

**ACCREDITATION SCHEME FOR PEST CONTROL AGENCY TO CONDUCT
PHYTOSANITARY TREATMENT OF IMPORTED RISKED GOODS AND EXPORTED
CERTIFIED PLANT RELATED MATERIALS
(PCA Accreditation)**

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CONTENTS

Page Number

Introduction

Scope	3
Definitions	3
Who can apply	4
What are the benefits	5
How to apply	5
Evaluation Procedure	6
Proficiency Requirements	6

Terms and conditions

Quality Assurance Manual	8
Desk Audit	8
Initial Site Audit	8
Routine Compliance Audit	8
Charges	10
Treatment Conduct	11
Records	11
Exclusion of Liability to AVA	12
Suspension or Termination of service	12

Appendix 1

Application for PCA Accreditation	13 to 14
-----------------------------------	----------

Appendix 2

Primary guidelines for the preparation of QA manual	15 to 22
---	----------

Appendix 3

Specimen Declaration by Chief Executive	23
---	----

Appendix 4

Specimen of phytosanitary treatment certificate	24
---	----

Appendix 5

Marking for approved phytosanitary treatment	25
--	----

Appendix 6

Minimum requirements for the approved phytosanitary treatments- HT & MB	26
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ACCREDITATION SCHEME FOR PEST CONTROL AGENCY TO CONDUCT PHYTOSANITARY TREATMENT OF IMPORTED RISKED GOODS AND EXPORTED CERTIFIED PLANT RELATED MATERIALS (PCA Accreditation)

INTRODUCTION

1. Scope

The PCA Accreditation is applicable to all pest control agencies (PCA) who are performing phytosanitary treatment such as methyl bromide fumigation, heat treatment, chemical pressure impregnation and other pest disinfestation measures on plants and plant products that are regulated for import and certified for export by AVA. The arrangement specifies the requirements to be met by PCA to be registered under the accreditation scheme in order to carry out phytosanitary treatments and certification of treatment on behalf of AVA. The arrangement includes conditions that the accredited pest control agencies must fulfill to maintain their approved status.

The PCA Accreditation can also be used for animal products when required.

2. Definitions

Approved	: Having been formally recognized by AVA as competent to act on their behalf to provide a service in accordance with the performance specified in the QA manual
Audit	: An evaluation to determine the degree of conformity with prescribed criteria
CPI	: Chemical pressure impregnation
Critical control points	: A point, step or process where control can be applied and where hazard can be prevented, eliminated or reduced to acceptable levels
Critical non-compliance	: An incident that results in loss of confidence that a pest control agency system is in place and being operated (i.e. product cannot be confidently certified/ released without inspection) as per approved operating procedures
HT	: Heat treatment
IPPC	: International Plant Protection Convention
MB	: Methyl bromide

- Pest** : Any species, strain or biotype of plant, animal or pathogenic agent which is or is capable of being injurious to plants or plant products
- Pest Control Agency** : The legally identifiable establishment (or organization) responsible for performance of the pest control operational system
- Pest Control Operational System** : The organizational structure, responsibilities, operational procedures, processes and resources for implementing activities associated with the application of phytosanitary treatment
- Phytosanitary Certificate** : Certificate patterned after the model certificates of IPPC
- Phytosanitary Certification** : Use of official prescribed methods for performing inspections, tests, surveys or treatment that lead to the issue of a phytosanitary certificate and including phytosanitary tag and AVA authorized marks and labels.
- Phytosanitary Treatment** : AVA authorized procedure, for the killing, removal or rendering infertile of pests or devitalizing of plants
- Phytosanitary Treatment Operator** : Person who is licensed or authorized by the pest control agency and is familiar with the treatment methods and procedures, the objectives of the phytosanitary treatment and the assessment of the phytosanitary treatment results but operates under effective supervision under the pest control operational system
- Phytosanitary Treatment Certificate** : A uniquely numbered certificate issued by a pest control agency verifying that an approved phytosanitary treatment has been completed in accordance with this arrangement and includes a description of the treatment, treated materials and identification marks

3. Who can apply

The PCA Accreditation is applicable to any pest control agency that is a legally identifiable business entity in Singapore. The application is subject to the following conditions:

- 1] The pest control] operational system operated by the PCA demonstrates proficiency and is capable of consistently performing the phytosanitary treatment and phytosanitary certification applied for, up to the level as specified by the pest control agency and approved by AVA.

- 2] The PCA is able to document in detail in a quality assurance manual (QA), the phytosanitary treatment and phytosanitary certification procedure applied, including identifying the recognized critical control points for each stage of their pest control agency operational system.
- 3] The PCA is capable of maintaining and achieving all the standards and procedures set down in its QA manual.
- 4] The PCA should review and revise the QA manual implemented under the PCA Accreditation as and when there are any new requirements set down by AVA or by importing countries for export certification.
- 5) The PCA should comply with legislation administered by other local government authorities

4. What are the benefits

(A) For the Pest Control Agency (PCA)

- 1) A more ordered and coordinated approach in achieving a quality service in pest control.
- 2) Client satisfaction with a consistently good performance from PCA.
- 3) Increased flexibility, as supervision no longer has to be done by AVA inspectors before certification. The pest control agency has more flexibility in organizing and scheduling and conducting the disinfestation measure.
- 4) Increased competitiveness.
- 5) Employees have a sense of direction and purpose. Jobs are well documented and understood.
- 6) Through good planning would decrease waste and reject materials.

(B) For AVA

- 1) Assurance of more effective control of treatment process and service quality.

5. How to Apply

Pest control agency is required to complete the application letter as shown in Appendix 1. The letter accompanied by the QA Manual should be forwarded to Head, Plant Regulatory Branch - Plant Health, Import and Export Division, Lorong Chencharu,

Sembawang Research Station. The letter should indicate the type(s) of phytosanitary treatment that need to be approved and the names of plant and forestry/ plant product covered under the phytosanitary treatment schedules. For establishments that have been awarded with The Singapore Quality Class, ISO 9000 or equivalent, the QA manual can cross-reference to these quality management manuals and documents. However such quoted manuals and documents may also be required to be submitted for verification if necessary.

6. Evaluation of Application Procedure

The evaluation and assessment process for acceptance into the scheme is represented diagrammatically as follows:

Applicant submits its QA manual



Desk audit (completed within 4 weeks from the date of submission)



Initial site audit (within 2 weeks after desk audit)



Follow up Audit (within 2 weeks and on two consecutive treatments)



PCA Accreditation granted (if no critical non-compliance detected on follow up audit)

7. Proficiency Requirement for Accreditation

(A) The pest control agency staff must demonstrate proficiency in knowledge of:

- 1) plant pests and plant protection
- 2) operation and maintenance of facilities and equipment used for the phytosanitary treatment applied
- 3) treatment applied (e.g. nature of application/ monitoring process/ corrective actions/ etc)
- 4) treatment schedules (e.g. recommended dosages or concentrations/ calculation of application rates/ temperature relationship/ etc)
- 5) equipment calibration procedures
- 6) treatment effectiveness verification
- 7) security, segregation and identification of treated products

(B) The PCA must possess the necessary equipment and facilities for the phytosanitary treatments applied and keep them in good operating conditions.

8. Others

All information and data submitted in the QA manual and other quality system manual will be classified as "Confidential".

TERMS AND CONDITIONS FOR PEST CONTROL AGENCY TO BE REGISTERED UNDER THE PCA ACCREDITATION

1. Quality Assurance manual (QA manual)

Pest control agency will need to specify the type of phytosanitary treatment including the names of plant/ plant product that will be subjected to such treatment and describe details of quality assurance system at various points which will ensure that as a minimum, all the treated materials have been disinfested in accordance to the performance level as defined in the QA manual. Other procedures and requirements on how the phytosanitary treatment certificates are issued to the shippers/ consignors and how the authorized marks (see Appendix 5) are endorsed in the treated materials shall also be explained and documented. The emphasis here is that the establishment has a quality system in place and is operating according to it. The QA Manual allows AVA to audit the pest control agency operational system. Pest control agency is obliged to comply with its QA manual, once it has been approved by AVA. AVA must be advised immediately of changes to critical quality control procedures, phytosanitary treatment standards etc., and the manual must be amended accordingly. Any significant change to the QA manual must be approved in writing by AVA. General guidelines and elements that need to be included into the QA manual are outlined in Appendix 2. A commitment declaration from top management is also necessary once the QA manual is approved by AVA -see Appendix 3.

2. Desk Audit

All applicants shall be subject to auditing by AVA. This is the primary step of evaluation of a QA manual to determine the adequacy of the quality system. Files relating to the past performance of the applicant will be checked for any outstanding matters that could affect the regulatory standing of this applicant.

3. Initial Site Audit & Follow Up Audit

The applicant shall grant reasonable access for the purpose of audits to any premises, facilities, staff and relevant records that are listed under the QA manual.

If the desk audit shows that the quality system as described, demonstrates ability in meeting specified objectives, three consecutive site audits of the quality system will be conducted. This involves a major assessment of the entire phytosanitary treatment process to ensure that the procedures documented in the manual are being followed and are effective. The pest control agency will be advised of the findings and recommendations regarding entry into the accreditation arrangement. For each subsequent type of treatment to be approved for listing in the pest control operational system, at least 3 consecutive and successful audits will be conducted.

4. Routine Compliance Evaluation

The objective is to ensure that the PCA continues to operate its quality system in accordance with the arrangement and is able to adjust the quality system as requirements

change and problems are addressed and corrected. No quality system procedure is ever finalized. The PCA Accreditation is subject to re-negotiation and update of manuals whenever necessary. The routine compliance evaluation will generally take the form of three audits each year. It may be necessary to increase the frequency and/or intensity depending on establishment performance or changed risk factors. For PCA that has developed similar quality management manual and is audited by a third party certification body, such routine compliance evaluation on common areas may be exempted.

4.1 CRITICAL NON-COMPLIANCE

The PCA Accreditation will be automatically suspended for any critical non-compliance detected.

Examples of critical non-compliance include but are not limited to -

- a. Incompetent staff operating, where their activities are the key elements of treatment.
- b. Live target pests above the allowable maximum pest limits (in this case "0") found during inspection/audit of the treated product (once the required mortality time has elapsed).
- c. Product not being treated.
- d. Deliberate provision of incorrect assurances or use of treatment certificates.
- e. Failure to follow approved procedures.
- f. Untreated product not segregated or separately identified from treated product.
- g. Three or more major non-compliance faults detected in the two previous consecutive audits.

4.1.1 Corrective Action

Where a critical non-compliance is identified during any audit, the PCA's approval status would be suspended. If suspended, the PCA will have to re-apply for approval. Should the PCA's approval status not be suspended, a maximum of 3 consecutive treatments shall be audited. During these audits the PCA must identify and implement an agreed corrective action strategy, and have the successful implementation of the strategy verified by the auditor.

The PCA will lose the approval status should the PCA fail to comply with any agreed corrective action(s) within the suspension period.

4.2 MAJOR NON-COMPLIANCE

Where a major non-compliance is identified, the PCA may be suspended for a period specified by AVA until the non-compliance is corrected and an audit completed.

Examples of major non-compliance include but are not limited to -

- a. A significant difference between auditor and auditee defect findings.
- b. Auditee fails to identify, classify or record defects correctly.
- c. Equipment unreliable.
- d. Amendments to documented procedural details of pest control operational system and QA manual not notified to AVA.
- e. Actions taken following inspections/audits not recorded.
- f. Treatment specifications (when specified) not available to inspection/audit staff.
- g. Corrective action for a minor non-compliance not implemented within the agreed time frame.

h. Three or more minor non-compliances in any one audit.

4.2.1 Corrective Action

Corrective action needs to be implemented promptly in order to retain confidence that treatments are meeting the requirements.

Where one or more major non-compliance are identified during an initial system audit, all treatments carried out by the PCA will be monitored until the non-compliance are corrected.

A critical non-compliance is to be recorded for every three major non-compliance identified during a single audit.

4.3 MINOR NON-COMPLIANCE

A minor non-compliance does not immediately place treatment success at risk.

A major non-compliance will be recorded for every three minor non-compliance identified during a single audit.

Where a non-compliance is identified and not covered by the above examples and definitions, it is to be classified as a major non-compliance until clarified by the AVA.

4.3.1 Corrective Actions

A corrective action and time frame for its implementation is to be agreed between AVA (auditor) and PCA (auditee) for each non-compliance detected.

The corrective action shall record:

- a. What shall be done;
- b. By whom it shall be done;
- c. The time frame for implementation of the corrective action; and
- d. The verification activities to be undertaken to ensure that corrective action has been successfully implemented.

Where the non-compliance impacts on the eligibility of product treatment status, AVA shall verify and decide on appropriate measures to resolve its status.

4.4 CONTINGENCIES FOR NON-COMPLIANCE

Where PCA fails to implement agreed corrective actions for a critical or major non-compliance, any risk goods or export produce must be subjected to re-treatment under AVA supervision.

5. Charges

The charges that apply for Desk Audit, Site Audit Routine Compliance Evaluation and Non-compliance audit are reviewed from time to time. A schedule of prevailing charges is available for your inspection from Plant Regulatory Branch- Plant Health, Sembawang Research Station.

6. Treatment Conduct

6.1 Treatment specifications

6.1.1. Export Certification

a. General Goods

The treatments are carried out to the importing countries “specification”

b. Scheduled Goods as mentioned in Appendix 6 or any directives issued by AVA. The treatment shall be carried out in accordance to AVA’s specifications

6.1.2 Imported Risk Goods

The treatment shall be carried out in accordance to AVA’s specifications which is outlined in the appropriate importation regulations or where such treatments are unprescribed, as determined by the authorised AVA officer.

6.2 Phytosanitary Treatment Certificate

PCA registered under PCA Accreditation will issue and sign a “Phytosanitary Treatment Certificate” for each treatment conducted bearing the appropriate information as is required to be captured in the Treatment register outlined in Section 7. These treatment information can be declared in the phytosanitary certificate issued by AVA to validate that treatment had been carried out.

6.3 Use of Mark

6.3.1. AVA logo

The AVA logo or the words “Agri-Food & Veterinary Authority” or “AVA” are not to be used by the PCA registered under PCA Accreditation Scheme in any of its publications or letterheads. However the PCA may use wording specific to the approval that is given and only with the prior written approval of AVA, such as: “Approved or Accredited by AVA to carry out phytosanitary treatments”.

6.3.2 Product Specific Marking

An approved product specific marking for treatment of scheduled goods as mentioned in Appendix 5 or Section 6.1.1(b) is to be used in accordance with AVA’s specification for the particular marking. Infringement or violation of the use specifications will be deemed as a critical non-compliance

7. Records

The PCA shall keep and maintain an up to date treatment register of the last 24 months phytosanitary treatment records. The register shall be available to AVA authorized staff for the purpose of AVA audits. The register shall capture the following information:

- Phytosanitary treatment date

- Phytosanitary treatment location
- Phytosanitary treatment type (e.g. methyl bromide, kiln dry.....)
- Dose rate, time, material temperature
- Material (commodities) description
- Who carried out the phytosanitary treatment (including signature)
- Types of live pests detected after phytosanitary treatment
- Identification marks for material
- Name of shipper/ consignor
- Phytosanitary treatment certificate number & Date of issue

Other records on the licensing of the phytosanitary treatment operator, equipment calibration record will also be subject to AVA audit.

8. Exclusion of Liability to AVA

PCA registered under PCA Accreditation accepts that under no circumstances will AVA or its authorized staff and agents be liable for any loss, claim, action, demand, expense, inquiry or damage, however caused, arising directly or indirectly from or in any way to the phytosanitary treatment conducted and phytosanitary treatment certificates issued including the use of AVA authorized logo by the PCA registered under the PCA Accreditation.

PCA accepts that no other approval or certification other than that specified will be granted by AVA.

PCA should not expect that any goods treated under the PCA Accreditation will be accepted by an importing country's phytosanitary or plant protection authority.

9. Suspension or Termination of Service

AVA may at any time suspend or terminate the PCA registered under the PCA Accreditation without assigning any reason if:

- a. the PCA falsifies or presents any declaration, statement, representation or document that is false for the purpose of obtaining approval from AVA
- b. the QA performance of the establishment falls below AVA requirements
- c. critical non-compliance and major non-compliance are identified by AVA
- d. the import authority rejects the treated materials due to pest infestation.
- e. there is any breach of the term and condition of the agreement.

PCA is also at liberty to terminate its participation in PCA Accreditation with AVA by giving 30 days notice in writing, if the service is found not useful to them.

APPLICATION LETTER FOR PEST CONTROL AGENCY TO BE REGISTERED UNDER THE PCA ACCREDITATION

Name of pest control agency	:
Business Address	:
Treatment Type(s)	:
Materials (commodities) Covered	:
Major Importing Countries	:
Telephone/ Fax	:
Email	:
Name & Job Title of Person Responsible for Pest Control Operational System	:

Applicant's Statement

I, (name of applicant)
..... (job title in establishment) wish to apply for approval under the terms and conditions set down in the PCA Accreditation Scheme for providing phytosanitary treatment of plant related material for export and imported risk goods and;

- a) shall ensure compliance with all Terms and Conditions of the PCA Accreditation Scheme and any such terms and conditions that the AVA may from time to time vary or impose.
- b) shall comply with the policies, procedures and specifications set out in this QA manual that define the quality management system in operation for the application and certification of pest disinfection measures to the schedule of products on behalf of AVA.
- c) shall grant entry to the premises at any time to persons who are AVA authorised officers or agents for the purpose of audit of the PCA Accreditation.

- d) agree to AVA making enquiries and using the information supplied by me, in connection with this application for the following purposes:
 - i. to ensure that I have appropriate consents, permits, licences and authorities in respect of my business operations and my business premises that are required;
 - ii. to notify the public of my approved status

- e) agree to indemnify and keep indemnified AVA or its authorized staff and agents from and against any claim (including third party claim), liability, loss, damage, costs and expenses which AVA or its authorized staff or agents may suffer or incur arising directly or indirectly from the phytosanitary treatment and certification that are conducted on behalf of AVA or any other course of actions committed by the PCA under the PCA Accreditation.

- f) fully understand that once my application for the PCA Accreditation Scheme is approved by AVA and if I gave false information for the purpose of obtaining a phytosanitary certificate or the application of AVA authorized marks and labels to the treated commodities, the PCA Accreditation shall be suspended or terminated with immediate effect.

- g) note that the PCA Accreditation will be subject to desk evaluation and subsequent audits and I agree to pay any costs of such evaluation and audits as may be charged to me from time to time.

Signed _____

For and behalf of _____
(name of establishment)

Dated _____

BELOW FOR OFFICIAL USE ONLY:

Application Received	:	Date:	
Additional Information Required	:	Yes/ No	Date:
First Site Audit	:	Yes/ No	Date:
Second Site Audit	:	Yes/ No	Date:
Third Site Audit	:	Yes/ No	Date:
Application Approval	:	Yes/ No	Date:

Primary Guides for the Preparation of QA Manual

The Quality Assurance (QA) manual is a document produced by the Pest Control Agency to describe the quality management system in operation at their establishment. It is a compilation of policies, procedures, controls and documentation encompassed by the quality assurance system. The manual must describe the system that is in place, not that which should be in place. The manual must be prepared in such a way that it is easily understood, concise and usable. To achieve this, the following are recommended.

1. Cross-reference thoroughly, particularly where recorded sheets or logs are concerned.
2. Identify recording sheets or logs by title and form or document number, both of which should be quoted whenever the form is referred to in a manual.
3. Clearly label flow charts, diagrams, tables and checklists for easy reference.
4. Group like sections together, rather than scatter references throughout a manual.
5. Use tables, diagrams and other forms of easily understandable instructions wherever possible.

To facilitate amendments, all manuals should:

1. Be prepared in loose leaf.
2. Have a number and date on each page.
3. Include a table of contents.

Documenting A Quality System Under the PCA Accreditation

MANAGEMENT RESPONSIBILITY

1. Quality Policy Statement

AVA would expect the management of PCA to have a strong commitment to quality, clearly evident to staff. A statement describing the aims of the organisation in this regard, signed by the chief executive, should therefore be included in the manual (specimen see Appendix 3).

2. Type of Phytosanitary Treatment & Schedule of Products Covered

Name the type of phytosanitary treatment and schedule of materials proposed to be covered under the PCA Accreditation. PCA should therefore prepare a list of materials, importing countries, the types of phytosanitary treatment (including rate of application) and certification required by these countries.

As importing countries frequently revise their requirements, often without notice, it cannot be assured that previous requirements will still apply. Therefore it is the responsibility of the PCA to work closely with AVA and the shippers/ consignors to ensure that they are aware of the requirements of the importing country and to prevent costly rejection or destruction of exported products. The system adopted by the PCA to check on these requirements needs to be documented.

3. Management Review and Internal Audit of Quality Assurance System

The company's quality assurance system should be reviewed internally on a regular basis, to review the efficiency of procedures and confirm the maintenance of quality at or above the agreed level. The plan should state the frequency, method and who is responsible for such reviews. The results of such reviews must be documented and made available to AVA on request.

ORGANISATION

4. Personnel

4.1 Organisation Chart

It is recommended that an organisational chart of senior management, quality control personnel, and phytosanitary treatment operator(s) with copy of their licenses (if applicable) and person involved in certification of phytosanitary treatment be provided. The company shall appoint a Management Representative responsible for all matters affecting the quality assurance system.

4.2 Duty Statements

Duty statements should include positions of the above-mentioned staff responsible for the processing operations of the QA arrangements.

QUALITY MANAGEMENT SYSTEM

5. Application of Phytosanitary Treatment

PCA needs to document in detail the procedures and standards for the application

of each of the authorized phytosanitary treatment on materials as listed in the phytosanitary treatment manual. In particular, AVA needs to know:

- the standards of application of treatment (list critical requirements at each step)
- knowledge of treatment being applied (e.g. calculations on dose/ rate/ time/ temperature relationships)
- the monitoring process during the different stages of phytosanitary treatment (e.g. concentration, temperature, duration and endpoint assessment on result of treatment)
- types of monitoring equipment for measuring concentration, temperature and leakages
- equipment calibration procedures
- qualification and experience of person responsible for overseeing the phytosanitary treatment
- the phytosanitary treatment manual that focuses on target pests and materials
- the standards and procedures for the issue of certification or marks after successful application of disinfestation measures
- security and segregation of treated materials
- chemical or physical reaction properties on materials after phytosanitary treatment

6. Material for Phytosanitary treatment

6.1 Quality Control of Material

Materials can be defined as all those plants and forestry/ plant products that the shippers/ consignors refer to PCA for phytosanitary treatment. These include fresh flowers, grains, spices, lumber and wooden packaging materials. The quality of these materials especially the degree of pest infestation could affect the result of phytosanitary treatment conducted by the PCA. It is therefore important for the PCA to ensure the minimum quality standards of these materials before entering into the phytosanitary treatment agreement with the shippers/ consignors. The method(s) employed under the PCA Accreditation to monitor the quality of material that are

subject to phytosanitary treatment must be documented in the QA manual. The written procedures describe how function should be controlled, who is in control, what is to be controlled, where and when. All appropriate documents, work instruction etc. must be available when they are needed and that any changes need to be properly authorised and acknowledged.

6.2 Storage

Procedures must document on how the PCA works with shippers/ consignors to ensure that following the phytosanitary treatment, the treated materials will be stored at selected, appropriate locations so as to minimize risk of re-contamination by pests, and deterioration.

7. Process Control

7.1 Analysis of Operational Processes

In order to assure the treated materials meet the plant health requirements imposed by the foreign Plant Quarantine authority, the potential hazards within the phytosanitary treatment process must be identified. Each process line should be analysed to identify the critical points within the process that must be controlled to ensure that the objective of such control is attained. The following steps form a typical sequence of analysis.

- identify quality parameters, i.e. what does the foreign Plant Quarantine authority want?
- inspect process and draw flow chart, i.e. look at the process that is in place for phytosanitary treatment and certification and write down the steps involved.
- identify hazards related to the phytosanitary treatment and certification, i.e. what can go wrong in the process to cause the quality of the phytosanitary treatment service to deteriorate or no longer meet specifications, e.g. pest infestation, wrong certification.
- rate the hazards and assess the risk.
- determine critical control points at which to reduce or eliminate the hazards to minimum impact.
- establish controls at critical points e.g. specifications, procedures, inspections and records.

7.2 Key Elements for Process Control

7.2.1 Product Identification and Trace-ability

To avoid possible cross contamination and substitution after phytosanitary treatment, the treated materials and certification issued must bear the lot identification or coding system which enables the PCA to trace and identify the materials in the event of failure at storage or at any foreign inspection point. The identifying marks and records relating to each lot number allow the phytosanitary treatment history of the materials to be traced. The records must be maintained by the PCA for at least 2 years from the date of application of phytosanitary treatment.

7.2.2 Phytosanitary Treatment Monitoring

The procedure for ensuring phytosanitary treatment has been applied to the required standard will be documented and results recorded by the PCA.

Examples:

For temperatures : suitable recording methods are necessary, e.g. thermographs for kiln sterilization & maximum/minimum thermometers for methyl bromide fumigation

For fumigants : identify methods to verify the presence of the gas, e.g. locations, detector tubes, thermal conductivity analyzers, fumiscope or control insects and the interval involved

7.2.3 Non-compliance with Phytosanitary Treatment Specifications

AVA requires that the procedures for dealing with phytosanitary treatment that fails to meet specification at any process point be documented. Specify acceptance/rejection criteria for further processing, segregation of suspect product and disposal procedures. The causes that lead to the non-compliance of specifications must also be identified. Corrective action should be documented so that recurrences are eliminated or reduced.

7.2.4 Segregation Between Disinfested and Non-treated Materials

AVA requires that the PCA work with shippers/ consignors and come up with procedures on storage of disinfested materials, including stock rotation, temperature control, control of non-inspected and/or non-treated materials.

7.2.5 Compliance With Phytosanitary Requirements Of Importing Countries

PCA shall establish and maintain documented procedures for certifying the

phytosanitary treatment meets the phytosanitary requirements imposed by the importing countries. Besides setting standards of label and marks on the treated materials and the issue of phytosanitary treatment certificate to the shippers/ consignors, the PCA must also ensure the phytosanitary treatment operator conducts compliance inspection on the materials immediately after the phytosanitary treatment to ensure no live pests are detected. The phytosanitary treatment operators will be trained by AVA according to the types and nature of commodities that are covered in their QA manual. The detailed records of the inspection for every treated material with identification lot numbers must be documented.

7.3 Proposed Sample for Preparing Risk Analysis & Process Control

Critical Control Limits & Monitoring Measures Implemented By PCA on Methyl Bromide Fumigation

<u>PROCESS</u> (from beginning to end of fumigation)	<u>POTENTIAL HAZARDS & CRITICAL LIMIT</u>	<u>MONITORING MEASURES</u> (the name and job title of person responsible must be stated in each operation)	<u>WHERE RECORDED</u>
1. Confirmation of goods for fumigation	e.g. 1. Quantity and identification of SWPM, 2. rejection standards for infested SWPM		
2. Arrange goods for fumigation	e.g. 1. Stacking- maximum height. 2. list precautionary measures that ensure free gas circulation		
3. Dosage rates	e.g. 1. Updated phytosanitary treatment manual 2. new requirement from importing countries		
4. Set up procedure	e.g. 1. Measure dimensions of the stacks, 2. condition of cover sheets & sandbags 3. record of temperature		
5. Introduce fumigant	e.g. 1. Rate, amount and time 2. list measures that ensure adequate dispersal of the gas		
6. Check for leaks	e.g. list procedure including corrective actions imposed by licensing agent		

7. Monitoring concentration during phytosanitary treatment period	e.g. 1. Measure gas concentration on number of interval and standard of minimum concentration in each interval 2. number of point for monitoring gas concentration 3. remedial action if below minimum concentration 4. name the gas meter used.		
8. Monitor End Point	e.g. 1. Correct duration 2. minimum gas concentration 3. void phytosanitary treatment		
9. Goods Release: Exhaust fumigant and remove sheets	e.g. list procedure imposed by licensing agent		
10. Assessment on effectiveness of phytosanitary treatment	e.g. 1. list indicator for each assessment 2. corrective action for non-compliance		
11. Segregation of treated and untreated product	e.g. list measures that prevent cross infestation		
12. Marks and label on treated materials	e.g. list measures that ensure the accountability and trace ability of the treated materials is maintained		
13. Issue Fumigation Certificate for treated materials	e.g. 1. list basic information that must be covered in the document 2. The approving procedure for the issue of fumigation certificate that covers individual consignment.		
14. Calibration and other testing	e.g. list service interval for gas meter, thermometer and cover sheets		
15. Update on phytosanitary treatment manual	e.g. list approval procedure		

8. Training

PCA shall establish and maintain documented procedures for identifying training needs and provide for the training of all personnel performing activities with respect to the detection of pests, application of phytosanitary treatment, certification of phytosanitary treatment and the compliance with foreign phytosanitary requirements. Records of training shall be maintained.

Declaration by Chief Executive

I _____ (name) _____ (job title) of
the registered company _____
(name) hereby declare to all my staff and to Agri-Food & Veterinary Authority (AVA),
that I undertake, on behalf of the company to:

- a) ensure compliance with the Terms and Conditions of the PCA Accreditation.
- b) comply with the policies, procedures and specifications set out in this QA manual which defines the quality management system in operation for the application and certification of pest disinfestation measures to the schedule of products approved by AVA.
- c) grant entry to the premises at any time to persons who are AVA authorised officers or agents for the purpose of audit of the PCA Accreditation. .

I understand that being committed to this PCA Accreditation is essential to the successful maintenance of the pest control operational system and I will endeavour to ensure that all personnel in the system understand their objectives and responsibilities.

Signed _____

Dated _____

* delete whichever not applicable

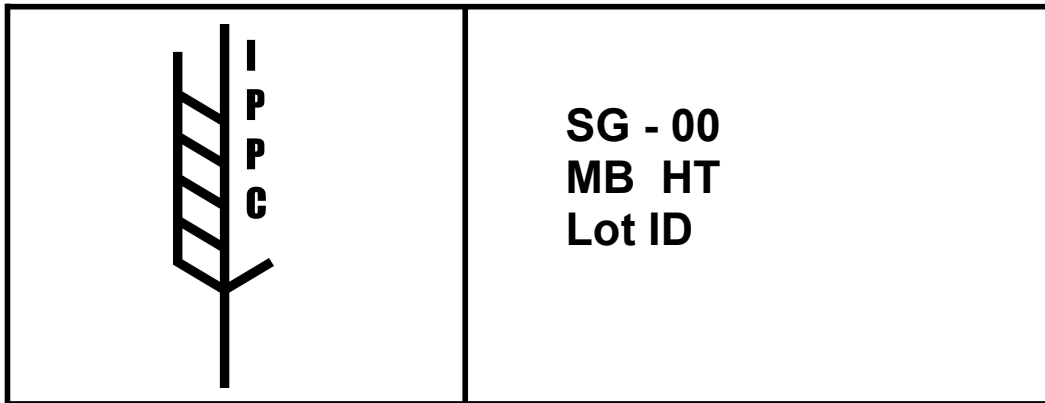
Specimen of Phytosanitary Treatment Certificate

Name & Address of Pest Control Agency under PCA Accreditation	
	Certificate No.: _____
	Date of Issue: _____
Name of Phytosanitary Treatment Certificate	
<p>This is to certify that the goods described below were treated with heat*/ chemical pressure impregnation*/ methyl bromide gas* as follows. The company is approved by AVA to conduct phytosanitary treatments on import and export of plants and forestry/ plant products.</p>	
Name & Address of Shipper/ Consignor	:
Name & Address of Consignee	:
Date of Treatment	:
Place of Treatment	:
Method of Application	:
Rate of Application	:
Exposure Period	:
Maximum and Minimum Temperature During Treatment (for methyl bromide gas only)	:
Name & Quantity of Commodities Treated	:
Markings	:
Means of Conveyance (optional)	:
Destination/ Port of Entry (optional)	:
Airway Bill (optional)	:
_____ (Signature of licensed treatment operator)	
_____ (Name of licensed treatment operator)	
* delete where appropriate	

The list of approved pest control agency is obtainable from: www.ava.gov.sg Click "More Information" and select "Circulars"

MARKING FOR APPROVED PHYTOSANITARY TREATMENT

The mark shown below is to certify that the wood packaging material that bears the mark has been subjected to an approved phytosanitary treatment.



The mark should at minimum include the:

- symbol
- ISO two letter country code followed by a unique number assigned by AVA to the PCA or ACS members of the wood packaging material, who is responsible for ensuring appropriate wood is used, approved phytosanitary treatment was applied and properly marked
- IPPC abbreviation according to the approved measure used (e.g. HT, MB, CPI).
- Lot identification

Markings should be:

- according to the model shown here
- legible
- permanent and not transferable
- placed in a visible location, preferably on at least two opposite sides of the article being certified.

The use of red or orange should be avoided since these colors are used in the labeling of dangerous goods.

Recycled, remanufactured or repaired wood packaging material should be re-certified and re-marked. All components of such material should have been treated.

Shippers should be encouraged to use appropriately marked wood for dunnage.

Minimum Requirements On Phytosanitary Treatment Of Solid Wood Packaging Materials

1. For Methyl Bromide fumigation

Temperature	Initial dose (gm/ m ³)	Minimum required concentration (gm/ m ³) after:			
		0.5 hrs	2 hrs	4 hrs	16 hrs
21° C or above	48	36	24	17	14
16° C or above	56	42	28	20	17
11° C or above	64	48	32	22	19

2. For Heat treatment (steam, hot water or dry heat)

A minimum wood core temperature of 56⁰ C for a minimum of 30 minutes