dunnage, lumber or associated product (e.g. polystyrene boxes).
9. The measured temperature of the product or the ambient air (whichever is lower) is used to calculate methyl bromide dose, and must be at least 10°C (including at the wood core) throughout the duration of treatment.
10. WPM, dunnage or lumber to be fumigated is not wrapped or coated in materials impervious to the fumigant.
11. Records of methyl bromide treatments are retained by WPM and fumigation facilities, for a period of 3 years for inspection and auditing purposes.

- WPM, dunnage and lumber 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 length) or
  - Greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 cm<sup>2</sup>

Removal of bark must be carried out before fumigation because the presence of bark on the wood affects the efficacy of methyl bromide treatment.

At fumigation, WPM and lumber facilities, the inspection agency shall inspect and audit on a periodic basis:

- The minimum requirements for methyl bromide CT and dosage rate, exposure temperature and time by reviewing the facility records, fumigation data and/or other data pertinent to the MB fumigation process;
- New, used, remanufactured, repaired, combo, or recycled WPM, dunnage and lumber under this program is marked MB under the supervision of an inspection agency accredited by the Enforcement Committee;
- New, used remanufactured, repaired, combo, or recycled WPM, and dunnage bear mark(s) containing the following information:
  - a. The approved IPPC logo.
  - b. The two-letter US abbreviation followed by a unique number assigned by an inspection agency to the fumigation facility or WPM facility.
  - c. The “MB” abbreviation for methyl bromide fumigation.
  - d. The identifying symbol, logo, or name of the inspection agency.



Inspection  
agency logo



e. “DUN” or “DUNNAGE”



- Lumber bear mark(s) containing the following information:
  - a. The unique number assigned by an inspection agency to the fumigation or lumber facility.
  - b. The “MB” abbreviation for methyl bromide fumigation.
  - c. The identifying symbol, logo, or name of the inspection agency.

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The mark(s) and the application of such mark(s) shall be as approved by the Enforcement Committee.

The Enforcement Committee shall implement this policy, and accredit and monitor inspection agencies pursuant to the Memorandum of Understanding with the United States Department of Agriculture (USDA) Animal and Plant Health Inspection Service (APHIS) and the National Wooden Pallet and Container Association (NWPCA) and other regulations adopted by NWPCA specifying the requirements to be met by inspection agencies, fumigation, WPM, and lumber facilities.

An accredited inspection agency shall enter into a standard contract agreement with NWPCA. An accredited inspection agency shall in turn enter into standard contract agreements that have been approved by the Enforcement Committee with each fumigation, WPM and lumber facility provided with quality control, inspection, certification, and auditing services.

The Enforcement Committee shall have the option to employ consultants to assist in implementation and conduct of this policy. The cost of the consultant shall be borne by the inspection agency or agencies involved.

Inspection agencies accredited under this policy shall pay such charges and fees as are fixed and assessed by NWPCA.

Inspection agencies accredited by the Enforcement Committee shall allow the above-described treatment mark to be used only on WPM, dunnage and lumber that conform to procedures referenced in the Export Wood Packaging Material Fumigation Enforcement Regulations. Conversely, such agencies shall not authorize the use of the above-mentioned treatment mark or one similar to it on WPM, dunnage and lumber treated to procedures not conforming to those referenced in the Export Wood Packaging Material Fumigation Enforcement Regulations and ISPM 15.

The authorization of this Policy by NWPCA and accreditation oversight of the Enforcement Committee shall not indicate approval of or responsibility for ISPM 15. Furthermore, neither NWPCA nor the Enforcement Committee has any responsibility for the WPM, dunnage and lumber treated and marked under this Policy nor do they endorse, approve, or adopt any warranty or other representation regarding a fumigation, WPM and lumber facility, or any other person or entity.

Other fumigants can be included in this Policy if the chemical has demonstrated that it can provide adequate level of phytosanitary protection and has been approved and adopted by the Commission on Phytosanitary Measures (CPM).