MAF BIOSECURITY NEW
ZEALAND EXPORT
CERTIFICATION STANDARD

Technical Requirements: Registered Certification Mark (ISPM15)

This standard specifies the minimum technical requirements to facilitate the application of a MAF registered certification mark as per ISPM 15 to meet importing country requirements.

<table>
<thead>
<tr>
<th>REVIEW</th>
<th>This MAFBNZ standard is subject to periodic review.</th>
</tr>
</thead>
<tbody>
<tr>
<td>ENDORSEMENT</td>
<td>This MAFBNZ standard is hereby endorsed.</td>
</tr>
<tr>
<td>Director Border Standards MAFBNZ</td>
<td></td>
</tr>
<tr>
<td>Date</td>
<td>5th March 2010</td>
</tr>
</tbody>
</table>

MAF Biosecurity New Zealand
P O Box 2526
Wellington
New Zealand
AMENDMENT RECORD and IMPLEMENTATION SCHEDULE

Amendments to this Standard originally issued on 1 June 2006 will be given a consecutive number and will be dated.

Please ensure that all amendments are inserted, obsolete pages removed, and the record below is completed.

<table>
<thead>
<tr>
<th>Amendment No:</th>
<th>Date:</th>
<th>Specification:</th>
<th>Implementation Date:</th>
</tr>
</thead>
<tbody>
<tr>
<td>1</td>
<td>08/12/2009</td>
<td>• Update to align with revised ISPM 15 Standard 2009</td>
<td>15/03/2010</td>
</tr>
<tr>
<td>2</td>
<td>07/01/2010</td>
<td>• Amended Section 5.2 to more clearly define the requirements of the International Standard for ISPM 15 (2009) for repaired wood packaging material.</td>
<td>15/03/2010</td>
</tr>
<tr>
<td>3</td>
<td>27/01/2010</td>
<td>• Amended Section 3.3.vi and Section 5.2 to further clarify the requirements of the International Standard for ISPM 15 (2009).</td>
<td>15/03/2010</td>
</tr>
<tr>
<td>4</td>
<td>26/02/2010</td>
<td>• Reformatted Sections 4.1 and 4.2.</td>
<td>15/03/2010</td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Amended new Section 4.1.1 to provide further clarification for composite wood packaging material.</td>
<td></td>
</tr>
<tr>
<td></td>
<td></td>
<td>• Added new Section 2.6 to outline exempt wood packaging material.</td>
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</tr>
</tbody>
</table>
TABLE OF CONTENTS

TABLE OF CONTENTS

1 INTRODUCTION ........................................................................................................... 3

1.1 Background .............................................................................................................. 4

1.2 Purpose .................................................................................................................... 4

1.3 References .............................................................................................................. 4

1.4 Definitions .............................................................................................................. 4

2 APPROVAL TO APPLY A MAF REGISTERED ISPM 15 MARK ............................................. 5

2.1 Scope of Activity and Applicable Standards ................................................................. 5

2.2 Process for Approval to Apply the Certification Mark .................................................. 6

2.3 Register of Certified Mark Applicators .................................................................... 6

2.4 Biosecurity New Zealand Cost Recovery Fees ............................................................ 6

2.5 Suspension or Termination of Approval to Apply the MAF Registered
Certification Mark ........................................................................................................ 6

2.6 Exemptions .............................................................................................................. 6

3 APPROVED TREATMENTS ASSOCIATED WITH WOOD PACKAGING
MATERIAL ..................................................................................................................... 7

3.1 Mandatory Use of Debarked Wood ....................................................................... 7

3.2 Heat Treatment (Treatment Code for the Mark: HT) ................................................... 7

3.3 Methyl Bromide Treatment (Treatment Code for the Mark: MB) .............................. 7

4 APPLICATION AND SPECIFICATIONS OF THE REGISTERED CERTIFICATION
MARK ............................................................................................................................... 9

4.1 Application of the Registered Certification Mark ....................................................... 9

4.1.1 Application of the Registered Certification Mark to Composite Units ................. 9

4.1.2 Application of the Registered Certification Mark to Dunnage ............................. 9

4.2 Specifications of the Registered Certification Mark .................................................. 10

4.2.1 Examples of Acceptable Design for the Registered Certification Mark ............... 11

5 RE-USE, REPAIR, OR REMANUFACTURE OF PREVIOUSLY APPROVED
WOOD PACKAGING MATERIAL .................................................................................. 12

5.1 Reuse of Wood Packaging Material ....................................................................... 12

5.2 Repaired Wood Packaging Material ....................................................................... 12

5.3 Remanufactured Wood Packaging Material ............................................................ 12

6 SECURITY OF THE REGISTERED CERTIFICATION MARK ........................................... 13

7 STAFF COMPETENCY REQUIREMENTS .................................................................. 13

8 RECORDS MANAGEMENT ......................................................................................... 13
1 INTRODUCTION

1.1 Background

This standard is one of a set of standards that comprise the MAF Biosecurity New Zealand (MAFBNZ) export phytosanitary and seed certification system.

This export certification system operates through the delegation of authority by MAFBNZ to authorised Independent Verification Agencies (IVAs) and approved Organisations to carry out certification services and activities on behalf of MAFBNZ.

The standard “System Overview and Requirements” provides an overview of the policies and general requirements for MAFBNZ’s Plant (including Forestry) Export Certification system.

MAFBNZ has developed standards and technical requirements for the delegation of authority for the provision of phytosanitary and seed export certification services and activities.

The series of export certification standards for plants and forestry exports can be found on the MAFBNZ websites:


This standard is also part of the MAFBNZ Treatment Supplier Programme. MAFBNZ has the responsibility to ensure that official treatments being applied to imported risk goods provide the best practicable level of control.

1.2 Purpose

This standard specifies the minimum technical requirements to facilitate the application of a MAF registered certification mark as per ISPM 15 to meet importing country requirements.

1.3 References

Refer to Appendix 1, MAFBNZ Export Certification Standard: System Overview and Requirements, and specifically the International Standards for Phytosanitary Measures: Guidelines for Regulating Wood Packaging in International Trade (ISPM 15).


1.4 Definitions

Refer to Appendix 2, MAFBNZ Export Certification Standard: System Overview and Requirements and those contained in the International Standards for Phytosanitary Measures: Guidelines for Regulating Wood Packaging in International Trade (ISPM 15).
## 2 Approval to Apply a MAF Registered ISPM 15 Mark

The MAFBNZ Registered Certification Mark associated with treated wooden packaging as per ISPM 15 is hereafter referred to as a "registered certification mark".

Organisations applying Registered Certification Marks shall be located in New Zealand.

### 2.1 Scope of Activity and Applicable Standards

The following Table (1) identifies the linkage between Technical Requirements: Registered Certification Mark ISPM 15 Standard and other Biosecurity New Zealand Standards.

**Table 1** Linkage to other Biosecurity New Zealand Standards.

<table>
<thead>
<tr>
<th>Scope of phytosanitary activities</th>
<th>Applicable Biosecurity New Zealand Standards</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>Treatment Supplier standard</td>
</tr>
<tr>
<td>1. Organisation carrying out ISPM15 treatments and marking</td>
<td>Utilise some specifications</td>
</tr>
<tr>
<td>2. Organisation carrying out ISPM15 Marking only</td>
<td>None</td>
</tr>
<tr>
<td>3. Treatment Supplier carrying out all treatment options including ISPM treatments and ISPM 15 marking</td>
<td>Core system standard</td>
</tr>
</tbody>
</table>
2.2 Process for Approval to Apply the Certification Mark

Refer to Table 2 of the MAFBNZ Standard Organisation Requirements, or the approval process outlined in MAFBNZ Requirements for the Supplier of Official Treatments as appropriate.

If approval is granted the organisation and/or treatment supplier shall be assigned a registration number and the companies details will be posted on the MAFBNZ register of certified mark applicators.

2.3 Register of Certified Mark Applicators

This Biosecurity New Zealand register is available on the following MAFBNZ web site:


2.4 Biosecurity New Zealand Cost Recovery Fees

The schedule of fees is available from the MAFBNZ website:


2.5 Suspension or Termination of Approval to Apply the MAF Registered Certification Mark

Cross reference to MAFBNZ Standard Organisation Requirements Section 2.4-2.6 or Requirements for The Supplier of Official Treatments Section 9 as appropriate.

2.6 Exemptions

The following articles are of sufficiently low risk to be exempted from the provisions of this standard1:

i. Wood packaging material made entirely from thin wood (6 mm or less in thickness)

ii. Wood 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

iii. Barrels for wine and spirit that have been heated during manufacture

iv. Gift boxes for wine, cigars and other commodities made from wood that has been processed and/or manufactured in a way that renders it free of pests

v. Sawdust, wood shavings and wood wool

vi. Wood components permanently attached to freight vehicles and containers.

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1 Not all types of gift boxes or barrels are constructed in a manner that renders them pest free, and therefore certain types may be considered to be within the scope of this standard. Where appropriate, specific arrangements related to these types of commodities may be established between importing and exporting NPPOs.

3 APPROVED TREATMENTS ASSOCIATED WITH WOOD PACKAGING MATERIAL

3.1 Mandatory Use of Debarked Wood

Irrespective of the type of treatment applied, wood packaging material must be made of debarked wood. For this standard, any number of visually separate and clearly distinct small pieces of bark may remain if they are:

i. Less than 3 cm in width (regardless of the length); or

ii. Greater than 3 cm in width, with the total surface area of an individual piece of bark less than 50 square cm.

For methyl bromide treatment the removal of bark must be carried out before treatment because the presence of bark on the wood affects the efficacy of the methyl bromide treatment. For heat treatment, the removal of bark can be carried out before or after treatment.

3.2 Heat Treatment (Treatment Code for the Mark: HT)

Heat treatment must be carried out by a MAFBNZ Approved Treatment Supplier or Organisation.

Wood packaging material must be heated in accordance with a specific time-temperature schedule that achieves a minimum temperature of 56 °C for a minimum duration of 30 continuous minutes throughout the entire profile of the wood (including at its core).

3.3 Methyl Bromide Treatment (Treatment Code for the Mark: MB)

Methyl bromide treatment must be carried out by a MAFBNZ Approved Treatment Supplier or Organisation.

The wood packaging material must be fumigated with methyl bromide in accordance with a schedule that achieves the minimum concentration-time product (CT) over 24 hours at the temperature and final residual concentration specified in Table 2. 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 hours, 4 hours and 24 hours (in the case of longer exposure times and weaker concentrations, additional measurement must be recorded at the end of fumigation). New Zealand considers the CT sachets to be equivalent to monitoring.

Table 2: Minimum CT achieved over 24 hours for wood packaging material fumigated with methyl bromide

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3 The CT product utilised for methyl bromide treatment in this standard is the sum of the product of the concentration (g/m³) and time (h) over the duration of the treatment.


Page 7 of 13
<table>
<thead>
<tr>
<th>Temperature</th>
<th>CT (g·h/m²) over 24 h</th>
<th>Minimum final concentration (g/m³) after 24 h</th>
</tr>
</thead>
<tbody>
<tr>
<td>21 °C or above</td>
<td>650</td>
<td>24</td>
</tr>
<tr>
<td>16 °C or above</td>
<td>800</td>
<td>28</td>
</tr>
<tr>
<td>10 °C or above</td>
<td>900</td>
<td>32</td>
</tr>
</tbody>
</table>

One example of a schedule that may be used for achieving the specified requirements is shown in Table 3.

**Table 3:** Example of a treatment schedule that achieves the minimum required CT for wood packaging material treated with methyl bromide (initial doses may need to be higher in conditions of high sorption or leakage)

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Dosage (g/m³)</th>
<th>Minimum concentration (g/m³) at:</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td></td>
<td>2 h</td>
</tr>
<tr>
<td>21 °C or above</td>
<td>48</td>
<td>36</td>
</tr>
<tr>
<td>16 °C or above</td>
<td>56</td>
<td>42</td>
</tr>
<tr>
<td>10 °C or above</td>
<td>64</td>
<td>48</td>
</tr>
</tbody>
</table>

The following factors must be appropriately addressed by those involved in the application of methyl bromide treatment under this standard:

i. Fans shall be used as appropriate during the gas distribution phase of fumigation and should be positioned to ensure that the fumigant is rapidly and effectively distributed throughout the fumigation enclosure (preferably within one hour of application);

ii. Fumigation enclosures shall not be loaded beyond 80% of their volume;

iii. Fumigation enclosures shall be well sealed and gas tight. 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;

iv. The fumigation site floor shall be either impermeable to the fumigant or gas-proof sheets must be laid on the floor;

v. Methyl bromide shall be applied through a vaporizer ('hot gassing') in order to fully volatilize the fumigant prior to its entry into the fumigation enclosure;

vi. Methyl bromide treatment shall not be carried out on wood packaging material exceeding 20 cm in cross section. Wood stacks must contain separators at least every 20 cm to ensure adequate methyl bromide circulation and penetration;

vii. When calculating methyl bromide dosage, compensation shall be made for any gas mixtures (e.g. 2% chloropicrin) to ensure that the total amount of methyl bromide applied meets required dosage rates (see Table 3);

viii. Initial dose rates and post-treatment product handling procedures shall take account of the likely methyl bromide sorption by the treated wood packaging material or associated product (e.g. polystyrene boxes);

ix. The measured temperature of the product or the ambient air (whichever is the lower) shall be used to calculate the methyl bromide dose, and must be at least 10 °C (including at the wood core) throughout the duration of the treatment;

x. Wood packaging material to be fumigated shall not be wrapped or coated in materials impervious to the fumigant; and

xi. Records of methyl bromide treatments shall be retained by treatment providers, for a period of two years for auditing purposes.

4 APPLICATION AND SPECIFICATIONS OF THE REGISTERED CERTIFICATION MARK

4.1 Application of the Registered Certification Mark

The registered certification mark shall only be applied by a MAFBNZ approved registered certification mark applicator to wood packaging material that is:

i. Treated in compliance with International Standard for Phytosanitary Measures No. 15: Guidelines for Regulating Wood Packing Material in International Trade (ISPM 15);

ii. Sourced from a
   a) MAFBNZ approved Treatment Supplier, or
   b) MAFBNZ approved Organisation who has approval to undertake ISPM 15 official treatments;

iii. Clearly traceable to the official treatment process; and

iv. In accordance with specific importing countries treatment requirement.

4.1.1 Application of the Registered Certification Mark to Composite Units

Where various components are integrated into a unit of wood packaging material, the resultant composite unit must be considered as a single unit for marking purposes. On a composite unit of wood packaging material made of both treated wood and processed wood material (where the processed component does not require treatment), the mark may appear on the processed wood material components to ensure that the mark is in a visible location and is of a sufficient size. This approach to the application of the mark applies only to composite single units, not to temporary assemblies of wood packaging material.

4.1.2 Application of the Registered Certification Mark to Dunnage

Special consideration of legible application of the mark to dunnage may be necessary because treated wood for use as dunnage may not be cut to final length until loading of a conveyance takes place. It is important that shipper ensure that all dunnage used to secure or support commodities is treated and displays the mark, and that the marks are clear and legible. Small pieces of wood that do not include all the required elements of the mark must not be used for dunnage. Options for marking dunnage appropriately include:

i. Application of the mark to pieces of wood intended for use as dunnage along their entire length at very short intervals (NB: where very small pieces are subsequently cut for use as dunnage, the cuts must be made so that an entire mark is present on the dunnage used.)
ii. Additional application of the mark to treated dunnage in a visible location after cutting, provided that the shipper is approved for ISPM 15.

4.2 Specifications of the Registered Certification Mark

The size, font types used, and position of the mark may vary, but its size must be sufficient to be both visible and legible to inspectors without the use of a visual aid. The mark must be rectangular or square in shape and contained within a border line with a vertical line separating the symbol from the code components. To facilitate the use of stencilling, small gaps in the border, the vertical line, and elsewhere among the components of the mark, may be present.

No other information shall be contained within the border of the mark. If additional marks (e.g. trademarks of the producer, logo of the authorizing body) are considered useful to protect the use of the mark on a national level, such information may be provided adjacent to but outside of the border of the mark.

The registered certification mark applied to wood packaging material must be:

i. Legible;
ii. Durable (permanent) and not transferable;
iii. Placed in a location that is visible when the wood packaging is in use, preferably on at least two opposite sides of the wood packaging unit;
iv. Any colour other than red or orange;
v. Stamped or branded to the wood packaging material; and
vi. Not be hand drawn

A mark indicating that wood packaging material has been subjected to an approved phytosanitary treatment in accordance with this standard shall comprise the following required components:

i. The IPPC certification symbol;
ii. A two letter country code, i.e. “NZ” for New Zealand;
iii. A unique producer/treatment provider code issued by MAFBNZ; and
iv. A treatment code using the appropriate abbreviation (“HT” for heat treated or “MB” for methyl bromide treated wood packaging material).

The design of the symbol must resemble closely that shown in the examples illustrated in Section 4.2.1 and must be presented to the left of the other components.

The country code must be the International Organization for Standards (ISO) two-letter country code (shown in the examples as “XX”). It must be separated by a hyphen from the producer/treatment provider code.

The producer/treatment provider code is a unique code assigned to the producer of the wood packaging material or treatment provider who applies the marks (shown in the examples as “000”).
The treatment code is an IPPC abbreviation for the approved measure used and shown in the examples as “YY”. The treatment code must appear after the combined country and producer/treatment provider codes. It must appear on a separate line from the country code and producer/treatment provider code, or be separated by a hyphen if presented on the same line as the other codes.

<table>
<thead>
<tr>
<th>Treatment code</th>
<th>Treatment type</th>
</tr>
</thead>
<tbody>
<tr>
<td>HT</td>
<td>Heat treatment</td>
</tr>
<tr>
<td>MB</td>
<td>Methyl bromide</td>
</tr>
</tbody>
</table>

### 4.2.1 Examples of Acceptable Design for the Registered Certification Mark

The following are examples of some acceptable variants of the required components of the registered certification mark.

![Certification Mark Examples](image)

(This represents a prospective example of a mark applied by stencilling; small gaps may be present in the border, ad the vertical line, and elsewhere among the components of the mark.)
5 RE-USE, REPAIR, OR REMANUFACTURE OF PREVIOUSLY APPROVED WOOD PACKAGING MATERIAL

5.1 Reuse of Wood Packaging Material

A unit of wood packaging material that has been treated and marked in accordance with the ISPM 15 standard and that has not been repaired, remanufactured or otherwise altered does not require re-treatment or re-application of the mark throughout the service life of the unit. Where alterations are made to articles of wood packaging, see Section 5.2 below.

5.2 Repaired Wood Packaging Material

Repaired wood packaging material is wood packaging material that has had up to approximately one third of its components removed and replaced. When marked wood packaging material is repaired, only wood treated in accordance with the ISPM 15 standard is used for the repair, or wood constructed or fabricated from processed wood material. Where treated wood is used for the repair, each added component must be individually marked in accordance with the ISPM 15 standard. The repaired wood packaging material may have previous marks obliterated (e.g. by covering with paint or grinding).

If the eligibility of treated wood used for repair is unknown then the repaired wood packing material must have previous marks obliterated (e.g. by covering with paint or grinding) and the unit must be re-treated, and the mark then applied in accordance with the ISPM 15 standard.

5.3 Remanufactured Wood Packaging Material

If a unit of wood packaging material has had more than approximately one third of its components replaced, the unit is considered to be remanufactured. In this process, various components (with additional reworking if necessary) may be combined and then reassembled into further wood packaging material. Remanufactured wood packaging material may therefore incorporate both new and previously used components.
Remanufactured wood packaging material must have any previous applications of the mark permanently obliterated (e.g. by covering with paint or grinding). Remanufactured wood packaging material must be re-treated and the mark must then be applied anew in accordance with the ISPM 15 standard.

6 SECURITY OF THE REGISTERED CERTIFICATION MARK

The registered certification mark is to be stored and protected from misuse, and is only to be used by competent staff (see section 7 below).

The MAFBNZ Approved Treatment Provider or Organisation shall document a system, and be operating to that system, to manage and control an inventory of registered certification mark stamps.

7 STAFF COMPETENCY REQUIREMENTS

Staff carrying out the registered certification mark application shall be competent in the following area:

i. Demonstrable ability to follow written procedures.

8 RECORDS MANAGEMENT

In addition to the requirements set out in the MAFBNZ Standard: Organisation Requirements, and/or MAFBNZ Standard: Requirements for The Supplier of Official Treatments the following records shall be kept:

i. Certification number assigned to the organisation by MAFBNZ; and
ii. Treatment certificates issued by approved treatment suppliers where applicable.