AQIS
AUSTRALIAN QUARANTINE AND INSPECTION SERVICE
DEPARTMENT OF AGRICULTURE, FISHERIES AND FORESTRY

WORK INSTRUCTION

- Grains Program -

Inspection of Forest Products for Export

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1. PURPOSE

To describe the procedure to be followed by AQIS Authorised Officers and AQIS Approved Inspectors undertaking the inspection of Forest Products for Export.

2. SCOPE

The procedures set out in this Work Instruction apply to the 'Inspection of Forest Products for Export', requiring Phytosanitary Certification by the importing country.

3. ADDITIONAL MATERIAL TO BE USED IN CONJUNCTION WITH THIS DOCUMENT

- *Export Control Act 1982*
- The *Prescribed Goods (General) Orders Part 2 Prescribed Goods, sub-order 6 (0).*
- The *Grains Plants and Plant Products Orders (GPPPO's) 1985*
- *Process Management System: - Inspection of Forest Products for Export* (if applicable).
- *Field Crops Inspection Manual and Handbook*

4. DEFINITIONS

Approved Inspector - a suitably trained / skilled person approved by the Australian Quarantine and Inspection Service (AQIS) to undertake the inspection of prescribed goods in accordance with this Work Instruction, the *Export Control Act 1982* (and subordinate legislation) and the International Plant Protection Convention (IPPC) –International Standards for Phytosanitary Measures (ISPMs)

Authorised Officer – an officer of the Department of Agriculture, Fisheries and Forestry – Australia (AFFA) or a person appointed under section 20 of the *Export Control Act 1982.*

Compliance Agreement - a voluntary agreement entered into by the Australian Quarantine and Inspection Service (AQIS) and an independent party to undertake specific procedures / activities on behalf of AQIS using suitably trained / skilled persons.

Consignment - a quantity of prescribed goods assembled and intended for export at the one time and nominated on an export permit(s) and / or Phytosanitary Certificate (E16). A consignment may consist of one or more ***inspection lots***.

Contaminants – see foreign matter.

Empty (dry box) container – a purpose made, secure, container system unit (CSU) for the transportation of either bulk, bundled or bagged prescribed goods to overseas destinations.

Foreign matter – means any substance, whether organic or inorganic, which are included in or with the prescribed goods.

Forest Product – any product derived from wood such as sawn timber, woodchips, veneers, panels, and plywood among others.

Frass – debris or excrement produced by insects.

Inspection Lot or (lot) – an amount of product presented for inspection.

Inspector – an AQIS Approved Inspector, where the inspection is being carried out under a Compliance Arrangement or an AQIS Authorised Officer, where inspection is directly undertaken by the Commonwealth at a fee for inspection.

Live infestation – either alive or dying (moribund). Includes insects, mites, Arthropods and snails, includes all stages of the lifecycle (larvae, pupae and adult phases).

Log – a section of trimmed, unhewn timber.

Pest – any species, strain or biotype of plant, animal or pathogenic agent, injurious to wood, forest products and / or plant products, or considered of quarantine significance by the importing country.

Phytosanitary Certificate - a document issued by one government, (ie. the Australian government), to the government of the importing country, testifying to the plant health status (freedom from pests, diseases and weed seeds) of the certified product.

Prescribed goods – goods, or goods included in a class of goods, that are declared by the regulations to be prescribed goods for the purpose of the *Export Control Act 1982, Section 3 and Prescribed Goods (General) Orders, Part 2 Prescribed Goods, sub-order 6(o).*

Reconstituted product – processed forest products such as plywood, veneer, particleboard, and fibreboard.

Registered establishment – an establishment that is registered under the Orders for the preparation (includes inspection) of prescribed goods for export.

Request for Permit (RFP) – an electronic version of a Notice of Intention to Export, lodged electronically through the EXDOC system.

Roundwood – logs or other round sections cut from trees.

Sawnwood – logs that have been processed into sawn timber.

Sleeper – structural timber used on or near the ground that supports weight.

Timber – the body, stem or trunk of a tree prepared for building or carpentry.

Transport Unit – a ship’s hold, upper / weather deck or empty (dry box) container unit.

Wood – the secondary xylem of trees and shrubs, lying beneath the bark and consisting largely of cellulose and lignin.

Wood-chips – angular shaped small pieces of wood primarily used for the manufacture of pulp into paper.

5. RESPONSIBILITIES

5.1 Management Responsibilities

The Manager (Executer under the Compliance Agreement) of the registered export establishment is responsible for;

i) the implementation and execution of this work instruction,

ii) ensuring that only AQIS Approved Inspectors undertake the inspection of forest products, and

iii) that all inspections of forest products undertaken under the Compliance Arrangement are carried out in accordance with this work instruction.

5.2 AQIS Approved Inspectors Responsibilities

The Inspector at the registered export establishment is responsible for ensuring that all of the activities described in this work instruction are followed when inspecting forest products for export.

6. WORK ACTIVITIES

6.1 Verification of Inspection Requirements

The Inspector, prior to inspection, must ensure that the export requirements and / or Phytosanitary requirements of the importing country for which the consignment is being inspected are known. If pests are found during the inspection, the exporter must check with AQIS to ascertain if specific pests are of quarantine concern.

The Inspector shall also verify whether an Import Permit is required, the existence of any additional declarations and specific objects of quarantine concern such as prohibited pest or if any treatments are required.

Inspectors must also check if import permit requirements override the normal sampling rates.

Note: If the sampling rate specified by the importing country differs from the rate prescribed in this Work Instruction, the Approved Inspector shall use the higher rate.

6.2 Preparation for Inspection

The Inspector shall conduct a hygiene inspection of the nominated areas that are to be used, including the product inspection area, flow path, storage areas etc and record the result of the inspection on the Export Inspection Record (EIR) – Attachment 2.

The pathway from product storage to the container or ship must be free of potential contaminants, such as seeds, soil, live insects and foreign plant material that may be of Quarantine concern. These pathways include all equipment used to handle and load the product to the container or ship, such as belts, hoppers, transfer points, screens and loaders.

Where live insects of quarantine concern are detected or a risk of cross infestation exists, the Inspector will ensure that the insects and/or risk of cross infestation/contamination are eliminated prior to proceeding with the export inspection.

Any treatment required to eliminate cross-infestation risk will be recorded on the Export Inspection Record (EIR) (Attachment 2), and the details of the treatment documented on a Hygiene Inspection, Cleaning & Waste Disposal Record (Attachment 4).

The Inspector shall;

Ensure that adequate inspection facilities are available and that they are fit for use. These facilities shall include:

(a) access to draw random and representative samples from the lot for inspection;

(b) sufficient space (minimum 1 metre) around stacks of wood and forest products to allow adequate access for the sampling and inspection of the lot;

(c) that adequate natural or artificial lighting is available (minimum 600 Lux)

The Inspector shall ensure that the container / ship / vessel to be loaded has been inspected and passed fit for use by an AQIS Accredited Empty (Dry Box) Container Inspector or an accredited ship inspector, prior to commencing loading, by identifying;

(i) the presence of an 'Inspected' sticker (if from another site) and / or

(ii) transport unit seal (if unit is from another site),

(iii) that a *Declaration of Inspection for Empty (Dry Box) Containers* has been issued (if applicable) and provided to the inspector, and

(iv) Permit to Load has been issued (in the case of a ship / vessel) prior to commencement of loading.

If any of the above is not available the Inspector will assume the transport unit has not been inspected. The Inspector shall ensure that the unit is inspected and approved prior to commencement of loading.

NOTE: Importing country requirements should be checked to ensure the validity of the transport unit inspections, as certain importing country destinations will only accept transport unit inspections to be valid for 14 or 21 days after the date of inspection.

6.3 Determination of Inspection Lots

The Inspector shall determine the size and identification of the inspection lots. In the case of log yards, exporters shall produce a location plan and the Inspector shall inspect and mark on the plan which logs are acceptable.

The Inspector shall record the tonnage or number of forest products forming each inspection lot on the Export Inspection Record.

6.4 Inspection and Sampling

Forest products are to be inspected and sampled as stated in the *Grain, Plants and Plant Product Orders Schedule 5*, and in accordance with 6.5 to 6.7 of this document.

6.4.1 Sampling of Forest Products

The sampling rate for all inspection lots will be **10%** per inspection lot irrespective of the number of logs / pallets in the lot, and **2.25 litres per 33.33 tonnes** in the case of woodchips, in accordance with the *Grains Plants and Plant Product Orders Schedule 5.*

The Inspector shall **randomly** select the forest products to be sampled from the lot presented for export.

Logs: the 10% random sample shall be presented in a designated 'sample inspection area' - segregated from the rest of the consignment. This area is to be clean and suitable for the performance of sample inspection. Where the consignment consists of a number of lots/lines, each of the samples lots representing each lot/line shall be clearly identified and seperated from other lot samples.

Woodchip: As a bulk commodity it is to be sampled as per the *Grain, Plants and Plant Product Orders*, Schedule 5 at 2.25 litres per 33.33 tonnes or equivalent using an AQIS approved automatic sampling system or manual sampling from the product flow-path during out-turn.

Sawn Timber Products (excluding logs and woodchip): All exposed sides and ends of bundles are to be inspected as the sample of the total timber surface area of the lot.

Note: Bundles are to be presented in single stacks to a maximum of 2 bundles high (to a maximum height of 2 metres above the inspection surface).

A minimum of one bundle of timber products shall be split to inspect for the presence of termites, Sirex Wasp and wood rots.

Reduced Sampling Rate: NOTE: - ***The application of this reduced sampling regime is based on the product and sample storage areas being approved by AQIS – product stored on hardstand that is not subject to invasion by termites and is free from soil contamination.*** Consignments presented with treatment certificates detailing effective fumigation (as per the AQIS Fumigation Standard) or other approved treatments may be subject to a reduced sampling rate and inspection intensity of 2% (Approved treatments are detailed in Attachment 3). Co-mingling of treated and untreated product will result in the application of the full sampling and inspection regime, negating any reduction in sample size or treatment intensity.

Note:

1. The application of insecticidal treatments do not address other potential contaminant issues of quarantine concern such as soil, grains, seed, plant material.
2. Re-infestation is a major concern during the period between treatment cessation and export – eg termites, flying insects

6.4.2 Inspection of Forest Products.

The Inspector will visually inspect the outside surface of all wood and forest products forming the inspection lot / consignment. This inspection is to determine overall level of insect infestation, disease, soil and other contaminants. Timber must be allowed to stand for 24 hours prior to inspection to allow frass to develop as it is disturbed during the loading process. Similarly, wet timber cannot be inspected thoroughly because frass is removed by rain, and must stand for a further 24 hours after rain has ceased.

The surface of each lot will be inspected by visually examining the wood for:

- Insects and larvae
- Snails and snail eggs
- Exterior termite and ant runways
- Frass
- Insect emergence holes
- Unusual changes in the colour or texture of the wood
- Seeds
- Soil (where logs are stored in a paddock situation, exporters must ensure that the presence of soil on logs does not conflict with importing country requirements).
- Bark (subject to importing country requirements and conditions)
- Plant and animal residues

In addition to the visual inspection, the Inspector shall perform the following inspection pertaining to the specific categories of forest products for export:

Logs

Roundwood with bark – the inspector shall intensively examine all available surfaces of logs including ends, for insects, termites, frass, exit holes, fungi etc in the lot sample. Lift any semi-attached bark with knife, hammer and / or chisel and inspect for signs of infestation. Probe any branch stubs, cracks and / or holes to dislodge any harboured pests that may be present.

The Inspector shall select a **10% sub-sample** from the original segregated 10 % sample. The Inspector shall perform an intensive inspection of the sub-sampled logs, removing sample areas of bark on the sub-sampled logs to inspect for the presence of live insects and pests harbouring under the bark or in the sapwood.

The Inspector shall also perform an ‘overview inspection’ of the entire lot, assessing the products for contaminants and infestation.

Any detection of soil on logs will result in an intensified inspection to assess the extent of contamination, identify contaminated logs and the subsequent rejection of ALL contaminated

logs. Logs placed directly on soil or mud may be rejected as being contaminated, requiring cleaning and re-inspection prior to export.

(***Note****: exporters should present their product in a state where it is prepared and ready for export, meeting all importing country import conditions)*

Roundwood without bark – visually inspect all surfaces of the '10% sample' logs for signs of live insect presence and contaminants. Look for any discolouration on the timber surface, frass, termites and exit holes as any one of these may allude to insect presence.

Sawn Timber

The Inspector shall inspect all exposed sides and ends for insects, termites, frass, exit holes, fungi etc in the lot. Where the bundles are wrapped in plastic, a minimum of 10% of the bundles will have plastic slashed or removed to facilitate inspection of the timber surface.

Note: A minimum of one of bundle of timber products shall be split to inspect for the presence of termites, Sirex Wasp, other pests and wood rots.

Processed Forest Products

Newly manufactured panel products such as plywood, chipboard and particleboard are acceptable for a reduced sampling rate (including panel products used as packaging), provided they have not been pre-used and are accompanied by a manufacturers statement. Accompanying certificates are to state:
'The (*name of panel product*) / packing in this consignment was manufactured in Australia within three months of shipment and has not been pre-used.

Kiln Dried/ Heat Treated/Fumigated Timber

Where a treatment is carried out prior to export, a valid treatment certificate dated within 3 months of shipment must accompany the consignment. These consignments will receive a reduced inspection rate.

Exporters must be made fully aware that timber must be stickered at 200 mm intervals to allow for fumigation. Timber covered with pre-shipment certification should also have been stickered prior to treatment. This should also be endorsed on the documents.

Note: In this case a reduced sampling rate means dropping the requirement for splitting a bundle for inspection

Woodchips

Shall be inspected at the rate of **2.25 litres per 33.33 tonnes**, either by automatic sampler or random manual sample. The surface of the woodchip pile should be visually inspected for signs of insect presence prior to commencing sampling. Beetles and weevils may be of particular concern and as such, the chips should be probed / turned if insect presence is suspected. Woodchip samples should also be sieved according to procedures outlined in the GPPPO's.

Any insect or arthropod potentially capable of surviving through the voyage to the point of inspection at discharge in the importing country is to be considered a potential quarantine pest.

The final decision of the pest quarantine status is the sole responsibility of the importing country's plant health/ quarantine authority.

Note: AQIS staff are to adhere to good OH&S practices at all times. *All other AQIS Approved Inspectors are advised to follow their employer's Occupational Health & Safety procedures*.

6.5 Inspection Tolerances

A nil tolerance for live insect pests of quarantine concern will be applied, irrespective of whether the pests are found on the outside of the stacks or from the samples inspected.

NOTE: Where visual signs of infestation (exit holes / frass / webbing) are found during inspection the Inspector will undertake a more detailed inspection to determine that no live pests of quarantine concern are present.

Where insects of quarantine concern are found the Inspector will reject the entire inspection lot.

Where injurious or quarantine contaminants are found the Inspector will reject the entire inspection lot from which the sample was drawn.

6.6 Rejection Procedures

The Inspector will clearly identify the rejected lot / s with pallet cards, fluorescent tape or sign posting. The Inspector will record the details of the rejection on the EIR and notify the

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that the lot / consignment has been rejected.

On rejection of a lot / consignment (woodchips) the Inspector will halt the loading process and conduct a hygiene inspection of the flow path to ensure that it is clean and fit for use.

The Inspector will record the result of the hygiene inspection on the CWD form. The Inspector or

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will ensure that the rejected lot / consignment is clearly identified and isolated / segregated / removed from the packing area as described in the Process Management System.

Loading will not recommence until the rejected lot has been isolated / segregated / removed from the packing/loading area and the inspection flow path inspected to ensure that it is clean (free of pests and contaminants).

Rejected lots may not be re-presented for inspection until the entire lot has had appropriate treatments /corrective actions performed to remove the prohibited items (pest, soil, seed etc).

The Inspector will ensure that all lots / consignments re-presented for export are inspected and sampled in accordance with Clause 6.5 to 6.6.

The Inspector will record the method employed to rectify the cause of rejection on the EIR for all re-inspected lots / consignments.

Prior to commencement of re-inspection of previously rejected lots, the exporter shall supply, to the Approved Inspector, a treatment certificate/ declaration detailing the performance of the treatment of the identified lot including:

- date of treatment
- nature of treatment
- concentration
- dose rate
- duration
- temperature range during treatment

NOTE: The 'twenty percent rule' will apply to woodchips to ensure that background levels of insect infestation in export woodchip cargoes are kept to a minimum. (See the Field Crops Inspection Manual & Handbook, *Section 4.2.21*). This rule will only apply to insects of quarantine concern.

7 DOCUMENTATION

7.1 Completion of Paperwork

The Inspector will record the results of the inspection on the Export Inspection Record (EIR), including;

i) lot number(s);

ii) number of items / tonnes in the lot;

iii) any rejection details and whether the product was treated and re-presented or replaced and,

iv) the Phytosanitary Certificate number and RFP number of the inspected consignment

The Inspector will complete;

(a) an Export Inspection Record (EIR) sheet.

(b) the Phytosanitary Certificate. (if applicable)

Note: The Company may complete the details on the Phytosanitary Certificate, but the certificate can only be authorised by an AQIS Authorised Officer. Refer to the Phytosanitary Certificate Completion Work Instruction - through the AFFA website – http://www.aqis.gov.au/Phyto , the click on 'PHYTO Documents', 'General'. (http://www.aqis.gov.au/PhytoPublish/Documents/Phytosanitary%20Certificate%20Completion%20WI.doc)

7.2 Document Control

The Inspector will ensure that all inspection records / export documentation relating to the inspection are forwarded to the

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for filing.

The Inspector must record / sign the following:

- Permit to Load (AQIS Inspectors Only),
- An Export Inspection Record Sheet (EIR),
- A Hygiene Inspection, Cleaning and Waste Disposal Report.

Note: A copy of all documentation relating to the inspection carried out under this Work Instruction must be kept on file for a minimum of two (2) years for audit purposes.

8 ATTACHMENTS

Attachment 1 - Equipment List for the Inspection of Wood and Forest Products for Export

Attachment 2 - Export Inspection Record (EIR)

Attachment 3 - Approved Treatments for Wood and Forest Products for Export.

Attachment 4 – Hygiene, Cleaning and Waste Disposal Record.

ATTACHMENT 1: - EQUIPMENT LIST FOR TIMBER INSPECTION

- Bucket
- Plastic bags
- Pencil/s
- x10 optical enhancer
- Insect identification book
- Insect bottles/vials
- Insect brush
- Fluorescent tape
- Tweezers
- Knife
- Sticky labels
- Torch
- Hammer
- Chisel

ATTACHMENT 2: - EXPORT INSPECTION WORKSHEET

FCL / LCL	Country of Final Destination:	Import Permit No:	RFP/PIG/PHYTO NO

Name and Address of Exporter:	Vessel name/ Flight:	Phytosanitary Certificate Required: Yes / No	I ……..…… the person furnishing the information herein: - a) give notice of intention to export prescribed goods; and b) declare that: (i) the conditions and restrictions prescribed in Regulations or Orders under the *Export Control Act 1982* and applicable to the goods have been complied with; (ii) the information supplied on this form is true and correct in every particular; and (iii) responsibility for AQIS charges incurred are accepted.
	Reg.Estab No: ___ ___ ___ ___		
	Date and Time of Inspection:	Additional Declarations Required: Yes / No	
Name and address of Consignee:	Place of Inspection:		
	Commodity Description & Amount:	Date of Departure: ____ / ____ / ____	_____ ___ / ___ / ___ Signature of Exporter or Agent Date

Inspection and Loading Details

Wood Inspection Summary

Container Number/ Phytos/ Marks.	*Container inspection		Inspected for export					Date of Inspection	Start time (eg 7.30)	Finish time (eg 15.00)	Reporting Data
	CA or AQIS	'X' if passed	Commodity	'Bulk' OR No.of lots	Kgs	Tonnes	Pass/ Fail (P/F)				
		☐						/ /			Total Tonnes Passed:
		☐						/ /			Number of rejections:
		☐						/ /			Rejected Tonnes:
		☐						/ /			Chargeable time Hrs Mins:
		☐						/ /			Travel time Hrs Mins:
No of Cont's:		TOTALS:									OTS No:

ENDORSEMENTS (AD's):

COMMENTS/ TREATMENTS:

I, …….. certify that I have conducted a pre-inspection hygiene inspection of the product inspection area and flow path prior to the collection of samples.

COMPLIANCE AGREEMENT NUMBER:	…….. Approved Inspector (s) Name	…….. Approved Inspector's Signature
Authorised Officer(in block letters):	Authorised Officer Signature:	

(STAMP/SEAL)

☐ **Check (X) if empty container Inspection Dec attached** ☐ **Check (X) if CONTAINER list is attached** ☐ **Check (X) if PRODUCT list is attached**

ATTACHMENT 3: - TREATMENTS FOR FOREST PRODUCTS APPROVED FOR EXPORT

AQIS does not specify any particular treatment. The type of treatment is left to the discretion of commercial parties, for whom profitable trading depends upon effective fumigation. Exporters should note, however, that an AQIS approved method of fumigation, as described below, attracts a reduced rate of sampling for inspection.

Options for treatment are:

- Fumigation under sheets with methyl bromide or phosphine
- Heat treatments
- Chemical preservatives
- Importing country requirements – mandatory pre-shipment treatments. Some importing countries require pre-shipment treatments to be performed on a product and endorsed on a Phytosanitary Certificate.

Any fumigation treatments are to be applied according to manufacturer instructions.

Methyl Bromide (CH_3Br)

Forest products shall be placed on an impervious floor with a minimum 50cm edge around the stack. Tarpaulins shall be free of holes and made of heavy gauge plastic (greater than 1500 micron) or bitumen canvas. The tarpaulin shall be roped to secure the sides and so prevent any bellow action in high winds, which effectively pumps the gas out. The edges of the tarpaulin should be weighted down with sand snakes (or equivalent) placed as close as possible to the edge of the stack.

Any fumigation treatments are to be applied according to manufacturer instructions.
A licensed operator shall apply CH_3Br through a heat exchange unit. The pipe delivering the fumigant shall be connected to a 40mm, open-ended PVC pipe. The length of the pipe depends on the length of the stack being fumigated. The length shall be 50% of the length of the stack. The PVC pipe shall have 4mm diameter holes drilled at 100cm intervals starting 200cm from the gas induction end of the stack. The pipe is to be introduced along the top of the stack and left in place throughout the fumigation.

Fumigation shall be monitored so that the stack has been exposed to CH_3Br for a minimum of 200gram contact hours. This will require monitoring lines at the opposite end of the stack to where the gas was introduced. Topping up to a total of 80 grams per cubic metre is allowed. If more than 80 grams per cubic metre is required, the fumigation shall be aborted, investigate the reason for the failure, correct the failure and re-commence the fumigation.

The maximum thickness of timber between fillets in a packet should not exceed 200 mm and it should be stacked in a manner that allows adequate gas circulation between pieces. Stickers shall not be less than 6 mm thick and be of a non-compressible nature.

Timber pre-wrapped in impervious material shall have adequate provision made to allow rapid penetration of the fumigant eg. openings and slits.

Fumigation with Methyl Bromide will only be accepted for concessionary release if the procedures outlined above have been carried out, and the fumigation was carried out with no more than 21 days prior to shipment.

Table 1. Methyl Bromide (CH_3Br) fumigation requirements

Prescribed dosages for various temperatures are:
48 g/m³ (3lbs/1000 cu ft) for 24 hours at 21°C (70°F) or above
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 6°-10°C
80g/m³ (5 lbs/1000 cu ft) for 24 hours at 1°-5°C.

Note: Under the Montreal Protocol on 'Substances that Deplete the Ozone Layer', developed countries are committed to an increasing phase-out of MB for non Quarantine Pre-Shipment Strategy uses, with a total phase-out by 2005.
It is therefore recommended that alternative treatments to Methyl Bromide be sought out and implemented as soon as possible.

More information on the phase-out of Methyl Bromide and current developments can be found on the following Environment Australia website: www.ea.gov.au/atmosphere/ozone/mebrqps.html

Phosphine

The timber and/or forest products shall be placed on an impervious floor with a minimum of 50cm edge around the stack. Tarpaulins shall be free of holes and made of heavy gauge plastic (greater than 1500 micron) or bitumen canvas. The tarpaulin shall be roped to secure the sides and so prevent any bellows action in high winds, which effectively pumps the gas out. The edges of the tarpaulin should be weighted down with sand snakes (or equivalent) placed as close as possible to the edge of the stack.

The phosphine sachet/tablets are to be placed throughout the stack (if possible). Circulation of the gas under the tarpaulins is necessary if the phosphine is placed at one end of the stack. A fan shall be used to circulate the gas. Phosphine shall be administered as per the fumigant label. Phosphine fumigation should not be attempted if the temperature falls below 15°C. Above 15°C, fumigation may proceed according to Table 2.

Table 2. Recommended treatment using Phosphine

Exposure Period	Ambient Temperature
7 days	>25°C
10 days	15 - 25°C

Phosphine may also be applied as Aluminium Phosphide.

Heat Treatments

Heat treatments are effective against most types of unwanted pests that may be on the product **at the time of treatment.** Unlike chemical preservative treatments it does not provide lasting protection from pest contaminants.

There are varying degrees of heat treatments both in temperature and length of treatment.
It is highly recommended that each piece/layer of wood be separated for maximum efficacy.

AQIS requires the thickness of export timber to be included on the relevant Phytosanitary Certificates. If the thickness is not stated, the heat treatment must be at least 26 hours duration.

Table 3. Recommended temperatures for the heat treatment of timber

Maximum thickness between fillets (mm)	**Time in hours with a minimum temperature of 74 C**
25	4
50	6
75	8
100	10
150	14
200	18
250	22
300	26

AQIS accepts that timber heat sterilised less than 21 days before the date of export meets their export requirements.

Chemical Preservatives

Any chemical preservation treatments are to be applied according to manufacturer instructions.

Preservative options and requirements

Timber exported from Australia is regarded as having met its preservative sterilisation requirements if:

1. There is evidence of the Wood Mark on each packet of timber.
2. Treatment details are included on the Phytosanitary Certificate.
3. That the treatment complies with the *Approved Treatments for Wood and Forest Products for Export.*

See Table 4 for suggested chemical preservative options

Table 4. Preservative options and requirements

Chemical	**Minimum Retention**
Boron compounds	0.1% Boric Acid equivalent minimum loading in the sapwood
Copper + didecydimethyl ammonium chloride (DDAC)	0.35% mass/mass OR 2.8kg/m3 in softwood timbers, 5.6 kg/m3 in hardwood timbers
Copper azole	0.27% mass/mass OR 1.35kg/m3 in softwood timbers, 2.7kg/m3 in hardwood timbers
Copper Chrome Arsenic (CCA)	0.27% mass/mass OR 1.35kg/m3 minimum preservative retention
Arsenic	0.04% minimum preservation loading in sapwood core
Permethrin	Minimum retention of not less than 0.06% mass/mass

AQIS accepts that timber treated with chemical preservative/s less than 21 days before the date of export meets their export requirements.

ATTACHMENT 4: - HYGIENE INSPECTION, CLEANING AND WASTE DISPOSAL FORM

HYGIENE INSPECTION, CLEANING & WASTE DISPOSAL (CWD) RECORD									
Company					**E16 /EX222 / PIG No**				
Inspector (name)					**Date**				
Reason for Inspection	*** Nominated Cleaning Areas**								
	1	**2**	**3**	**4**	**5**	**6**	**7**	**8**	**Hygiene Inspectors initials / date**
	Delivery Area	**Storage Area**	**Loading Area**	**Treatment Area**	**Passed Goods Storage Area.**	**Premises Surrounds**	**Flow Path**	**Failed Goods Area**	
Initial Inspection									
Re-inspection									
Change of goods inspection									
Re-inspection									
Re-inspection									

DESCRIPTION OF SITE AND TREATMENT ACTIVITY REQUIRED:		
Area Failed	**Action Required**	**Completed by - Signed**
Loading Area.	Failed Initial inspection – requires clearing of residue	
Flow Path	Live insects found in belt return	
Flow Path – re-inspection	Residue to be cleaned away	

HYGIENE INSPECTION, CLEANING AND WASTE DISPOSAL RECORD - KEY			
P	Area is clean	T	Treatment required live insects present in area.
F	Area requires cleaning and/or disposal of waste residues		