Australian Government

Australian Quarantine and Inspection Service

Cargo Containers

Quarantine aspects and procedures

15 September 2005

Important Notices

Disclaimer

The information contained in this document covers the Australian Quarantine and Inspection Service (AQIS) requirements for timber used as crates, pallets, and in containers as lining, flooring, and skids, and any other articles described as packaging and dunnage.

Importers must satisfy Australian quarantine concerns and comply with quarantine conditions applicable at the time of entry.

This document is current on the date of issue but may change without prior notice. Changes to this document are published on the 1st and 15th of the month, as required, and is directly available on the AQIS website at http://www.aqis.gov.au/cargoqap.

The Commonwealth of Australia through AQIS is not liable for costs arising from or associated with decisions to import based on conditions presented here, which are not current at the time of importation.

It is the importer's responsibility to be aware of and to ensure compliance with the requirements of all other regulatory and advisory bodies prior to, and following importation, e.g. the Australian Customs Service (ACS), State Departments of Agriculture, Food Standards Australia New Zealand, Therapeutic Goods Administration (TGA), and the Agricultural Pesticides and Veterinary Medicines Authority (APVMA).

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Australian Government
Australian Quarantine and Inspection Service

The Australian Quarantine and Inspection Service (AQIS) is an agency within the Commonwealth Department of Agriculture, Fisheries and Forestry.

CARGO CONTAINERS

QUARANTINE ASPECTS AND PROCEDURES

FOREWORD

Transporting goods in ships and aircraft between countries using containers is an economic and well-established practice. Quarantine requirements and procedures have been modified by the Australian Quarantine and Inspection Service (AQIS) to exclude exotic pests and diseases, while permitting reasonably quick clearance of containers and minimum interference to their movement within Australia.

This document deals with containers and the materials they are constructed from as they represent a potential means of introducing serious pests and diseases to Australia. Timber pests pose a significant quarantine risk to Australia. Accordingly, all exposed timber components and timber packing in Full Container Load (FCL) containers must be treated and appropriate verification of treatment supplied before the container can be considered for immediate release.

Quarantine is also concerned with the external and internal cleanliness of containers. As containers age and usage becomes even more widespread, the risks for quarantine are expected to multiply, and the need for quarantine vigilance will increase.

This document is designed to answer most questions on Australian quarantine entry requirements for containers. Should there be an uncertainty about any aspect of these procedures, contact one of the offices listed in Section 5.

This document relates to quarantine requirements. You should also be aware of the Australian Customs Service conditions before attempting to move imported cargoes.

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1. QUARANTINE PROBLEMS ASSOCIATED WITH CONTAINERS OR THE MATERIALS THEY CARRY

Quarantine import requirements for containers arriving in Australia from overseas ports are designed to exclude exotic pests and diseases while facilitating clearance of containers through the quarantine barrier.

The factors discussed below can be associated with containers or the materials they carry and are of specific quarantine concern since they could be the means of introducing serious pests and diseases to Australia.

1.1 Timber used in the construction of containers

AQIS is concerned about exposed solid timber components of containers and also exposed plywood and timber veneer components. If FCL release is required, exposed timber components must be treated to AQIS requirements. Containers constructed without any exposed timber are not subject to any specific quarantine requirements other than freedom from soil, plant material and contamination from animal products. AQIS has no quarantine concerns with reconstituted wood products such as particleboard, chipboard, masonite, oriented strand board, medium and high density fibreboard.

Australia has regulated the import of timber packing and timber associated with cargo containers since the 1970s. Interception records demonstrate that many insects, some exotic to Australia, attack seasoned timber and solid timber after non-permanent treatment. Containers with exposed timber components imported into Australia must be free of infestation.

Exposed timber used in the construction of containers should be permanently treated to minimise quarantine impediments in Australia. However, timber permanently and totally encapsulated in a manner which excludes insect infestation does not necessarily require chemical treatment.

Appendix I details AQIS approved permanent treatments (or immunisation treatments). These treatments are used to prevent infestation of the timber components during the 'life' of the container and many will also provide protection against timber decay. Treatment of the timber components eliminates a significant quarantine risk and facilitates quarantine clearance. Termites have been imported into a country within a container fitted with untreated plywood lining. Appendix IV details testing procedures to be followed in the event of a query concerning the treatment carried out on any timber.

Containers with untreated exposed timber components can be released from quarantine without inspection of those components provided the container has been fumigated with methyl bromide or sulphuryl fluoride and packed or shipped within 21 days. Acceptable offshore fumigation of the container will eliminate the need for quarantine inspection of the timber components on arrival. If not treated offshore, importers may elect to have the container treated on arrival to facilitate quarantine clearance of the container. Details of AQIS approved fumigation treatments are available in Appendix II. Fumigation treatments have no residual effect and since reinfestation can occur, these containers must be fumigated for every subsequent trip to Australia.

Some permanent treatments are also appropriate for timber and timber products imported as a commodity. In these instances, this document should be read in conjunction with the relevant import conditions for the specific commodity. AQIS import conditions for thousands of commodities are provided in the AQIS Import Conditions database ICON available at www.aqis.gov.au/icon.

1.2 Internal or external contamination

1.2.1 Giant African Snail (GAS)

Giant African Snail (GAS) or *Achatina fulica* is considered to be one of the most damaging agricultural pests in the world. To address the risk of introducing GAS to Australia, AQIS inspects for GAS on the external surfaces of sea freight containers originating from GAS target areas. In addition, AQIS requires the interior of containers originating from GAS target areas to be free of GAS.

The AQIS Import Conditions database ICON outlines AQIS import requirements in relation to GAS. Under 'ICON Search', use the search paramater 'snail' to view the ICON case for 'Snails - giant African snail (GAS)'. This ICON case lists GAS target areas and provides AQIS import requirements for sea freight containers and commercial cargo originating from GAS target areas.

1.2.2 Soil

This is an ideal medium for carrying weed seeds and a range of diseases, including foot and mouth disease, which could seriously affect Australia's agricultural production.

1.2.3 Plant Material

Small amounts of grain contamination can harbour serious stored grain insects and could introduce a new plant disease into Australia.

One of the most serious pests associated with plant and animal contaminants in containers is **khapra beetle (*Trogoderma granarium*).** This insect can persist for several years in undisturbed sites, in cracks, crevices and behind container linings then emerge to attack susceptible produce, which might subsequently be carried in the containers.

1.2.4 Animal products

Contaminants such as meat, bones or hides could introduce serious animal diseases to Australia. Bird droppings on cargo could also introduce avian diseases.

Thorough cleaning of the inside and outside of the container prior to shipment will assist in removing contamination and could alleviate the need for expensive and time-consuming quarantine treatment in Australia. All contaminated containers and cargoes detected entering Australia require treatment (at the importer's expense) before release.

1.3 Packing materials

1.3.1 Timber and timber treatments (including ISPM 15)

Many damaging timber pests and diseases not present in Australia are capable of living in solid timber and timber products such as plywood, veneers and peeler cores. They may enter Australia via timber used in the construction of containers (refer section 1.1) or timber used to pack and/or support cargo in containers. Where inspection reveals insect infestation or evidence of infestation, treatment is required at the importer's expense.

AQIS has no quarantine concerns with packing made solely of reconstituted wood products. Reconstituted wood products are those that no longer contain solid wood as a result of the manufacturing process and include particleboard, chipboard, masonite, oriented strand board, medium and high density fibreboard.

Note: AQIS commenced a review of import requirements for plywood in late 2004. Until this

review is completed, plywood will continue to be a quarantine concern.

AQIS requires imported timber packing and dunnage to be free of bark. Bark has the potential to contain numerous pathogens of quarantine concern that are not addressed by AQIS approved fumigation treatments. It compromises the reliability of inspection as a quarantine risk mitigation measure and acts as a shelter for quarantine pests. It also raises contamination risks through its physical characteristics.

To reduce quarantine risks associated with timber packing, timber may be permanently treated (refer chemical treatments in Appendix I) or temporarily disinfested (refer treatments in Appendices II and III). Permanent treatments are those that are capable of excluding insect infestation from the timber for its operational life. Temporary or non-permanent treatments eliminate insect infestation present in the timber at the time of treatment, but do not give residual or on-going protection.

In addition to the AQIS approved methods in Appendices I, II and III, timber packing and dunnage that is marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps also meets AQIS treatment requirements.

'ISPM 15' is the acronym used for 'International Standards for Phytosanitary Measures Publication No. 15: *Guidelines for Regulating Wood Packaging Material in International Trade*'. The French NIMP 15 version and Spanish NIMF version of the acronym are also approved for use in international trade. The full text of this standard is available from the International Phytosanitary Portal at www.ippc.int. The presence of an ISPM 15, NIMP 15 or NIMF15 compliant stamp or mark on timber packing or dunnage certifies that the timber bearing the mark has been subjected to an ISPM 15 approved measure (or treatment) as specified in Annex I of ISPM 15. As ISPM 15 is subject to periodic review by the Interim Commission on Phytosanitary Measures (ICPM), approved treatments may be reviewed and/or additional measures may be approved and included in Annex I of ISPM 15.

1.3.2. Packing material made of newly manufactured plywood

Packing material made of plywood is acceptable for facilitated quarantine clearance, that is without inspection or further treatment, provided the plywood is newly manufactured (i.e. not pre-used), is manufactured in:

- Australia, Canada, Europe, Israel, Japan, New Zealand, United Kingdom or USA within three months of shipment; or
- countries other than those above, within 21 days of shipment,

and in every case, accompanied by an acceptable certificate that includes the country of manufacture, the date of manufacture and a statement that the plywood has not been pre-used (see Appendix VII for an example of an acceptable newly manufactured plywood certificate).

Alternatively, packing material made of either new or pre-used plywood may qualify for facilitated clearance if treated offshore by an AQIS approved method (refer Appendices I, II and III). Acceptable treatment certificates must accompany such consignments.

Upon arrival, packing material made of plywood that does not meet the newly manufactured requirements above or has not been appropriately treated offshore will be subject to inspection, treatment (refer Appendices II and III), re-export or destruction with all options at the importer's expense.

Import conditions for bulk imports of plywood are provided in the AQIS Import Conditions database ICON, available at www.aqis.gov.au/icon.

1.3.3 Other packing materials

Plant material such as straw, rice hulls or similar plant material used as packing can carry many

exotic insect pests and diseases. Containers in which those materials have been used as packing material must be unpacked in order to destroy that material. Because of the risks associated with these materials AQIS advices that they not be used in the first instance.

Some acceptable alternatives are synthetic foam and plastics, metal frames, inflatable dunnage, woodwool, shredded paper, reconstituted wood products and other similar materials.

1.4 Goods subject to Australian Quarantine

Goods subject to quarantine control must be cleared by AQIS before the container is released.

2. QUARANTINE PROCEDURES FOR CONTAINERS

2.1 Approved ports

Containers may be imported into Australia through approved ports where quarantine staff and facilities are available. For example, all State capital ports are approved ports. Trans-shipment may be permitted from the wharf/terminal to locations outside the metropolitan area of the port of entry provided adequate AQIS staff and facilities are available to handle the containers at their destination.

2.2 Release of FCL containers

The release of FCL containers from the wharf/terminal to the consignee's premises in metropolitan and country areas is illustrated schematically in Figure 1. The general requirements which permit this movement are:

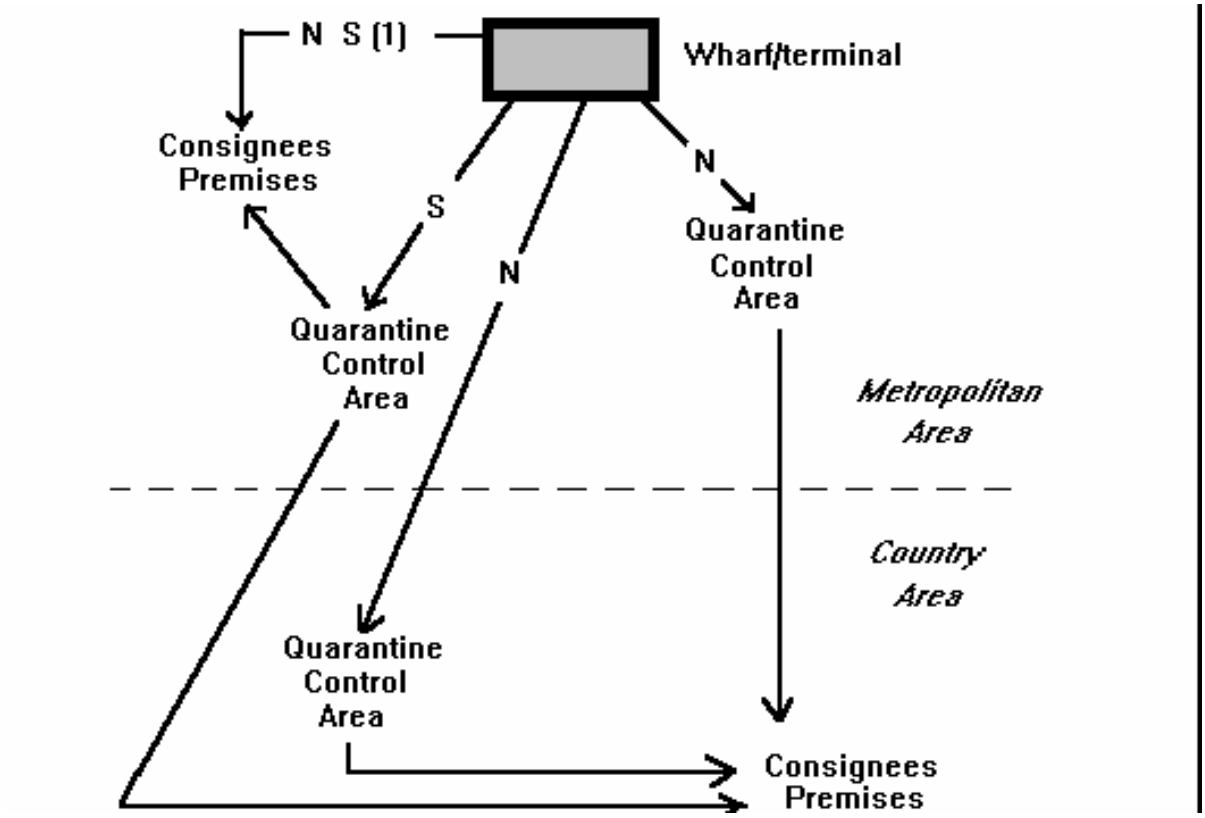
(i) The exterior of the container is free of contamination by soil or plant material. AQIS staff at the wharf/terminal inspect the external surfaces of containers during unloading operations. If contamination is found, it must be removed or treated before the container can proceed;

(ii) The goods, packing and interior of the container are not contaminated with material of animal and plant origin or soil;

(iii) No timber has been used as packing, or if timber has been used as packing, it is free of bark and the timber has been treated (refer Appendices I, II and III) or marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps. Treated timber packing that is not marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps and packing made of newly manufactured plywood must be accompanied by acceptable treatment certification. Timber packing includes crates, cases, dunnage, pallets and skids made of solid timber, plywood, veneers or peeler cores and any similar timber used to support, protect or carry a commodity, or any similar timber used as a shipping aid.

(iv) No straw, rice hulls or similar plant materials are used for packing. All such material should be declared.

Figure 1: Schematic representation of movement of FCL containers from the wharf/terminal to the consignee's premises in metropolitan and country areas.



N Goods not subject to quarantine
S Goods subject to quarantine
(1) Provided specific arrangements apply - see Section 2.2.2

2.2.1 Release of FCL containers carrying goods not subject to quarantine

FCL containers which conform to AQIS requirements for packing and cleanliness and do not contain goods subject to quarantine can be released immediately to unpacking addresses within the metropolitan area of the port of entry or within the metropolitan area of other approved ports.

Immediate release is only possible if appropriate documentation has been provided to AQIS at the port of entry prior to arrival of the vessel (see Section 3: Documentation).

All non hard-frozen containers destined for country unpacking addresses must receive a tailgate examination by quarantine and copies of treatment certificates for timber packing used in the container must be presented to quarantine before the container may be released. Unless otherwise directed, all hard-frozen containers accompanied by acceptable shipping company documentation providing evidence that goods have been maintained at -18°C (0°F) for at least 7 days are exempt from a tailgate examination, but still require an external examination to determine freedom from contamination.

The provision of treatment certificates in itself does not automatically qualify containers for immediate release without inspection. If a quarantine infringement is suspected in a container, it will be directed to an approved area for further inspection, and where necessary, additional treatment.

2.2.2 Release of FCL containers carrying goods subject to quarantine

FCL containers that contain goods subject to quarantine must go to a break-bulk depot for unpacking and inspection unless prior AQIS permission for release has been given.

The AQIS Import Conditions database ICON available at www.aqis.gov.au/icon provides information on import requirements for thousands of commodities.

Immediate release of containers carrying goods subject to quarantine and which otherwise meet our requirements for cleanliness and packing is possible provided specific arrangements exist for those goods. Procedures for exposed infestable agricultural produce and manufactured timber articles are listed below as examples.

Containers carrying goods subject to quarantine are not permitted to move to the country for unpacking. This is because of the increased risk of establishing pests and diseases in agricultural areas and the inadequacy of inspection and treatment facilities. However, where these constraints have been satisfied, delivery has been approved in accordance with appropriate conditions to manage quarantine risks. For a proposal to be considered contact the appropriate AQIS officer in your State at the address given in Section 5.

Contact the relevant AQIS State office for information on specific procedures which may apply to other quarantinable goods.

2.2.2(a) Exposed infestable agricultural produce in FCL containers

Khapra beetle is established within an area broadly limited north by the 35° parallel, south by the Equator, west by West Africa and east by Myanma; i.e. the warm dry regions along the Suez route from the Indian subcontinent to Europe. Khapra beetle has been introduced into areas of similar climatic conditions elsewhere, especially the alternative route between India and Europe around Africa.

Table 3 Khapra Beetle Countries

Afghanistan	Indonesia	Qatar
Algeria	Iran	Rwanda
Angola	Iraq	Saudi Arabia
Bahrain	Israel	Senegal
Bangladesh	Ivory Coast	Sierra Leone
Benin	Jordan	Somali Republic
Botswana	Kenya	Sri Lanka
Burkina	Korea, Republic of (South Korea)	Sudan
Burundi	Kuwait	Swaziland
Cambodia (Kampuchea)	Laos	Syria
Cameroon	Lebanon	Taiwan
Central African Republic	Lesotho	Tanzania
Chad	Liberia	Thailand
Comoros	Libya	Togo

Congo	Madagascar	Tunisia
Cyprus	Malawi	Turkey
Djibouti	Malaysia	Uganda
Egypt	Mali	United Arab Emirates
Equatorial Guinea	Mauritania	Uruguay
Eritrea	Morocco	Venezuela
Ethiopia	Mozambique	Vietnam
Gabon	Myanma (Burma)	Yemen
Gambia	Namibia	Zaire
Ghana	Niger	Zambia
Guinea	Nigeria	Zimbabwe
Guinea Bissau, Rep.	Oman	
India	Pakistan	

Conditions for import also vary in relation to the kind of container used to ship the produce. Fumigation of the empty containers is a requirement where there is a risk of insect infestation as a result of previous cargo carried in the container. Infestable residues often accumulate in spaces behind linings of containers particularly if they have been damaged at any time. These spaces provide favourable habitats for insects to shelter and breed.

Consequently, containers with wall linings must be fumigated prior to loading with exposed infestable agricultural produce. Flat-top, open-sided, insulated containers and those without wall linings do not require fumigation.

Containers with permanent wall linings have an air space between the lining and the steel wall of the container. The permanently immunised wooden floor and internal linings of these containers eliminate infestation in the timber, but the space behind the wall lining is an ideal place for stored product insects to survive in residues of agricultural products. To overcome the issue of insect infestation behind wall linings, AQIS requires lined FCL containers to undergo a precautionary fumigation with methyl bromide prior to loading with exposed infestable agricultural products.

- **FCL containers from countries where Khapra beetle occurs (see Table 3)**

All containers with exposed infestable agricultural produce imported into Australia must be unpacked for inspection of the produce and the empty container, unless the following pre-shipment conditions are complied with. These conditions vary in relation to the risk of introducing the serious exotic insect pest of stored produce, Khapra beetle (*Trogoderma granarium* Everts).

FCL containers of exposed infestable agricultural produce may be delivered to metropolitan premises at ports of entry registered by AQIS for that purpose.

If a container is carrying more than one kind of agricultural commodity, then FCL delivery would only be permitted to an approved quarantine premises in the metropolitan area, if the container was packed at one location and is covered by Phytosanitary certification for each commodity line in the container.

<u>Containers: open-top, open-sided, insulated and those without wall lining require:</u>

- a packer's declaration indicating the container was unlined, insulated, open-top, open-sided, in sound condition and, prior to loading, was cleaned to achieve freedom from contamination by soil, plant and animal residues and insects; and

- an official international Phytosanitary certificate for the agricultural produce immediately prior to loading with the added endorsement that it was free from Khapra beetle (*Trogoderma granarium* Everts) and was grown in the country issuing the certificate.

Containers: with wall lining require:

- a packer's declaration indicating the container had wall lining in sound condition and prior to loading was cleaned to achieve freedom from contamination by soil, plant and animal residues and insects;

- an official Government certificate of fumigation of the empty container, immediately prior to loading, under a gas-tight sheet with methyl bromide. To ensure effective treatment correct fumigation procedures must be used (see Appendix V); and

- an official international Phytosanitary certificate for the agricultural produce immediately prior to loading with the additional endorsements that it was free from Khapra beetle (*Trogoderma granarium* Everts) and was grown in the country issuing the certificate.

Correctly certified containers and contents may be delivered to approved quarantine premises for unpacking and holding of the goods under quarantine until inspected and cleared by a quarantine officer. The container may be released after unpacking.

- **FCL containers from countries where Khapra beetle does not occur**

These countries include all countries other than those listed in Table 3.

FCL containers of exposed infestable agricultural produce may be delivered to metropolitan premises at ports of entry.

If a container is carrying more than one kind of agricultural commodity, then FCL delivery would only be permitted to a metropolitan premise if the container was packed in one location and is covered by Phytosanitary certification for each commodity line in the container.

Containers: open-top, open-sided, insulated and those without wall lining require:

- a packer's declaration indicating the container was unlined, insulated, open-top, open-sided, in sound condition and, prior to loading, was cleaned to achieve freedom from contamination by soil, plant and animal residues and insects; and
- an official international Phytosanitary certificate for the agricultural produce immediately prior to loading with the endorsement that the produce was grown in the country issuing the certificate.

Containers with wall lining require:

- a packer's declaration indicating the container had wall lining in sound condition and prior to loading was cleaned and free from contamination by soil, plant and animal residues and insects;
- a certificate of fumigation of the empty container, immediately prior to loading, under a gas tight sheet with methyl bromide. To ensure effective treatment, correct fumigation procedures should be used - (see Appendix V); and
- an official international Phytosanitary certificate for the agricultural produce immediately prior to loading with the endorsement that the produce was grown in the country issuing the certificate.

2.2.2(b) Timber articles in FCL containers

General purpose FCL containers carrying timber articles, including newly manufactured furniture, antique furniture and timber packing but not household and personal effects, may be fumigated with methyl bromide before shipment under gas tight sheets. To ensure effective treatment, correct fumigation procedures should be used (see Appendix V).

Overseas fumigation certificates for household and personal effects and removalist goods are acceptable, provided the treatment certificates are accompanied by detailed inventories. Some items may remain subject to quarantine.

To facilitate the immediate release of fumigated FCL containers carrying timber articles and/or packing, an additional grouping CF (container fumigated) should be added to the manifest quarantine code. This grouping indicates the container and contents have been treated according to AQIS requirements. Treatment certificates must be presented to Quarantine before containers carrying timber articles are released.

2.2.3 Restricted goods and incorrectly documented cargoes

FCL containers carrying restricted goods or incorrectly documented cargoes must be inspected either by tailgate examination or by directing to an approved break-bulk depot for unpacking and inspection. Prohibited goods carried in FCL or LCL containers will be ordered into quarantine for destruction or export.

2.3 Release of LCL containers

Provided the exterior of the container is free from contamination, all LCL containers entering Australia will go to a quarantine controlled area for unpacking and all necessary treatment.

To facilitate release from quarantine and minimise any requirement for expensive and time-consuming remedial treatment upon arrival in Australia, exporters are urged to pack goods in a manner that excludes the risk of insect infestation and disease. Where timber packing is used within these containers, the timber should be free of bark. Packing made of solid timber, plywood, veneers, or peeler core should be treated offshore by an AQIS approved method (see Appendices I, II, III). Packing made of newly manufactured plywood also meets AQIS requirements if it is accompanied by acceptable certification (see Appendix VII Section 5). AQIS also accepts timber packing marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps. Otherwise, upon arrival, untreated timber packing associated with consignments will be subject to inspection, treatment, re-export or destruction with all options at the importer's expense.

2.4 Release of Imported Empty Containers

The external surfaces of empty containers are inspected by quarantine at the wharf/terminal during unloading operations. The interiors may be contaminated with plant and animal material and are also inspected by quarantine or a third party. If contamination is found in/on the container, it must be cleaned or treated before it can be delivered.

2.5 Special procedures for handling dunnage

Timber dunnage, which may be low quality untreated timber, represents a high quarantine risk and accordingly is subject to special procedures for handling, storage and treatment.

At break-bulk depots, all timber dunnage must be stacked in an approved place from where it can

only be re-used as packing in export containers. The approved storage area must be cleared at least once every two weeks and all dunnage destroyed or fumigated. Only dunnage that has been treated by an AQIS approved method (refer Appendices I, II, III) or inspected by AQIS can be released from quarantine.

No container with timber dunnage is allowed to proceed outside the metropolitan area at the port of entry unless there is an official certificate or declaration from the shipping agent or exporter to the effect that the timber has been treated by an AQIS approved method (see Appendices I, II and III) or is marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps.

For timber that is not marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps, due to the problems associated with adequately treating large sized timber dunnage (dimensions greater than those specified in Appendices II and III) it must remain under AQIS supervision until destroyed or exported.

2.6 Fumigation of empty pallets from Papua New Guinea and other Pacific Islands

Empty pallets from Papua New Guinea and other Pacific Islands are fumigated with methyl bromide because of the risk of introducing the serious agricultural pest Giant African Snail.

3. DOCUMENTATION

3.1 Packing Declarations

Packing declarations have replaced the requirement for shipping companies to provide quarantine codes on manifests and/or bills of lading. Importer/importer representatives must ensure that correct and concise barrier information is provided. This barrier information is usually presented as a packing declaration, and must be provided for all containerised cargo consignments.

A packing declaration may be provided as a separate document or the declarations may appear on packing lists, commercial invoices or preferential tariff certificates only. When packing declarations are presented on these documents, they must adhere to all packing declaration requirements.

Packing declarations are required for FCL (Full Container Load), FCX (an ACS term for FCL containers with multiple Bills of Lading destined for the one unpack address – for quarantine purposes this is the same as FCL), LCL (Less than Container Load) and FAK (Freight All Kind) containers.

3.1.1 Packing Declaration Requirements

Ideally, a container number should be included on the packing declaration; however, other acceptable forms of consignment identification include a bill of lading number, commercial invoice number, preferential tariff certificate number or a packing list number only.

There must be a direct numerical link between the container number and these other formats of consignment identification.

In addition, the packing declaration must be dated OR state the vessel and voyage number, signed OR contain a chop or block stamp incorporating a stamped signature, and on letterhead OR contain a company stamp or seal.

A declaration for each of the following must also be provided:

(i) Straw Packing Statement

Each packing declaration must contain a statement about the use of straw packing. Straw includes straw, cereal packing, rice hulls and other unprocessed plant materials used as packing. It must state whether straw has or has not been used in the packing of the container's concerned.

(ii) Timber Packing Statement

Each packing declaration must contain a statement about the use of timber packing. AQIS is concerned about the use of packing made of solid timber, plywood, veneer and peeler core.

Timber packing includes crates, cases, dunnage, pallets, skids and any other shipping aid made of solid timber, plywood, veneer or peeler core. The packing declaration must state whether timber has or has not been used in the packing of the container concerned.

If timber packing has been used, immediate release from quarantine may be granted in the following circumstances provided that the consignment contains no straw packing and the timber is free of bark:

- All the timber packing has been treated offshore by an AQIS approved method (refer Appendices I, II, III) and acceptable treatment certificates are provided; or
- All the timber packing is marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps and a statement to this effect is provided on the packing declaration.

Where conditions for immediate release have not been met, importers may choose for the timber packing in the consignment to be inspected; or treated on arrival by an AQIS approved method; or re-exported; or destroyed, with all options being at the importer's expense.

(iii) Bark Statement

Where timber packing has been used, each packing declaration must contain a statement as to whether or not the timber packing within the container has bark on it. Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.

A bark statement must be present on any packing declaration that has timber declared.

Examples of acceptable FCL and LCL packing declarations are included in Appendix VII.

3.1.2 Exemptions from Packing Declarations

Annual Packing Declarations

Importers regularly importing the same or similar commodities from the same packer/supplier using the same packing materials may apply to AQIS to be exempted from providing a packing declaration for each consignment.

Exemptions in this circumstance will only be granted when the company provides an acceptable Annual Packing Declaration (see Section 3.2). AQIS does not accept annual packing declarations for consignments that include timber packing marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps.

Hard Frozen Containers

Refrigerated FCL/FCX containers whose cargo has been endorsed as hard frozen are exempt from packing declarations. For this exemption to be granted, the temperature must be continuously maintained at a minimum of -18°C (0°F) for a period of not less than seven days.

Statements such as 'Goods maintained at -18°C (0°F)' must be clearly evident on either the bill of lading or the delivery order, which are issued by the relevant shipping company.

The issued date on the bill of lading will be considered to be the start of the seven-day period.

ISO Tank Containers

ISO tank containers are used to carry bulk amounts of liquid or chemicals, such as fuel additives, glue additives etc. No straw or timber packing would ever be used in such containers and it is highly unlikely that the bladder would become soiled in any manner. They are exempt from standard packing declaration requirements.

3.2 Annual Packing Declarations

Annual packing declarations may be used by companies who consistently import the same or similar commodities from the same packing source or supplier using the same packing materials. AQIS does not accept annual packing declarations where consignments include timber packing marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps.

The concessions granted through the use of annual packing declarations are intended to reduce the need for importer's agents to have in their possession a unique packing declaration for every container or consignment of containerised cargo. Annual packing declarations are issued for a period of one year, after which time the importer may re-apply to AQIS for renewal.

The importer/importer's representative may apply to AQIS for endorsement of Annual Packing Declarations. The original Annual Packing Declaration must be endorsed, and to be valid must have an AQIS stamp, along with the signature of the approving AQIS officer, and an expiry date.

Annual packing declarations must be signed OR contain a chop block or block stamp incorporating a stamped signature, dated OR state both the vessel and voyage number, and on letterhead OR contain a company stamp or seal.

In addition, annual packing declarations must include a statement relating to the use of straw packing, timber packing and a statement relating to bark as outlined in Section 3.1.1 (i), (ii) and (iii), and a cleanliness declaration as outlined in Section 3.3.

Where packers/suppliers use timber packing in their consignments they are required to supply a treatment certificate for each container in which timber has been used (see Section 3.4).

Examples of annual packing declarations are included in Appendix VII.

3.3 Cleanliness Declaration

A cleanliness declaration is required for all FCL/X containerised cargo imported into Australia. This declaration, made by the packer/supplier, indicates that the container has been cleaned and/or inspected prior to packing and found to be free from contaminants.

A cleanliness declaration may be provided as a separate document or it may appear on packing lists, commercial invoices, preferential tariff certificates, and packing declarations only. When

cleanliness declarations are presented on these documents, they must adhere to all cleanliness declaration requirements.

Cleanliness declarations are not required for LCL (Less than a Container Load) or FAK (Freight All Kinds) containers, as the container's barrier concerns will be addressed at the unpacking sites.

Overseas Government endorsed cleanliness declarations which appear on government endorsed documentation must contain all the cleanliness declaration requirements to be acceptable.

3.3.1 Cleanliness Declaration Requirements

A container number should ideally be included on the declaration. However, other acceptable forms of consignment identification include a bill of lading number, commercial invoice number, preferential tariff certificate number or a packing list number only.

There must be a direct numerical link between the container number and these other formats of consignment identification.

The cleanliness declaration must also be dated OR state both the vessel AND voyage number, and it must be signed by the packer/supplier OR container a chop or block stamp incorporating a stamped signature.

The cleanliness declaration must include an acceptable cleanliness statement. It must state whether the container has been inspected or cleaned prior to loading and found to be clean or cleaned and free from contamination.

Examples of cleanliness declarations for Packing Declarations and an Annual Packing Declarations are included in Appendix VII.

3.4 Certification of treatments used for timber packing

Treatment of packing timbers is not mandatory, but if untreated timber is used, containers must be unpacked at a break-bulk depot to permit inspection. Immediate release of a container with timber packing is not permitted unless all of the timber is free of bark and has been treated by an AQIS approved method (see Section 2.2.2(b) and Appendices I, II and III) or all the timber packing is marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps,.

All containers destined for country unpacking addresses must receive a tailgate inspection as stipulated in Section 2.2.1.

Treatment certificates must be presented to AQIS on request. Provision of treatment certificates does not necessarily mean a container will be granted immediate release. AQIS reserves the right to inspect any container entering Australia.

Appendices I, II, III, IV and V include information relating to AQIS approved treatments and Appendix VII includes general formats for treatment certificates of timber packing treated before use in a container.

Overseas Government treatment certificates, generally referred to as Phytosanitary Certificates, must contain all the relevant treatment information to be acceptable.

AQIS has registered a limited number of overseas companies including Italian Fumigation Companies or operators to carry out approved pre-shipment treatments. Generally, commercial

certificates are accepted as valid until they are found to be unreliable due to detection of live insect infestation or other quarantine problems associated with certified timber. When this occurs, acceptance of certificates from that source will be withdrawn.

Importers are invited to contact AQIS officers at the addresses given in Section 5 for more information on the acceptability of certificates for overseas treatments.

3.5 Quarantine Entry requirements for containers carrying goods subject to Quarantine

A Quarantine Entry (QE) must be lodged by the importer or his authorised agent for any container that is subject to quarantine.

Quarantine action may be required for a number of reasons, including untreated timber packing, uncertified timber packing, straw packing country destination or incomplete manifest information. Customs brokers who are connected to the Australian Customs service (ACS) COMPILE and electronically lodge QE information will receive information relating to the consignments quarantine status, via their COMPILE entry message advice.

3.6 Container Manifests

Due to the changes that have been implemented by AQIS, the barrier information that is required by AQIS is now received via different avenues (refer to packing declaration). However, certain information is still required from shipping companies or in some cases freight forwarders on the consignments that are arriving on an overseas vessel.

This information can be presented by the responsible parties either as an electronically reported manifest (this refers only to electronic manifest providers and the appropriate Sea Cargo Automated (SCA) vessels), a full paper manifest or a manifest summary which must indicate the following information:

- name of discharging vessel
- container number including prefix
- whether FCL/X, LCL, FAK or Empty
- brief description of the goods; and
- indication if the container has any pre-treated timber components.

3.7 Follow-up inspection

To check the authenticity of documentation, AQIS has adopted a system of follow-up inspection. Where a quarantine infringement is detected, all subsequent containers from that source arriving at Australian ports may be diverted to break-bulk depots for unpacking until AQIS is satisfied that all quarantine requirements have been met.

3.8 Quarantine fees

Under provisions of the *Quarantine Act 1908,* AQIS is obliged to charge fees for inspection, supervision of treatment and travelling expenses. Fees are subject to periodic review and incorporated within the legislation.

4. QUARANTINE PROCEDURES FOR AIR CARGO CONTAINERS

Containers used by the air transport industry are designed to meet specific airworthiness standards and are usually constructed from metal with no exposed timber. These containers are normally

unpacked at approved break-bulk depots at airports where Australian Customs Service and AQIS operate.

4.1 Cleanliness of Containers

Soil contamination on containers must be removed by cleaning.

4.2 Quarantine requirements for immediate release

For immediate release of air cargo containers to unpacking addresses in the metropolitan area of the port of entry, AQIS must have the following information:

- declaration by exporter or consignor that the container is not carrying untreated timber packing or straw;
- adequate description of goods to satisfy AQIS that they are not subject to quarantine; and
- container is not contaminated with material of plant or animal origin.

5. FURTHER INQUIRIES

Inquiries may be directed to the addresses listed below. For information on specific operational aspects within approved ports, inquiries should be directed to the Manager, Import Clearance, AQIS at the relevant port.

NATIONAL OFFICE - CANBERRA

National Manager
Cargo Management, AQIS
GPO Box 858
CANBERRA ACT 2601
Telephone: (02) 6272 3999
Fax: (02) 6272 5888

NEW SOUTH WALES

Locked Bag 6
MASCOT NSW 2020
Telephone: (02) 9364 7222
Fax: (02) 9364 7340

VICTORIA

PO Box 1006
TULLAMARINE VIC 3043
Telephone: (03) 8318 6700
Fax: (03) 8318 6701

QUEENSLAND

PO Box 778
BRISBANE QLD 4001
Telephone: (07) 3246 8755
Fax: (07) 3839 9313

SOUTH AUSTRALIA

GPO Box 63
PORT ADELAIDE SA 5015
Telephone: (08) 8305 9700
Fax: (08) 8305 9820

WESTERN AUSTRALIA

PO Box 606
WELSHPOOL WA 6986
Telephone: (08) 9334 1555
Fax: (08) 9334 1666

AUSTRALIAN CAPITAL TERRITORY

PO Box 7193
Canberra Mail Centre ACT 2610
Telephone: (02) 6230 7979
Fax: (02) 6239 7351

TASMANIA

Department of Primary Industry & Fisheries
PO Box 347
NORTH HOBART TAS 7002
Telephone: (03) 6233 3352
Fax: (03) 6233 3307

NORTHERN TERRITORY

GPO Box 2268
DARWIN NT 0801
Telephone: (08) 8999 2109
Fax: (08) 8999 2049

In overseas countries information may be obtained through offices of AUSTRADE, which are associated with Australian Diplomatic Missions.

APPENDIX I: APPROVED PERMANENT PRESERVATIVE TREATMENTS FOR TIMBER.

Preservative treatments that are approved by AQIS for permanently preserved timber, exposed timber components of containers, timber packing and wooden articles are those that are capable of excluding insect infestation from timber for the operational life of the container or timber product.

To be acceptable to AQIS, preservative treatments are required to protect timber against the conditions and biological hazards to a minimum level of H2 as defined for Hazard Class H2 in Australian Standard AS 1604 Timber Preservative Treated Sawn and Round. Preservative treatments must also remain resistant to leaching and chemical change over time.

Note: All references to Australian Standard AS1604 should be interpreted as meaning the latest version of that standard.

Whilst there is no specific requirement for the pre-treatment of timber, untreated exposed timber components of containers must be inspected by AQIS before containers are released. AQIS will implement a new surveillance regime for containers with exposed timber components that have had a permanent timber preservative treatment applied. From 1 January 2005, samples of exposed timber components will be collected and analysed to determine the presence and level of chemical preservatives.

AQIS may grant quarantine clearance for timber packing and dunnage in containerised cargo on the basis of documentation. To be eligible for documentary based quarantine clearance, every consignment must be accompanied by an acceptable packing declaration. In addition, where a packing declaration states that timber has been used in a consignment and the timber is free of bark and there are no other quarantine concerns, AQIS requires acceptable treatment certificates to be provided for all timber packing that is not marked with ISPM 15, NIMP15 OR NIMF 15 compliant stamps.

1. PRESERVATIVE PENETRATION

In some timbers, it is not always possible to achieve the required levels of preservative penetration. In these cases alternative, more permeable timbers should be used.

The preservative penetration of the zone required to be penetrated, as specified below, must not be less than the levels stated for each preservative.

1.1 The zone required to be penetrated for solid timber

Full penetration by the preservative, of the cross-section of a piece of treated timber is desirable.

When this cannot be achieved, the following minimum preservative penetration pattern must be achieved in at least nine out of ten specimens.

a) If the species of timber used is of natural durability class 1 or 2 (as defined in AS 1604) the preservative shall penetrate all of the sapwood. Preservative penetration of the heartwood is not required.

b) If the species is of natural durability class 3 or 4, (as defined in AS 1604) the preservative must penetrate all the sapwood, AND IN ADDITION, one of the following requirements will apply:

i) where the lesser cross-sectional dimension is greater than 35mm, the penetration shall not be less than 8mm from any surface. Where the lesser cross-sectional dimension is equal to or less than 35mm, the penetration shall not be less than 5mm from any surface; OR

ii) unpenetrated heartwood will be permitted, provided that it comprises less than 20% of the cross sectional area of the piece AND does not extend more than halfway through the piece from one surface to the opposite surface AND does not exceed half the dimension of the side in the cross-section on which it occurs.

1.2 The zone required to be penetrated for laminated veneer products

Products (plywood and laminated veneer lumber or LVL) with veneers treated before or after gluing will be analysed for preservative penetration according to the requirements for solid wood. This penetration is generally easier to achieve by treating veneers before gluing but this can negatively impact upon glue bond quality. An alternative method of protection is by glue line treatment, but the thickness of the veneer shall be no greater than that proven to be effective and approved by AQIS. Current approvals allow for individual veneers to be no greater than 1.8mm thickness. Thicker outer (face) veneers may be used if completely impregnated using methods additional to glue-line treatment.

2. PRESERVATIVES FOR TREATING TIMBER

The preservatives that have been approved for treating timber for use in cargo containers and timber packing may be classified as water-borne preservatives, and non water-borne preservatives.

2.1 Water Borne Preservatives

2.1.1 Copper chrome arsenic (CCA) preservatives

These preservatives are mixtures of various compounds of copper, chromium and arsenic. Preservatives of this type must be formulated from either salts or oxides of bivalent copper, hexavalent chromium and pentavalent arsenic. In the formulated preservative and the solution used to treat the timber, the ratio of these active elements shall fall within the following limits

- Copper: 23-25% Chromium 38-45% Arsenic 30-37%.

The minimum concentration of CCA-type preservative in the zone required to be penetrated shall be 0.320% mass/mass (elemental copper + elemental chromium + elemental arsenic) based on the oven dried mass of the wood. This shall be deemed to be the minimum legal requirement.

Calculation of charge retentions relies on a number of assumptions. These are listed in the example below. Minimum charge retention for each CCA preservative may be calculated as follows:

a) Each elemental concentration of copper, chromium and arsenic is converted to the form in which it appears in the formulation; i.e.
   - %Cu to % Cu formulation e.g. %Cu to %$CuSO_4 5H_2O$
   - %Cr to % Cr formulation e.g. %Cr to % $K_2Cr_2O_7$
   - %As to % As formulation e.g. % As to % $As_2O5._2H_2O$

b) Formulation concentrations are then added to provide a Total Formulation Value (TFV); i.e. %$CuSO_4.5H_2O$ + % $K_2Cr_2O_7$ + % $As_2O_5.2H_2O$ = %TFV

c) The % TFV is then multiplied by the wood density/100. In the absence of more detailed information, 500 kg/m^3 may be assumed as the wood density value for pinus timbers and 1000 kg/m^3 assumed as the value for hardwoods, therefore;
   - %TFV x wood density/100 = piece retention

In general, piece retention is about 60% of charge retention and so Charge retention = piece retention x 1.6.

The CCA preservatives that appear in Table 2.1.1 are currently approved for treating sawn timber and veneer.

Table 2.1.1: Currently approved CCA preservatives

Preservative	**Minimum Preservative Retention in the Penetration Zone % mass/mass based upon the oven dried mass of the treated wood**
Ascu A	0.32
Bicurith C	0.32
Boliden K 33	0.32
Celbronze PT	0.32
Celcure A	0.32
Celcure AN	0.32
Celcure A (oxide)	0.32
Celcure AO	0.32
Celcure A(P)	0.32
Celcure A Paste	0.32
Celcure C	0.32
Celcure C72	0.32
Celcure K33	0.32
Chemicca Impretect C	0.32
Chemicca Impretect C Oxide	0.32
Chemonite	0.32
Copas LC/A	0.32
Cryptogil C	0.32
Cryptogil CP	0.32
Cryptogil CO	0.32
Cryptogil COP	0.32
Cryptogil COP2	0.32
Duralin K33	0.32
Fujisolute	0.32
Fujisolute CCA type B	0.32
Greenwood	0.32
Impretect C	0.32
Injecta CCA-C	0.32
Injecta K33	0.32
Injecta K33-C	0.32
Injecta Osmose K33-C	0.32
Kemira K33 type B	0.32
Kemira K33 type C	0.32
Kemwood CCA -C	0.32
Kemwood K33 type B	0.32
Kemwood K33 type C	0.32
Lahontuho K33	0.32
Laporte CCA type 1	0.32
Laporte CCA type 2	0.32
Laporte CCA type C	0.32
Malenit CCA	0.32
Mekure T1	0.32

Mekure T2	0.32
Neo Malenit	0.32
Nissan CCA	0.32
Nissan CCA type C	0.32
Osmose CCA Oxide	0.32
Osmose Celcure AO	0.32
Osmosalts	0.32
Osmose K33	0.32
Osmose K33 type C	0.32
Oxcel	0.32
Pentagreen	0.32
Permawood type B	0.32
Permawood type C	0.32
Permawood CCA	0.32
Permawood CF	0.32
Quantum CCA – 60%	0.32
Quantum CCA Oxide	0.32
Rentokil CCA type C	0.32
Rentokil K33	0.32
Sarmix 3	0.32
Sarmix Oxcel	0.32
Sarmix Oxcel C	0.32
Sarmix Oxcel C-680	0.32
Supa Timber PM	0.32
Superwolmanzout- CO	0.32
Tanalith C	0.32
Tanalith CA	0.32
Tanalith CO	0.32
Tanalith CCA Oxide C	0.32
Tanalith CP	0.32
Tanalith K33	0.32
Tanalith NCA	0.32
Tanalith Oxide CO	0.32
Tanalith Oxide C	0.32
Tanalith Oxide C 3310	0.32
Tanalith U	0.32
Timpro CCA type 1	0.32
Toyosol type 1	0.32
Toyosol type 3	0.32
Treatim CCA	0.32
Wolman CCA	0.32
Wolman CCA - B	0.32
Wolman CCA - C	0.32
Wolman CCA type O	0.32
Wolman CCA type S	0.32
Wolmanzout CO	0.32
Woodlast	0.32
Yoneda	0.32

Note: Basilit C, Basilit CCA type A, Basilit UA, Basilit CCA type B and Basilit UA No. 132 are no longer

manufactured. However containers whose timber components were previously treated with these products will be accepted without inspection in Australian ports, provided all other conditions are complied with.

2.1.2 Copper chromium boron (CCB) salts

Commencing 1 November 1999, AQIS no longer recognised the use of CCB chemicals.

2.1.3 Copper chromium fluorine (CCF)

The minimum concentration of copper, chromium and fluorine in the zone required to be penetrated shall be 0.56% mass/mass (elemental copper + elemental chromium + elemental fluorine) based on the oven dried mass of the treated wood.

Preservatives of this type shall be formulated from either salts or oxides of bivalent copper and hexavalent chromium. In the CCF formulated preservative and the solution used to treat the timber, the ratio of these active elements shall fall within the limits:

- Copper: 30% minimum, Chromium 50% minimum, Fluorine 5% minimum.

Currently approved CCF type preservatives are presented in Table 2.1.3.

Table 2.1.3: Currently approved CCF preservatives

Preservative	**Total active elements (TAE)**			**Minimum TAE Retention in the Penetration Zone % mass/mass**
	Copper	**Chromium**	**Fluorine**	
Korasit CKF	30% minimum	50% minimum	5% minimum	0.56

2.1.4 Ammoniacal Copper Quaternary preservatives

Ammoniacal copper quaternary preservatives are mixtures of compounds of the element copper and quaternary ammonium. The quaternary ammonium compound may be either didecyldimethyl ammonium chloride (DDAC) or benzalkonium chloride (BAC).

In the DDAC formulated preservative or DDAC preservative solution used to treat the timber, the composition of the active ingredients must fall within the limits (see AS1604):

- Copper 57 - 66%, DDAC 33 - 44%

In the BAC formulated preservative or BAC preservative solution used to treat the timber, the composition of the active ingredients must fall within the limits:

- Copper 45 – 66%, BAC 33 – 54%

The minimum concentration of this type of preservative in the zone required to be penetrated shall be 0.350% mass/mass (elemental copper + DDAC or BAC) based on the oven-dried mass of the treated wood.

Currently approved ammoniacal copper quaternary preservatives are presented in Table 2.1.4.

Table 2.1.4: Currently approved ammoniacal copper quaternary preservatives

Preservative	Copper	Quaternary Ammonium Compound	Minimum Preservative Retention in the Penetration Zone % mass/mass
Copper + DDAC Permawood ACQ 2100, Kemwood ACQ 2100, ACQ Type D, Korasit KS, Laporte ACQ 2100, Lignosan G	57-66%	33-44%	0.350
Copper + BAC Celcure AC-500, Celcure AC-800, ACQ97, Mitrex ACQ, Permawood ACQ 1900, Kemwood ACQ 1900, Permawood ACQ 2000, Kemwood ACQ 2000, Permawood ACQ 2200, Kemwood ACQ 2200, Osmose Nature Wood / Osmose Nature Wood NW 100	45-66%	33-54%	0.350

2.1.5 Boron and alkyl ammonium preservatives

These preservatives are a mixture of boric acid and dialkyldimethylammonium chloride (DDAC) and are approved for their DDAC content and not the borate component (which has not been shown to be equivalent to Hazard level 2 as per Australian Standard AS 1604).

Treated timber must contain not less than 44% of the minimum retention as DDAC. The minimum concentration of this type of preservative in the zone required to be penetrated shall be 1.56% mass/mass (elemental boron + DDAC) based on the oven dried mass of the wood. This shall be deemed to be the minimum legal requirement.

Currently approved boron and alkyl ammonium type preservatives are presented in Table 2.1.5

Table 2.1.5: Currently approved Boron + DDAC preservatives

Preservative	Boron	Alkyl Ammonium Compound	Minimum Preservative Retention in the Penetration Zone % mass/mass
Celbor P	13.6%	44%	1.56

2.1.6 Copper azole preservatives

Copper azole wood preservatives are a mixture of copper and triazole compounds. In the formulated preservative and the preservative used to treat the timber, the concentration of the triazole expressed as a percent of total active ingredients shall fall within the following limits:

- Tebuconazole 4.18% - 3.42%
- Cyproconazole 1.64 – 1.34%

The minimum concentration of this type of preservative in the zone required to be penetrated, shall be:

- 0.27% mass/mass (elemental copper + Tebuconazole), or
- 0.38% mass/mass (elemental copper + Cyproconazole),

based on the oven dried mass of the wood.

Currently approved copper azole preservatives are presented in Table 2.1.6

Table 2.1.6: Copper azole preservatives

Preservative	Minimum Preservative Retention in the Penetration Zone %mass/mass
Tanalith® E	0.27
Tanalith® CY	0.38

2.1.7 Cu-HDO and boric acid preservative (Bis-(N-Cyclohexyldiazeniumdioxy)-copper)

Cu-HDO wood preservatives are a mixture of copper compounds, HDO and boric acid. In the formulated preservative and the preservative used to treat the timber, the composition of the ingredients (must be expressed as a percent of total active ingredients) shall fall within the following limits:

- Cu 70-75%
- HDO 19-24%
- B 5-7%

The minimum concentration of this type of preservative in the zone required to be penetrated must be 0.255% mass/mass (elemental Cu+HDO+B) based on the oven dried mass of the wood. This shall be deemed to be the minimum legal requirement.

Currently approved Cu-HDO and boric acid preservatives are presented in Table 2.1.7

Table 2.1.7: Cu-HDO preservatives

Preservative	Minimum Preservative Retention in the Penetration Zone %mass/mass
Wolmanit CX-8	2.05
Wolmanit CX-10	1.64
Adolit KDA	1.64

2.1.8 Copper, Boron acid and Polymeric biocide preservatives

These preservatives are a mixture of copper compounds, boric acid and polymeric biocides. These active ingredients combine synergistically to give both insecticidal and fungicidal efficacy.

Currently approved Copper, Boron acid and Polymeric biocide preservatives are presented in Table 2.1.8

Table 2.1.8 ***Copper, Boron acid and Polymeric biocide preservatives***

Preservative	Copper	Boron	Polymeric biocide	Minimum Preservative Retention in the Penetration Zone % mass/mass
Copper + Boron + polymer betaine (Impralit KDS)	41%	33%	26%	1.2

2.2 Other than Water-Borne Preservatives

2.2.1 Permethrin

This preservative may be used by itself or with a fungicide and is usually dissolved in an organic solvent such as white spirits.

The minimum concentration of this type of preservative in the zone required to be penetrated must be **0.020% mass/mass (permethrin)** based on the oven dried mass of the wood.

Currently approved preservatives containing permethrin are shown in Table 2.2.1

Table 2.2.1: Permethrin preservatives

Agro Plus	Tanalith E2
Arbezol Spezial	Tanalith T
Celpruf P	Vacsol Azure
Gorvivac 050	Vacsol Green
Kemvac B41	Vacsol N
Organotect	Vacsol N WR
Protim AQ	Vacsol NA WR
Protim Optimum	Vacsol NA wrl
Protim Timberlife H3	Vacsol QP
Protim Trussguard H2	Vacsol T
Protim 235WR	Xylamon DVIL 313
Protim LCWR	Xylosan forte
Supa Timber PM	

2.2.2 Deltamethrin

This preservative may be formulated by itself or with a fungicide and is usually dissolved in an organic solvent such as white spirits. The minimum concentration of this type of preservative in the zone required to be penetrated must be 0.0020% mass/mass (deltamethrin) based on the oven dried mass of the wood or a minimum retention of 0.03kg/m³. This shall be deemed to be the minimum legal requirement.

Formulation names for preservatives containing the active ingredient deltamethrin are not listed.

2.2.3 Cypermethrin

The minimum preservative retention of this type of preservative in the zone required to be

penetrated must be 0.030% mass/mass (cypermethrin) based on the oven dried mass of the wood. This shall be deemed to be the minimum legal requirement.

Currently approved preservatives containing cypermethrin are shown in Table 2.2.3

Table 2.2.3: Cypermethrin preservatives

Preservative	Minimum Preservative Retention in the Penetration Zone %mass/mass of cypermethrin
Celpruf Z	0.03
Basilit CIS	0.03

2.2.4 Fenvalerate

A preservative which in addition to achieving adequate penetration has a minimum retention of 0.18 kg/m³ fenvalerate*. (AQIS is in the process of assessing the efficacy data associated with this chemical to determine whether or not it will be phased out).
*The minimum charge loading of commercial preservatives based on treated wood volume.

2.2.5 TBTO (Tributyltin oxide)

A preservative which in addition to achieving adequate penetration has a minimum retention of 4.8kg/m³ tributyltin oxide*. (FUNGICIDE ONLY no longer acceptable without insecticide if applied after 1 June 1999).
*The minimum charge loading of commercial preservatives based on treated wood volume.

2.2.6 Niedo - Woodgard

A preservative which in addition to achieving adequate penetration has a minimum retention of 12kg/m³ boric acid* equivalent plus 12kg/m³ paraffin wax (Meets hazard level 1 only of AS1604 and will be phased out).
*The minimum charge loading of commercial preservatives based on treated wood volume.

2.2.7 Sumithion (Fenitrothion)

A preservative which in addition to achieving adequate penetration has a minimum retention of 0.42 kg/m³ fenitrothion*. The following commercial formulation at a minimum charge retention indicated in brackets has been approved: Koshiace B (2.0 kg/m³)*. (AQIS is in the process of assessing the efficacy data associated with this chemical to determine whether or not it will be phased out).
*The minimum charge loading of commercial preservatives based on treated wood volume.

2.2.8 Chlorfenapyr

Currently approved preservatives containing Chlorfenapyr for use in solid timber are shown in Table 2.2.8

Table 2.2.8 Chlorfenapyr

Preservative	Minimum Retention of Active Ingredient % mass/mass
Meganium 2000 ST	0.005

2.2.9 Bifenthrin

Currently approved preservatives containing Bifenthrin for use in solid wood are shown in Table 2.2.9

Table 2.2.9: Bifenthrin

Preservative	Minimum Retention of Active Ingredient % mass/mass
Bistar (10% Bifenthrin)	0.0047

3. PRESERVATIVES FOR TREATING VENEER BASED PRODUCTS

Veneer based products such as plywood and LVL will be accepted if veneers are treated with preservatives described for solid wood, and meet those specified retentions and penetrations. An alternative method of protection is glueline treatment.

3.1 Glueline treatments of plywood

The insecticides listed below are approved for use as glueline treatments provided no veneer in the plywood sheet is more than 2.5mm thick. The formulations listed have been shown to be efficacious in high pH phenolic adhesives.

For approved preservatives the minimum retention of active ingredients required is given below as %mass/mass.

Use the following equation to convert retention (%m/m) into retention (kg/m³):

$$\text{Retention (kg/m}^3\text{)} = \frac{\text{Retention (\%m/m)} \times \text{Density of plywood (kg/m}^3\text{)}}{100}$$

An anticipated change in 2005 for container flooring is that the approved insecticides will need to be used in combination with a fungicide.

3.1.1 Phoxim®

Currently approved formulations containing Phoxim® for use in plywood are shown in Table 3.1.1.

Table 3.1.1: Phoxim®

Formulation	Maximum Veneer Thickness	Minimum Retention of Active Ingredient % m/m		
		Softwood	Mix	Hardwood
Basileum SI84	1.6mm	0.25	0.20	0.15
Basileum SI84EC	1.6mm	0.25	0.20	0.15

3.1.2 Chlorfenapyr

Currently approved formulations containing Chlorfenapyr for use in plywood are shown in Table 3.1.2

Table 3.1.2: Chlorfenapyr

Formulation	Maximum Veneer Thickness	Minimum Retention of Active Ingredient %m/m		
		Softwood	Mix	Hardwood
Meganium 2000	1.8mm	-	-	0.009
Wolsit T-20	1.8mm	-	-	0.014
Tailileum 200	1.6mm	-	-	0.014
Meganium 2003	1.6mm	-	-	0.005

Note: For Meganium 2000 and Wolsit T-20, efficacy tests were conducted on Keruing (*Diptocarpus* spp.) and European beech (*Fagus sylvaticus*). Accordingly these two formulations are only approved as a glueline treatment for plywood manufactured from hardwood substrates. Tailileum 200 has not been tested for European beech and therefore it is not approved for use with this species. As an approximate guide only, hardwoods suitable for manufacture of plywood for cargo containers are defined as timber with air dry densities of more than 550 kg/m³. Certificates must state veneer thickness.

3.1.3 Imidacloprid

Currently approved formulations containing Imidacloprid for use in plywood are shown in Table 3.1.3

Table 3.1.3: Imidacloprid

Formulation	Maximum Veneer Thickness	Minimum Retention of Active Ingredient %m/m
Protecta C-02	1.8mm	0.02
Supraleum 150	1.8mm	0.02
Supraleum 75/OPP	1.6mm	0.01

Note. Efficacy tests were conducted on Keruing (*Dipterocarpus* spp.) and European Beech (*Fagus sylvatica*) plywood. Accordingly, formulations of Imidacloprid are only approved as a glue line treatment for plywood manufactured from hardwood substrates. As an approximate guide only, hardwoods suitable for manufacture of plywood for cargo containers are defined as timbers with air dry densities of more than 550 kg/m³. Certificates must state veneer thickness.

3.1.4 Bifenthrin

Currently approved formulations containing Bifenthrin for use in plywood are shown in Table 3.1.4

Table 3.1.4: Bifenthrin

Preservative	Maximum Veneer Thickness	Minimum Retention of Active Ingredient %m/m
Bistar (10% Bifenthrin)	2.5mm	0.013
Protecta C-03	1.8mm	0.013
Basileum SI 2000	1.6mm	0.011

Note. The formulation of Bifenthrin is approved as a glueline treatment for plywood manufactured from both softwood (coniferous) and hardwood substrates. As an approximate guide only, softwoods suitable for manufacture of plywood for cargo containers are defined as timbers with air dried densities less than 550kg/m³. Certificates must state the veneer thickness.

3.1.5 Cypermethrin

Currently approved formulations containing Cypermethrin for use in plywood are shown in Table 3.1.5

Table 3.1.5: Cypermethrin

Formulation	Maximum Veneer Thickness	Minimum Retention of Active Ingredient %m/m		
		Softwood	Mix	Hardwood
Radaleum FHP - 60 (Theta-cypemethrin formulation)	1.6mm	0.033	0.028	0.024
Radaleum FAP (cypermethrin tetramethrin formulation)	1.6mm	0.075	-	-
Radaleum HP (cypermethrin formulation)	1.6mm	0.075	-	-
Tailileum 300	1.6mm	-	-	0.075

Note: Efficacy tests for Radaleum FAP and Radaleum HP were conducted on Radiata pine (*Pinus radiata* D. Don) plywood. Accordingly, the above Radaleum FAP and Radaleum HP formulations of Cypermethrin are only approved as a glue line treatment for plywood manufactured from softwood (coniferous) substrates. Radaleum FHP – 60 has been tested on both soft and hard wood plys.

The efficacy tests for the above Tailileum 300 formulation were conducted on keruing plywood. Therefore it is only approved for use in hardwood substrates.

Certificates must state the veneer thickness.

3.1.6 Neonicotinoids

Currently approved preservatives containing neonicotinoids for softwood plys are included in Table 3.1.6.

Table 3.1.6 Neonicotinoids

Preservative	Minimum Retention of Active Ingredient % mass/mass in softwood plys
Everwood DF	0.0145

3.2 Veneer treatments applied before forming the plywood sheet

Plywood (or other laminated veneer product) formed from veneers treated with CCA, ACQ 2100, Tanalith E, permethrin, deltamethrin or cypermethrin containing formulations would be acceptable, provided the minimum retention specified for the zone required to be penetrated for each preservative is achieved, and the effectiveness of the preservative was not affected by the processing.

APPENDIX II: APPROVED NON-PERMANENT TREATMENTS FOR TIMBER – FUMIGATION TREATMENTS

1. Overview

AQIS approved non-permanent treatments will kill insects present in the timber at the time of treatment but give no protection against re-infestation.

Timber treated with non-permanent treatments must be packed in a container or shipped within 21 days of that treatment. The only exceptions to this timeframe are where all timber packing in the consignment:

- is marked with ISPM 15[1] compliant stamps, or
- has been treated in accordance with ISPM 15 and accompanied by an official government Phytosanitary certificate, or
- has been treated in New Zealand.

The timeframe between treatment and containerisation or shipment in New Zealand is 3 months. A timeframe between treatment and containerisation does not apply to consignments where all timber packing is marked with ISPM 15 compliant stamps or all timber packing has been treated in accordance with ISPM 15 and accompanied by an official government Phytosanitary certificate.

Fumigations with methyl bromide or sulphuryl fluoride are the only approved treatments for packed containers. All other treatments must be applied prior to containerisation.

AQIS may grant quarantine clearance for timber packing and dunnage in containerised cargo on the basis of documentation. To be eligible for documentary based quarantine clearance, every consignment must be accompanied by an acceptable packing declaration. Appendix VII includes example templates for packing declarations.

Where a packing declaration declares that timber packing has been used in a consignment and the timber is free of bark and there are no other quarantine concerns, AQIS requires acceptable documentation to accompany the consignment as validation that all timber packing in the consignment meets AQIS treatment requirements. The following types of documentation are acceptable to AQIS as validation of offshore treatments:

- If all timber packing is marked in accordance with ISPM 15, AQIS accepts:
  - a packing declaration from a packer/supplier declaring all timber packing is marked with ISPM 15 compliant stamps, or
  - an official government Phytosanitary certificate certifying “all timber packing is marked in accordance with ISPM 15”.
- If all timber packing has been treated in accordance with ISPM 15 but the packing is not marked in accordance with ISPM 15, AQIS only accepts official government Phytosanitary certificates certifying “all timber packing has been treated in accordance with ISPM 15” as validation for this treatment.
- For non-ISPM 15 treatments, AQIS accepts treatment certificates from acceptable treatment providers. AQIS also accepts official government Phytosanitary certificates as validation for all treatments, provided they include details of the treatment. Appendix VII includes an

[1] ISPM 15: The English language acronym for *International Standards for Phytosanitary Measures No. 15: Guidelines for Regulating Wood Packaging Material in International Trade*. The French and Spanish language acronyms for this Standard are NIMP 15 and NIMF 15 respectively. AQIS accepts packing declarations and phytosanitary certificates that use any of these acronyms. This standard is available from the International Phytosanitary Portal at www.ippc.int

example template for a fumigation treatment certificate.

AQIS also accepts packing made of newly manufactured plywood if the consignment is accompanied by acceptable certification. Appendix VII includes an example template for a Newly Manufactured Plywood Products Certificate.

2. Methyl bromide fumigation (CH_3Br)

Some information on the properties of methyl bromide and procedures necessary for effective fumigation are given in Appendix V.

Where timber used in the construction of containers and timber packing is to be fumigated with methyl bromide, fumigation must be at a concentration of 48g/m³ for 24 hours at a temperature of 21°C under normal atmospheric pressure (NAP).

For each 5°C the temperature is expected to fall below 21°C the fumigator must add 8g/m³ of methyl bromide. AQIS does not allow dosage compensation for temperatures above 21°C. AQIS does not accept treatments undertaken below 10°C.

For example the acceptable range at NAP is:
48 g/m³ (3lbs/1000 cu ft) for 24 hours at 21°C (70°F) or above (standard dosage)
56g/m³ (3.5 lbs/1000 cu ft) for 24 hours at 16 - 20°C
64g/m³ (4 lbs/1000 cu ft) for 24 hours at 11 - 15°C
72g/m³ (4.5 lbs/1000 cu ft) for 24 hours at 10°C

Methyl bromide under vacuum is acceptable if applied at:
64g/m³ for 4 hours at or above 21°C under vacuum (660mm vacuum)
64g/m³ for 5 hours at 4 - 20°C under vacuum (660mm vacuum).

The maximum thickness of the timber should not exceed 200mm and it should be stacked in a manner which allows adequate gas circulation between pieces. Correct fumigation procedures must be used (see Appendix V).

3. Sulphuryl fluoride (SO_2F_2) (Vikane®)

Sulphuryl fluoride is used extensively in the USA and certain other countries as a fumigant to control insect pests of timber. It should not be used on living plants or foodstuffs.

However, it has an advantage over methyl bromide in that it can be used without any deleterious effects on photographic supplies, metals, electronic components, papers, leather, rubbers, plastics or wallpapers. It could be the preferred fumigant for timber packing associated with delicate electronic equipment where rubber is used as a component.

Dosages: Prescribed dosages of sulphuryl fluoride for the treatment of timber packaging are:
64g/m³ (4 lb/1000 cu ft) for 16 hours at 21°C (70°F) or above
64g/m³ (4 lbs/1000 cu ft) for 24 hours at 15.5° - 20.5°C (60° - 69°F)
80g/m³ (5 lbs/1000 cu ft) for 24 hours at 10° - 15°C (50° - 59°F)
104g/m³ (6.5 lbs/1000 cu ft) for 24 hours at 4.5° - 9.5°C (40° - 49°F)
80g/m³ (5 lbs/1000 cu ft) for 32 hours at 4.5° - 9.5°C (40° - 49°F)
® Registered trade name by Dow Chemical Company.
(AQIS is in the process of assessing the efficacy data associated with this chemical and may phase out its use as a quarantine treatment.)

APPENDIX III: APPROVED NON-PERMANENT TREATMENTS FOR TIMBER – HEAT TREATMENTS

1. Overview

AQIS approved non-permanent treatments will kill insects present in the timber at the time of treatment but give no protection against re-infestation.

Timber treated with non-permanent treatments must be packed in a container or shipped within 21 days of that treatment. The only exceptions to this timeframe are where all timber packing:

- is marked with ISPM 15[1] compliant stamps, or
- has been treated in accordance with ISPM 15 and accompanied by an official government Phytosanitary certificate, or
- has been treated in New Zealand.

The timeframe between treatment and containerisation or shipment in New Zealand is 3 months. A timeframe between treatment and containerisation does not apply to consignments where all timber packing is marked with ISPM 15 compliant stamps or all timber packing has been treated in accordance with ISPM 15 and accompanied by an official government Phytosanitary certificate.

Whereas fumigation treatments may be performed after the goods have been containerised, heat treatments must be performed prior to containerisation.

The AQIS approved timber heat treatments are: kiln drying for quarantine purposes (ICON[2] Treatment T9912), heat treatment at a minimum of 56°C for 30 minutes as measured at the core of the wood (ICON Treatment T9968) and heat treatment of timber packing in accordance with ISPM 15. Whilst the time-temperature schedule for the T9968 heat treatment is the same as the time-temperature schedule for the heat treatment specified in ISPM 15, AQIS requirements for validating each of these heat treatments are different and detailed overleaf.

Timber packing that is free of bark and has been kiln dried (T9912), heat treated (T9968) or heat treated in accordance with ISPM 15 is considered to be effectively treated for Australian quarantine pests, except where AQIS has identified a specific quarantine concern.

Goods will remain subject to random surveillance for the purposes of validation and compliance.

An AQIS import permit is required to import untreated timber where all dimensions are greater than 200mm.

Kiln drying (T9912) for quarantine purposes has a long history of commercial usage and is known to be an effective treatment for insect, fungal and nematode timber pests. In recognition of its long history of commercial use and standard kiln operating procedures, treatment certificates from all commercial treatment providers are acceptable to AQIS as validation of this treatment.

Whilst some uncertainties remain about the effectiveness of heat treatment to a core temperature of

[1] ISPM 15: The English language acronym for *International Standards for Phytosanitary Measures No. 15: Guidelines for Regulating Wood Packaging Material in International Trade*. The French and Spanish language acronyms for this Standard are NIMP 15 and NIMF 15 respectively. AQIS accepts packing declarations and phytosanitary certificates that use any of these acronyms. This standard is available from the International Phytosanitary Portal at www.ippc.int

[2] ICON: The AQIS Import Conditions database available at www.aqis.gov.au/icon

56°C for 30 minutes (T9968), research underpinning the development of ISPM 15 has demonstrated that this time-temperature schedule is effective for a large number of insect timber pests present at the time of treatment. Given that this treatment has only been approved recently for quarantine purposes and can be delivered upon by any heat application method, not necessarily involving standard kiln operating procedures, AQIS will only accept this treatment if independently validated by the government of the exporting country. Acceptable forms of validation for the T9968 treatment are treatment certificates from treatment providers operating under a government authorised accreditation program that AQIS has reviewed and found to be equivalent to ISPM 15 certification systems or official government phytosanitary certificates (Section 3 provides further details on this treatment).

Where timber packing has been heat treated in accordance with ISPM 15, AQIS only accepts this treatment if the timber packing is either marked with ISPM 15 compliant stamps or accompanied by an official government phytosanitary certificate.

AQIS may grant quarantine clearance of timber packing and dunnage in containerised cargo without inspection on the basis of documentation. To be eligible for documentary based quarantine clearance, every consignment must be accompanied by an acceptable packing declaration. Appendix VII includes an example template for a packing declaration. Where a packing declaration declares that timber has been used in a consignment and the timber is free of bark and there are no other quarantine concerns, AQIS requires acceptable documentation to accompany the consignment as validation that all timber packing in the consignment meets AQIS treatment requirements. AQIS accepts the following types of documentation as validation of offshore treatments:

- If all timber packing is marked in accordance with ISPM 15, AQIS accepts:
  - a packing declaration from a packer/supplier declaring all timber packing is marked with ISPM 15 compliant stamps, or
  - an official government Phytosanitary certificate certifying “all timber packing is marked in accordance with ISPM 15”.
- If all timber packing has been treated in accordance with ISPM 15 but the packing is not marked in accordance with ISPM 15, AQIS only accepts official government Phytosanitary certificates certifying “all timber packing has been treated in accordance with ISPM 15” as validation for this treatment.
- For the non-ISPM 15 treatments (T9968 and T9912), AQIS accepts the following:
  - Official government Phytosanitary certificates provided they include details of the treatment (accepted for both T9912 and T9968). As Phytosanitary certificates are required to include a unique certificate identification number, AQIS does not require Phytosanitary certificates to include details of treatment providers and/or programs under which the treatment providers are accredited.
  - Treatment certificates issued by treatment providers accredited under an AQIS recognised government program or its equivalent (accepted for both T9912 and T9968).
  - Treatment certificates otherwise endorsed by a government certificate or its equivalent (accepted for T9912 only).
  - Treatment certificates issued by commercial heat treatment providers (accepted for T9912 only).

All treatment certificates must state the duration of the treatment, the treatment temperature and in the case of kiln drying for quarantine purposes (T9912), the certificate must state the maximum thickness of the timber. Treatment certificates from treatment providers accredited under an AQIS

recognised government program or its equivalent must also include the name of the program under which the treatment provider is accredited and the facility registration number or treatment provider number issued under that program. Appendix VII includes example templates for heat treatment certificates and kiln drying certificates.

2. Kiln drying (T9912) for quarantine purposes

AQIS has a number of general requirements for kiln drying treatments that are applied for quarantine purposes. These are:

- Dry bulb temperature in the chamber is maintained at or above 74°C (165°F) and the wet bulb depression (the maximum decrease allowed between the dry and wet bulb temperatures) is less than 2°C (3.6°F),
- Treatment time does not commence until the temperature and humidity in the chamber have stabilised and the core temperature of the timber has reached at least 74°C (165°F),
- All timber must have an average moisture content of less than 12%, based on oven-dry weight or mass, and
- The duration of the treatment will depend on the thickness of the timber (see Table 1 below). "Thickness" is defined here as the distance between spacers in the stack, regardless of the thickness of individual boards.

Table 1: Kiln drying treatment durations for timber of different thicknesses

Thickness of Timber (mm)	Duration of Treatment (Hours)
0 - 25	4
26 - 50	6
51 - 75	8
76 - 100	10
101 - 150	14
151 - 200	18
Thickness unknown	see (1) below
Thickness greater than 200mm	see (2) below

(1) If the thickness of the timber is not stated on the treatment certificate or is unknown, a verification inspection at an appropriate AQIS Quarantine Approved Premise is required to ensure that the timber has at least one dimension less than or equal to 200mm [see (2) below], and to verify that the treatment has been effective.

(2) Where all dimensions of the timber are greater than 200mm, AQIS requires an import permit application to be lodged for the timber. The permit conditions will mandate a treatment duration that exceeds 18 hours once the timber core temperature of 74°C has been achieved.

3. Heat treatment: 56°C for 30 minutes (T9968)

3.1 Treatment certificates

AQIS accepts any heat treatment that ensures the core temperature of the wood has reached a minimum of 56°C for 30 minutes (T9968). This treatment is only acceptable to AQIS if validated by a treatment certificate issued by a treatment provider accredited under an AQIS recognised government program or its equivalent, or an official government phytosanitary certificate.

A treatment certificate from a treatment provider accredited under an AQIS recognized government program or its equivalent must include the following details:

- The name of the program under which the treatment provider is accredited; and
- The facility registration number or treatment provider number issued under that program; and
- The duration of the treatment; and
- The treatment temperature as measured at the core of the wood. To be acceptable to AQIS, certificates must include wording to this effect. For example, in addition to the treatment temperature, a statement such as 'The temperature was held for the duration at the core of the wood' would be acceptable to AQIS.

Official government Phytosanitary certificates do not need to include details of treatment providers and/or programs under which the treatment providers are accredited but must include details of the treatment as follows:

- The duration of the treatment; and
- The treatment temperature as measured at the core of the wood. To be acceptable to AQIS, certificates must include wording to this effect. For example, in addition to the treatment temperature, a statement such as 'The temperature was held for the duration at the core of the wood' would be acceptable to AQIS.

3.2 Overview of AQIS requirements for approval of onshore and offshore heat treatment providers for heat treatment 56°C for 30 minutes (T9968)

Heat treatment providers must be able to demonstrate that their facilities can consistently deliver treatments to a core temperature of 56°C for 30 minutes across various species of timber. To demonstrate this, a treatment provider's chambers must initially undergo empirical testing overseen by an appropriate independent standards authority. This empirical testing must be undertaken for both hardwood (greater than 550kg/m^3) and softwood (less than 550kg/m^3). Note: Poplar wood (*Populus* species) shall be regarded as softwood. The UK Forestry Commission Plant Health Service Information Note 1 (revised June 2003) provides an example of a verification process for heat treatment. After the independent assessing body has approved the heat treatment chamber, the treatment provider should develop operating and reporting guidelines for the treatment. These should be reviewed and accepted by the independent assessor or standards authority.

The heat treatment provider is also required to undergo regular auditing or quality assurance validation overseen by a government recognised independent standards authority. This information is required for auditing by an independent auditor/assessor to verify the performance of the chamber over time, and to look for variance in treatments delivered. A full audit of records and facilities should occur no less than every 12 months and be performed by the National Plant Protection Organisation (NPPO), an independent standards agency authorised by the NPPO or an AQIS recognised agency.

The independent standards agency that oversees empirical testing must be:
- The relevant government body authorised under the International Plant Protection Convention (IPPC); or
- A private agency/technical laboratory approved by the IPPC authorised government body to accredit treatment providers on its behalf.

3.3 Non-acceptance by AQIS of heat treatment providers for T9968

Entomologists and/or plant pathologists identify the specimen/s collected from AQIS interceptions of timber pests and/or diseases on timber or wood packaging material. AQIS inspectors are required to initiate Interception Reports and attach all relevant information such as commercial documents, heat treatment certification or a copy of the treatment mark as per ISPM15, and any

other documents relating to the interception (e.g. Order into Quarantine, bill of lading, investigation notes, etc).

In addition to identifying the timber pest or disease, AQIS requires the entomologist/plant pathologist to confirm whether or not the timber pest or disease was present in the timber or wood packaging material prior to the application of the heat treatment.

AQIS will consider a timber heat treatment provider unacceptable, only if **all** of the following apply:

- The timber or wood packaging material contains live timber pest/s and/or disease/s.
- The timber pest/disease is identified and a statement provided by an entomologist/plant pathologist that the timber pest/disease was present in the timber or wood packaging material prior to the application of the heat treatment.
- The timber or wood packaging material is covered by a heat treatment certificate or has a treatment mark (as per ISPM15) from the treatment provider.

Where a timber pest and/or disease has been determined to be present in the timber or wood packaging material prior to treatment, AQIS will advise the heat treatment provider and NPPO of incidents. AQIS will provide a copy of the Interception Report, scientific findings and relevant paperwork. The heat treatment provider and NPPO will be requested to provide an acceptable response within 6 weeks. At the same time AQIS may take the following action:

- In the first instance of a failed heat treatment, the heat treatment provider will be placed on the Unacceptable Heat Treatment Providers List for 3 months and will be removed from that list, if the treatment provider and NPPO can advise AQIS that the issue(s) resulting in the treatment failure has been addressed.
- In the second instance of a failed heat treatment, the heat treatment provider will be placed on the Unacceptable Heat Treatment Providers List for 6 months and will be removed from that list, if the treatment provider and NPPO can advise AQIS that the issue(s) resulting in the treatment failure has been addressed.
- In the third instance of a failed heat treatment, the heat treatment provider will be placed on the Unacceptable Heat Treatment Providers List for 12 months and will be removed from that list, if the heat treatment provider and NPPO can advise AQIS that the issue(s) resulting in the treatment failure has been addressed.
- Any further treatment failures will result in the heat treatment provider being placed on the Unacceptable Heat Treatment Providers List indefinitely.

3.4 AQIS approved heat treatment providers and acceptable treatment certificates for T9968

AQIS recognised treatment providers for timber heat treatment at a minimum of 56 degrees for 30 minutes as measured at the core of the wood (T9968) that do not require validation of the heat treatment by an official Phytosanitary certificate are:

- **Canada**

  Treatment providers accredited under:

  1. The Canadian Heat Treated Wood Products Certification Program (CHTWPCP) as listed at: http://www.inspection.gc.ca/english/plaveg/for/cwpc/chtwpcpce.shtml

  OR

2. The Canadian Wood Packaging Certification Program (CWPCP) as listed at:

http://www.inspection.gc.ca/english/plaveg/for/cwpc/appe.shtml

OR

3. The Canadian Lumber Export Certification Program as listed at:
http://www.inspection.gc.ca/english/plaveg/for/cwpc/kdhte.shtml

- **United Kingdom**

  United Kingdom companies accredited under the United Kingdom Wood Marking Program that is administered by the Timber Packaging and Pallet Confederation (timcon). A list of accredited treatment providers is available at the timcon web site: www.timcon.org.

- **USA**

  AQIS accepts timber treated at 56 degrees for 30 minutes measured at the core by providers in the USA that are accredited under the United States Department of Agriculture (USDA) authorised American Lumber Standard Committee (ALSC) heat treatment programs for lumber and wood packaging material. The approval will be valid until 1 December 2004. In the interim, AQIS will complete a review of ALSC heat treatment programs to determine if they are able to meet AQIS requirements in the longer term. Details of accredited agencies are available from the ALSC website at www.alsc.org.

- **The Netherlands**

  Companies registered under the Netherlands Wood Packaging Marking Programme (developed by the Netherlands Plant Protection Service). The Netherlands Plant Protection Service has assigned administration of the Programme to The Foundation for Marking Wood Packaging Materials (Stichting Markering Houten Verpakkingen, SMHV). A list of registered companies (in Dutch only) is available at: http://www.smhv.nl/.
  Note: Select '*Geregistreerde bedrijven*' then select '*Registratie nr*' to view the company details and registration numbers.

- **France**

  Companies registered under the 'Programme for the Phytosanitary Conformity of Wood Packaging for Export Use' (developed by the French Ministry of Agriculture, Food, Fisheries and Rural Affairs). The Programme is administered regionally through the Regional Directorates of Agriculture and Forests / Regional Plant Protection Departments (DRAF/SRVP). The relevant DRAF/SPRV for each region in France issues Registration Numbers to approved companies. Note: An internet site listing details of registered companies is unavailable. Treatment certificates that include the name of the AQIS recognised programme, the registration number assigned to the facility under the programme and the appropriate treatment details are acceptable to AQIS.

3.5 References and further reading

Australian Quarantine and Inspection Service (AQIS) (2002): Quarantine Approved Premises Criteria, Quarantine Treatment Facilities: Class 4.1 Heat treatment facilities.

International Standards for Phytosanitary Measures Publication No. 15*: Guidelines for Regulating Wood Packaging Material in International Trade* (ISPM 15), Secretariat of the International Plant Protection Convention (IPPC), Food and Agriculture Organisation of the United Nations. Rome, 2002. Available from the IPPC website at www.ippc.int.

UK Forestry Commission Plant Health Service Information Note 1 (revised June 2003): Verification of heat treatment facilities and authorisation of the use of the DB-HT mark to comply with International Standards for Phytosanitary Measures ISPM 15. Available from the UK Forestry Commission website at: www.forestry.gov.uk/planthealth.

APPENDIX IV: TESTING PROCEDURES FOR PERMANENT PRESERVATIVE TREATMENTS.

Methods used for sampling and analysis shall be in accordance with Australian Standards AS 1604 and AS 1605.

Full penetration of a cross-section of sawn timber is desired but when this cannot be achieved all sapwood must be fully penetrated and not less than five out of six specimens shall show at least 6mm penetration from all faces. Alternatively at least one third of the total cross section shall be penetrated including all sapwood.

In plywood there shall be evidence of penetration of preservative into every distinguishable veneer in the assembly when examined on a section cut parallel to the grain of the face veneer and 300mm from the edge of the sheet, measured perpendicular to the grain of the face veneer.

It is recognised that the requirement for testing plywood would destroy the sheet. This test would only be required where quarantine officers found the plywood infested with timber insects. For routine testing, manufacturers of plywood may adopt sampling methods other than those outlined but it is their responsibility to ensure the treatment applied meets the prescribed standard.

The evidence of a colorimetric test for copper or zinc will be accepted as proof of penetration for a metal chrome arsenic preservative. Where a metal is not present in an approved arsenical preservative a test for arsenic will be required.

If the retention of any preservative, for any treatment containing arsenic, is to be proven by analysis, then at least 80% of wood samples from the outer 6mm of the timber must contain at least 1.12 kg/m³ as $As_2O5_2H_20$. Any sample taken from the whole cross-section at least 0.75 kg/m³ as $As_20_52H_20$.

For treatments containing tributyltin oxide no individual specimen of wood shall contain less than 3.20 kg/m³ of tributyltin oxide.

For preservatives where no colorimetric test is available penetration is to be proved by chemical analysis.

For plywood, no sample should be below 75% of the specified minimum retention.

APPENDIX V: FUMIGATION WITH SPECIAL REFERENCE TO CONTAINERS.

1. FUMIGANTS

Fumigants are pesticides in a gaseous state. Their effectiveness is determined largely by the:

?	dosage of the fumigant	NOTE:
?	duration of exposure	Details of these factors must be included on
?	temperature	fumigation certificates

Fumigants only control existing infestations in timber; they do not provide any residual protection against subsequent reinfestation. Consequently timber treated by fumigation must be packed in a container or shipped within 21 days of treatment.

Fumigants approved by AQIS for preshipment treatments are methyl bromide and sulphuryl fluoride with the former being most widely used.

1.1 Methyl bromide (CH_3Br)

Packing timbers, timber and wooden articles must be fumigated with methyl bromide at a concentration of 48g/m³ for 24 hours at a temperature of 21°C under normal atmospheric pressure (NAP).

For each 5°C the temperature is expected to fall below 21°C the fumigator must add 8g/m³ of methyl bromide. For temperatures above 21°C, no dosage compensation is allowed by AQIS. AQIS does not accept **treatments undertaken below 10°C.**

Under the AQIS Methyl Bromide Fumigation Standard, the use of dilutants such as carbon dioxide (CO2) is acceptable provided the fumigator calculates the required dosage rate on the methyl bromide content only.

Where a mixture (e.g. 80% methyl bromide and 20% carbon dioxide) is used, the fumigator must apply more of the solution to achieve the required dosage than if a full strength solution (100% methyl bromide) is used. There is no change to the required dosage recorded on the fumigation certificate other than to indicate that the dosage refers to the methyl bromide component of the mixture only.

Methyl bromide is **absorbed by oils, fats and finely ground materials**. It is also known to **react with materials containing sulphur**, including foodstuffs, proteins and paints, to produce objectionable discolouration or odours, which may persist even after prolonged aeration.
Methyl bromide is odourless so small concentrations of chloropicrin (tear gas) are sometimes added as a warning agent.

However, chloropicrin is very phytotoxic and must not be used for the fumigation of live plants, fruits, vegetables and seeds. The gas is regarded as a safe fumigant for seeds providing the moisture content is not excessively high and fumigation is not repeated.

When methyl bromide is to be used for fumigation of FCL containers, importers may need to consider unpacking for full inspection, as an alternative, if there are items, which may suffer such damage.

Where there are concerns about possible deleterious effects of methyl bromide, an alternative

treatment may be sought.

The following materials, commodities and articles are among those which should **not** ordinarily be fumigated with methyl bromide:

- butter, lard and fats unless in airtight cans, nuts with high oil content, avocado fruit, soybean flour, whole wheat flour, other high protein flours, baking powders;
- bone meal, charcoal, cinder blocks;
- furs, felts, horsehair articles, feather pillows, rug pads, high rag content writing papers and other high sulphur papers;
- iodised salt, salt blocks containing sulphur or its compounds;
- leather goods, particularly kid, photographic chemicals, (not camera film or X-ray film);
- photographic prints and blueprints, silver polishing papers;
- rubber goods, particularly sponge rubber, foam rubber and reclaimed rubber, including pillows, mattresses, rubber stamps and upholstered furniture;
- woollens, especially angora, soft yarns and sweaters, viscose rayon fabrics;
- sulphur-based paint and oil artworks; and
- disposable medical appliances.

Plastic wrapping <u>inhibits</u> the penetration of the fumigant.
Highly painted, varnished or glazed timber products are believed to <u>inhibit</u> the penetration of the fumigant.

1.2 Sulphuryl fluoride (SO_2F_2) (Vikane ®)

Sulphuryl fluoride is used extensively in the USA as a fumigant to control insect pests of timber. It should not be used on living plants or foodstuffs.

It has an advantage over methyl bromide in that it can be used without any deleterious effects on photographic supplies, metals, electronic components, papers, leather, rubbers, plastics and wallpapers. It could be the preferred fumigant for timber packaging associated with delicate electronic equipment which use rubber components.

*® Registered trade name of Dow Chemical Company.
(AQIS is in the process of assessing the efficacy data associated with this chemical and may phase out its use as a quarantine treatment.)

2. FUMIGATION OF CONTAINERS

Containers are not completely gas tight, they all leak to varying degrees. The leakiness is affected by such factors as construction, age, state of repair, and packing. It is further affected by extraneous factors such as fluctuations in temperature and pressure, exposure to winds and movement during transportation and lifting. The degree of leakiness of containers determines their suitability for fumigation.

Insulated containers in a good state of repair are suitable for fumigation and do not require to be covered with gas tight sheets.

General-purpose containers even when new, may be too leaky to permit effective fumigation without supplementary sealing of floors, seams and door seals.

Because of the gas tightness limitations of general-purpose containers, they must be fumigated on impervious surfaces with doors ajar and under gas tight sheets.

However, operational constraints in overseas ports suggest that this requirement is not always possible and that methods can be employed to bring some GP containers to an acceptable standard of gas tightness.

Where a container can be made sufficiently gastight, monitoring of gas concentrations in the container is acceptable as an alternative method.

This method should only be applied to containers which are fumigated for timber contents (packing or goods). A standard of 30 percent or more of the original fumigant concentration is required, when measured after 24 hours. If this standard is not reached then the container should be re-fumigated under gas-proof sheets.

Loaded containers may be fumigated to treat the exposed timber components of containers, timber packaging or the cargo. If the packaging timbers or cargo are to be fumigated, they must not be sealed in gas-impermeable materials such as plastic, aluminium foil and tarred or waxed papers.

The container must be packed to provide air space for circulation of the fumigant. Cartons, crates and bagged cargo should be on pallets or skids to keep them off the floor.

An axial type fan with a capacity of at least 71 m^3/min (2500CFM) must be used to circulate the fumigant. The fan must be placed at the open door, positioned to blow over the floor towards the front of the container. The fan should run for 15 minutes after the introduction of the fumigant.

If several containers are fumigated under the same sheet, additional fans are necessary. For every container under the sheet a fan of 71 m^3/min (2500CFM) capacity should be used.

The fumigant must be introduced into the container as a hot gas.

To achieve this, vaporisers of suitable heating capacity must be used. This is particularly important when fumigating commodities that absorb large amounts of fumigant, and for treatments conducted at low temperatures. Gas concentrations should be monitored at intervals during the fumigation and, if necessary, additional fumigant added to maintain the required concentration.

After completion of fumigation, the container should be ventilated until the fumigant can no longer be detected. Inadequately ventilated containers pose grave threats to the health of staff involved in their unpacking.

In special circumstances containers may be fumigated and shipped under gas without ventilation.

If this is done, safety procedures specified by relevant authorities and shipping companies must be complied with. Containers bearing warning labels that they have been shipped under fumigation will not be inspected by the Australian Quarantine and Inspection Service, until they have been ventilated and certified free of gas.

Certificates of fumigation must contain full details of fumigation as illustrated in the example at the end of this Appendix.

3. DOSAGE FOR CONTAINER FUMIGATION

3.1 Methyl bromide (CH_3Br)

The dosage of methyl bromide to meet the requirements of AQIS for containers carrying exposed infestable agricultural products and other products are as follows:

(a) **Unlined/insulated/open-top/open-sided (empty):** For carriage of exposed infestable agricultural produce unlined/insulated/open-top/open-sided containers do not require fumigation. A certificate of cleaning prior to packing the container will be accepted.

(b) **Lined general purpose containers (empty):** Prior to packing with exposed infestable agricultural produce fumigation is required as a precautionary treatment against Khapra beetle infestation behind container linings. The dosage of methyl bromide is as follows:

- 80 g/m³ (5 lb/1000 cu ft) for 24 hours at 21°C (70°F).

Additional fumigant should be added at the rate of 8g/m³ (8 oz/1000 cu ft) for each 5°C (10°F) the minimum ambient temperature during fumigation is below 21°C (70°F).

(c) **General purpose and insulated/refrigerated containers (packed):** If timber packaging (crates, pallets, dunnage, skids, etc.) is used in FCL containers the dosage of methyl bromide is as follows:

- 48 gm³ (3lb/1000 cu ft) for 24 hours at 21°C (70°F).
- Additional fumigant should be added at the rate of 8 g/m³ (8 oz/1000 cu ft) for each 5°C (10°F) the minimum ambient temperature during fumigation is below 21°C (70°F).
-

3.2 Sulphuryl fluoride (SO_2F_2) (Vikane ®)

Dosage of sulphuryl fluoride to meet the requirements of AQIS, **for general purpose and insulated/refrigerated containers (packed), if timber packaging (crates, pallets, dunnage, skids, etc.) is used in FCL containers is as follows:**

- 64 g/m³ (4 lbs/1000 cu ft) for 16 hours at 21°C (70°F)
- 64 g/m³ (4 lbs/1000 cu ft) for 24 hours at 15.5°-20.5°C (60°-69°F)
- 80 g/m³ (5 lbs/1000 cu ft) for 24 hours at 10°-15°C (50°-59°F)
- 104 g/m³ (6.5 lbs/1000 cu ft) for 24 hours at 4.5°-9.5°C (40°-49°F)
- 80 g/m³ (5 lbs/1000 cu ft) for 32 hours at 4.5°-9.5°C (40°-49°F)

Note: Sulphuryl fluoride is not suitable for fumigation of empty containers for carriage of exposed agricultural products. (AQIS is in the process of assessing the efficacy data associated with this chemical and may phase out its use as a quarantine treatment.)

Details regarding the correct certification of fumigation treatments, and the documentation required for quarantine clearance, refer to Appendix VII.

APPENDIX VI: DEFINITION OF TERMS USED IN THIS DOCUMENT.

'**Approved**' means approved by the Director of Quarantine or an officer designated by the Director of Quarantine.

'**Approved place for performing quarantine**' means a place approved by a Quarantine Officer in writing as a place for performing quarantine.

'**Container system unit**' is a container (including a lift-van or tank but not including a vehicle):

(a) designed for repeated use as a unit of cargo-handling equipment in the transport of goods by ships or aircraft specially constructed, adapted or equipped for the handling and carrying of containers of the type to which the container belongs in the course of a transportation system, in which goods are transported to and from the ship or aircraft in containers of that type; and

(b) fitted with devices to permit its ready handling in the course of that system and includes normal accessories and equipment of such a container when used or transported with the container.

(c)

'**Container break-bulk depot**' is a depot approved by the Australian Customs Service and the Director of Quarantine for storing, breaking down or consolidating containerised cargo. It includes accommodation for Customs and Quarantine officers and facilities and equipment for examining, weighing goods and holding goods in secure custody and can include facilities for fumigation, disinfecting and destroying goods.

'**FCL**' full container lot.
'**H/H**' - house to house.
'**P/H**' pier to house. Consignor, shipper, or carrier packing to consignee'
'**LCL**' less than container lot.
'**H/P**' - house to pier.
'**P/P**' - pier to pier. Consignor, shipper, or carrier packing to depot

'**Exposed infestable agricultural produce**' - The word 'exposed' in the definition is interpreted to mean exposed to insect infestation. Inherently infestable commodities may be processed in ways which eliminate existing insect infestation and maintain them in that condition by packing in insect proof containers. These commodities should be considered as non-exposed. Agricultural produce considered as non infestable include such products as plant fibres, rubber, processed tea, vegetable oils, etc.

'**Immediate release**' - is quarantine release from a wharf/terminal or airport based on presentation of appropriate documents without any quarantine inspection/treatment other than the external inspection of the container undertaken during unloading.

'**Packer's declaration**' **-** is a certificate issued by the person or organisation responsible for packing a container.

'**Quarantine control area**' is an area where inspection, treatment and other quarantine action can be undertaken under quarantine control and includes quarantine stations, wharfs, terminals, container break-bulk depots and approved places for performing quarantine.

APPENDIX VII: CERTIFICATION OF TREATMENTS, EXAMPLES OF ACCEPTABLE CERTIFICATES & FCL/LCL PACKERS DECLARATION.

1. CERTIFICATION OF TREATMENT

Examples of acceptable certificates are provided at the end of this appendix.

To permit the release of containers with off-shore treated timber packing, correct certification of the treatment is essential. AQIS does not require treatment certification for timber packing if it is marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps. To have consignments containing timber packing marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps cleared on the basis of documentation alone, ALL of the timber packing in the consignment must be marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps and an ISPM 15, NIMP15 or NIMF 15 packing declaration must accompany the consignment stating that ALL of the timber packing is marked with ISPM 15, NIMP15 or NIMF 15 compliant stamps.

Treatment certificates must include:

- the treatment provider's letterhead or a company stamp/seal; and
- the treatment provider's address; and
- a description of the goods being treated (eg crates, cases, pallets, skids, dunnage and/or timber shipping aid); and
- a signature by the treatment provider representative or a chop or block stamp incorporating a stamped signature; and
- the date the treatment took place and the signatory's date; and
- a consignment identifier or numerical link.

Treatments must be applied by treatment providers acceptable to AQIS.

Details showing that an approved treatment was used and that correct procedures were implemented in applying the treatment must also be included.

To be valid, treatment certificates must include the following information where AQIS approved treatments are applied to timber.

2. PERMANENT PRESERVATIVE TREATMENT OF TIMBER

Timber preservative treatments approved in Appendix I

All preservative treatments approved in Appendix I for the permanent immunisation of exposed timber components of containers are also approved for the permanent immunisation of packing timbers, wooden articles and timber products.

The information required in permanent immunisation treatment certificates includes:

This is to certify that the timber described below was treated on ..... (date) in accordance with AQIS requirements.
Name of preservative treatment: .....
Name and chemical composition of preservative: .....
Charge retention in the wood .....%mass/mass
Type of wood (species) .....
Method of application .....
Treatment Provider Signature: .....

3. FUMIGATION

Methyl bromide (CH_3Br) and sulphuryl fluoride (SO_2F_2) (Vikane®) fumigations approved in Appendix II

To permit release of fumigated containers correct certification of the treatments cited above is essential.

Critical information that must be included on all off-shore methyl bromide fumigation certificates.

name of fumigant.....
date of fumigation.....
place of fumigation.....
dosage: concentration .....g/m^3 Duration.....hours
minimum ambient temperature of the goods.....degrees C
fumigation performed under gas tight sheet Yes No (circle answer)
If no, pressure decay value for 200-100 Pascals.....seconds
container number (or numerical link).....
description of cargo.....……
treatment provider signature and date.....

(If the fumigation was under vacuum, the pressure reading has to be at least 660 millimetres of mercury and indicated on the accompanying certification)

Additional declarations for Methyl Bromide (CH_3Br) fumigations

There are two additional statements that can be added to an offshore methyl bromide fumigation certificate to clarify the way the consignment was fumigated. These are:

- **Impervious surfaces statement**

"This consignment has been verified free of impervious surfaces/layers* that may adversely effect the penetration of the fumigant prior to fumigation"

* Impervious surfaces/layers may include plastic wrapping or laminated plastic films, lacquered or painted surfaces, aluminium foil, tarred or waxed paper etc.

- **Stickering statement (spaces placed between layers of timber to allow methyl bromide fumigation to penetrate)**

"The consignment was stickered at 200 mm intervals" (ie stickered prior to treatment)

4. HEAT TREATMENTS

4.1 Kiln drying for quarantine purposes as approved in Appendix III

This is to certify that the timber described below was treated on .....(date)..... in accordance with AQIS requirements.
Temperature ..... °C
Duration:..... hours
Timber thickness:..... mm
(where 'thickness' is defined as the distance between spacers in the stack, regardless of the thickness of individual boards)
Container number (or numerical link).....
Description of goods.....
Treatment provider signature and date:.....

4.2 Heat treatment as approved in Appendix III

This is to certify that the timber described below was treated on .....(date)..... in accordance with AQIS requirements.
Temperature ..... °C
Duration at the core of the wood..... minutes or hours
Container number (or numerical link).....
Description of goods.....
Name and address of the government or industry body that has accredited the treatment provider to carry out this treatment……..
Treatment provider identification number or facility registration number…….
Treatment provider signature and date……

5. PACKING MATERIAL MADE OF NEWLY MANUFACTURED PLYWOOD

Packing material made of plywood is acceptable for quarantine without inspection or further treatment provided the plywood is newly manufactured (ie not pre-used), is manufactured in:

- Australia, Canada, Europe, Israel, Japan, New Zealand, United Kingdom or USA within three months of shipment; or
- countries other than those above, within 21 days of shipment,

and the consignment is accompanied by an acceptable certificate that includes the country of manufacture, the date of manufacture and a statement that the plywood has not been pre-used.

Example of an acceptable ISPM 15, NIMP 15 OR NIMF 15 FCL Packing Declaration

Supplier Letterhead

FCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Ship name:_____Voyage number:_____

Consignment identifier(s) or Numerical link(s) _____ __

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q1. Has **Straw Packing** been used in the consignment listed above?

A1. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q2a. Has **Timber Packing** been used in the consignment listed above?

A2a. YES ☐ NO ☐

Q2b. **ISPM 15**: Is all the timber packing marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps?

A2b. YES ☐ NO ☐

BARK (Including ISPM 15 compliant packing)

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q3. If **Timber Packing** is used, is it free of **Bark**?

A3. YES ☐ NO ☐

CLEANLINESS DECLARATION

I declare that the above container(s) has/have been cleaned and is/are free from material of animal and/or plant origin and soil.

Signed: _____ Date: _____
Packer / Supplier Representative

Example of an acceptable ISPM 15, NIMP 15 OR NIMF 15 LCL Packing Declaration

Supplier Letterhead

LCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Ship name:_____Voyage number:_____

Consignment identifier(s) or Numerical link(s) _____ __

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q1. Has **Straw Packing** been used in the consignment listed above?

A1. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q2a. Has **Timber Packing** been used in the consignment listed above?

A2a. YES ☐ NO ☐

Q2b. **ISPM 15**: Is all the timber packing marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps?

A2b. YES ☐ NO ☐

BARK (Including ISPM 15 compliant packing)

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q3. If **Timber Packing** is used, is it free of **Bark**?

A3. YES ☐ NO ☐

Signed: _____ Date: _____
Packer / Supplier Representative

Example of an acceptable combined ISPM 15, NIMP 15 OR NIMF 15 FCL/LCL Packing Declaration

Supplier Letterhead

FCL/LCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Ship name:_____Voyage number:_____

Consignment identifier(s) or Numerical link(s) _____ __

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q1. Has **Straw Packing** been used in the consignment listed above?

A1. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q2a. Has **Timber Packing** been used in the consignment listed above?

A2a. YES ☐ NO ☐

Q2b. **ISPM 15**: Is all the timber packing marked with ISPM 15, NIMP 15 or NIMF 15 compliant stamps?

A2b. YES ☐ NO ☐

BARK (Including ISPM 15 compliant packing)

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q3. If **Timber Packing** is used, is it free of **Bark**?

A3. YES ☐ NO ☐

CLEANLINESS DECLARATION (FCL only)

I declare that the above container(s) has/have been cleaned and is/are free from material of animal and/or plant origin and soil.

Signed: _____ Date: _____

Packer / Supplier Representative

Example of an Acceptable FCL Packing Declaration (Note: Does not cater for ISPM 15)

Supplier Letterhead

FCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Container Number or Numerical Link (Shipping Marks/Invoice Number/Bill Number):

_____

_____

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q. Has **Straw Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q. Has **Timber Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

BARK

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q. If **Timber Packing** is used, is it free of **Bark**?

A. YES ☐ NO ☐

CLEANLINESS DECLARATION FOR FCL

I also declare that the above container(s) has/have been cleaned and is/are free from material of animal and/or plant origin and soil.

Signed: _____ Date: _____

Supplier Representative

Example of an Acceptable LCL Packing Declaration (Note: Does <u>not</u> cater for ISPM 15)

Supplier Letterhead

LCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Container Number or Numerical Link (Shipping Marks/Invoice Number/Bill Number):

_____

_____

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q. Has **Straw Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q. Has **Timber Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

BARK

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q. If **Timber Packing** is used, is it free of **BARK**?

A. YES ☐ NO ☐

Signed: _____ Date: _____

Supplier Representative

Example of an Acceptable combined FCL/LCL Packing Declaration (Note: Does <u>not</u> cater for ISPM 15)

Supplier Letterhead

FCL/LCL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

Container Number or Numerical Link (Shipping Marks/Invoice Number/Bill Number):

_____

_____

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)

Q. Has **Straw Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: Crates, Cases, Dunnage, Pallets, Skids, and any other timber used as a shipping aid.)

Q. Has **Timber Packing** been used in the consignment listed above?

A. YES ☐ NO ☐

BARK

(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q. If **Timber Packing** is used, is it free of **Bark**?

A. YES ☐ NO ☐

CLEANLINESS DECLARATION FOR FCL'S ONLY

I also declare that the above container(s) has/have been cleaned and is/are free from material of animal and/or plant origin and soil.

Signed: _____ Date: _____

Supplier Representative

Example of an Acceptable LCL Annual Packing Declaration

Supplier Letterhead

LCL ANNUAL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)
Q. Is **Straw Packing** used in consignments covered by this document?

A. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: crates, cases, dunnage, pallets, skids, and any other timber used as a shipping aid.)
Q. Is **Timber Packing** used in consignments covered by this document?

A. YES ☐ NO ☐

BARK
(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q. If **Timber Packing** is used, is it free of **Bark**?

A. YES ☐ NO ☐

VALIDITY STATEMENT

On behalf of _____(Supplier Name), I hereby declare that the information and statements above are true and correct. This declaration is valid for 12 months from the date below, for all consignments packed by this business for _____(Importing Business Name). I undertake to immediately advise AQIS of any change to the information provided.

Signed: _____ Date: _____

Supplier Representative

Example of an Acceptable Combined FCL/LCL Annual Packing Declaration

Supplier Letterhead

FCL/LCL ANNUAL PACKING DECLARATION

[Boxes ☐ to be marked with an X in the appropriate place.]

STRAW PACKING

(Straw packing includes straw, cereal, rice hulls, and other unprocessed plant materials.)
Q. Is **Straw Packing** used in consignments covered by this document?

A. YES ☐ NO ☐

TIMBER PACKING

(Timber packing includes: crates, cases, dunnage, pallets, skids, and any other timber used as a shipping aid.)
Q. Is **Timber Packing** used in consignments covered by this document?

A. YES ☐ NO ☐

BARK
(Bark is the external natural layer covering trees and branches. This material is distinct and separable from processed timber.)

Q. If **Timber Packing** is used, is it free of **Bark**?

A. YES ☐ NO ☐

VALIDITY STATEMENT

On behalf of _____(Business Name), I hereby declare that the information and statements above are true and correct. This declaration is valid for 12 months from the date below and I undertake to immediately advise AQIS of any change to the information provided.

CLEANLINESS DECLARATION FOR FCL'S ONLY

All container(s) packed by this business for _____(Importing Business Name) and covered by this declaration will be cleaned free from residues of previous cargo and will be free from material of animal and/or plant origin and soil before packing.

Signed: _____ Date: _____

Supplier Representative

Example of an Acceptable Permanent Immunisation Treatment Certificate

Treatment Provider Letterhead

Details of Treatment

This is to certify that the timber described below was treated on (date) ..... in accordance with AQIS requirements.

Name of preservative treatment .....

Chemical composition of preservative (eg CCA) .....

Loading of preservative..... % mass/mass based upon the oven dried mass of the treated wood

Or

kg/m^3 or lbs/cu ft (net dry salt retention. nb Only limited preservatives can be expressed in these terms after 1 November 1999) .....

Description of goods.....

Consignment identifier or numerical link .....

Date .....

Signature of Treatment Provider.....

Example of an Acceptable Fumigation Certificate

Treatment Provider Letterhead

The goods described below were treated in accordance with the fumigation requirements of the Australian Quarantine and Inspection Service.

Details of Treatment

Name of fumigant .....

Dosage .....g/m^3 or lbs/cu ft

Duration ..... hours

Minimum ambient temperature during fumigation .....

Consignment identifier or numerical link .....

Description of cargo .....

Date .....

Treatment Provider Signature .....

Example of an Acceptable Kiln Dried Treatment Certificate

Treatment Provider Letterhead

Details of Kiln Drying Treatment

This is to certify that the timber described below was treated on (date) ..... in accordance with AQIS requirements.

Temperature .....(C° or F°)

Duration ..... hrs

Timber Thickness ..... mm/inches

Description of goods.....

Consignment identifier or numerical link .....

Date .....

Treatment Provider Signature .....

Example of an Acceptable Heat Treatment Certificate

Treatment Provider Letterhead

Details of Heat Treatment

This is to certify that the timber described below was treated on (date) ..... in accordance with AQIS requirements.

Temperature .....(C° or F°) Duration ..... hrs

The temperature was held for the duration at the core of the wood.

Description of goods.....

Consignment identifier or numerical link .....

Treatment provider identificatiuon number/facility registration number.....

Government or equivalent program name.....

Date .....

Treatment provider signature.....

Example of an Acceptable Newly Manufactured Plywood Products Certificate

Manufacturer's Letterhead

Details of Manufacture

Description / name of plywood product:……..

The plywood in this consignment was manufactured:

in …….(insert country of manufacture).……

on:……..(insert date of manufacture)…….

This plywood product has not been pre used.

Consignment identifier / numerical link:.....

Signature of manufacturer .....……....…….. Date ……