AGRICULTURE VICTORIA

ICA-07: Cold Treatment for Queensland Fruit Fly

REVISION REGISTER

Date of issue	Amendment details
04/05/2011	Version 7.0: Amend security requirements (8.3); clarify certification details (8.4.2)
09/05/2011	Version 7.1: Amend Requirements (6.0)
31/07/2013	Version 7.2: Updated to DEPI and **Plant Biosecurity Act 2010**
06/10/2014	Version 7.3: Reformatted
22/07/2015	Version 8.0: Update to DEDJTR and new template; general review of document; added record requirement details (7.2.5, 7.3.1, 8.2.1); clarified declaration fields (7.5); PHAC aligned to procedure (attachment 1); included property plan template (attachment 2); number and count/net weight of packages packed field included (attachment 6); the treatment room identification and size included (attachment 7); reading of treatment sensor recording field included (attachment 9).
01/06/2020	Version 8.1: Update to DJPR; amend Requirements (6.0) with tolerance levels.
31/12/2020	Version 8.2: update procedure to new format; addition of the Act to reference (3, 4)

Authorised and published by the Victorian Government
Department of Jobs, Precincts and Regions
1 Spring Street Melbourne Victoria 3000
Telephone (03) 9651 9999

ISBN 978-1-76090-373-2 (pdf/online/MS word).

For more information contact the DJPR Customer Service Centre 136 186.

This document is also available in PDF format on the internet at www.agriculture.vic.gov.au

Disclaimer

This publication may be of assistance to you but the State of Victoria and its employees do not guarantee that the publication is without flaw of any kind or is wholly appropriate for your particular purposes and therefore disclaims all liability for any error, loss or other consequence which may arise from you relying on any information in this publication.

TABLE OF CONTENTS

1 Purpose

The purpose of this procedure is to describe:

- the principles of operation, design features and standards required for cold treatment facilities; and
- the responsibilities and actions of personnel;

that applies to the certification of cold treatment of fruit for control of fruit fly under an Interstate Certification Assurance (ICA) arrangement.

2 Scope

This procedure covers certification of cold treatment for fruit by businesses operating under an ICA arrangement in Victoria.

This procedure may be applicable where cold treatment is an acceptable entry condition of an interstate authority for control of fruit fly.

Cold treatment may not be an accepted quarantine entry condition for some interstate markets.

Some intrastate or interstate markets may require additional quarantine certification for pests and diseases other than fruit fly as a condition of entry.

It is the responsibility of the business consigning the produce to ensure compliance with all applicable quarantine requirements.

Information on intrastate and interstate quarantine requirements can be obtained from your local accrediting office.

3 References

Plant Biosecurity Act 2010

PSW-02: Guide for completion of Plant Health Interstate Assurance Certificates.

4 Definitions

Act	means the *Plant Biosecurity Act 2010* (the Act).
Authorised Signatory	means a person of an accredited Business whose name and specimen signature is provided as an Authorised Signatory on the application for accreditation.
Business	means the legal entity responsible for the operation of the facility and ICA arrangement detailed in the business' Application for Accreditation.

Certified/Certification	means covered by a Plant Health Assurance Certificate issued by an accredited business.
Coldroom	means the facility in which cold treatment will be undertaken under this procedure
Cold treatment	means the treatment of produce at cold temperatures over a specified time for the control of fruit fly.
Treatment Lot	means a discrete quantity of produce collected in a coldroom and cold treated together as a unit.
Treatment Lot Number	means a unique number or code that identifies a treatment lot and the coldroom and facility in which it was treated.
Queensland Fruit Fly	means all stages of the species *Bactrocera tryoni* (Froggatt)

5 RESPONSIBILITY

The position titles used reflect the responsibilities of staff under this compliance agreement. These positions may not be present in all businesses, or different titles may be used for staff who carry out these responsibilities. One person may carry out the responsibilities of more than one position.

The **Certification Controller** is responsible for:

- representing the business during audits and other matters relevant to ICA accreditation;
- training staff in their duties and responsibilities under this procedure; and
- ensuring the business and its staff comply with their responsibilities and duties.

PART A (covering cold treatment):

- ensuring the business has current accreditation under Part A of this procedure (refer 9);
- if the cold treatment facility has more than one coldroom, maintaining a facility plan for each facility in which fruit is cold treated (refer 7.1); and
- ensuring coldrooms and temperature sensing and recording equipment conform (refer 7.2.2).

PART B (covering fruit receipt, packing and certification):

- ensuring the business has current accreditation under Part B of this procedure (refer 8.1);
- overseeing the packing of fruit for certification under this procedure (refer 8.2); and
- maintaining packing records that allows trace back of fruit to the original treatment lot and Coldroom Loading and Treatment Record or Cold Treatment Declaration (refer 8.2.1).

The **Treatment Operator** is responsible for:

- calibrating temperature sensors and recording equipment (refer 7.2.5);
- maintaining temperature sensing and recording equipment calibration records (refer 7.2.5);
- loading the coldroom, placement of temperature sensors and oversight of cold treatment and temperature recording (refer 7.3); and
- maintaining cold treatment records (refer 7.3.4).

The **Fruit Receipt Person** is responsible for:

- ensuring fruit received for packing and/or certification is sourced from a business accredited under Part A (8.1.1) and;
- ensuring a Cold Treatment Declaration (refer 7.5) is received with each delivery of produce received for certification under this procedure.

The **Authorised Dispatcher** is responsible for:

- ensuring all packages covered by an Assurance Certificate are identified (refer 8.4.1; and
- maintaining copies of all Assurance Certificates issued (refer 8.4.3).

The **Authorised Signatory** is responsible for:

- ensuring prior to signing and issuing an Assurance Certificate, that produce covered by the certificate has been prepared in accordance with the business's ICA arrangement, and the details on the certificate are true and correct in every particular (refer 8.4.2).

6 Requirement

Produce certified under this procedure must be subjected to cold treatment in an approved facility in accordance with one of the following treatment schedules.

For all susceptible fruits: Apples, Pears, Nashi, Grapes, All Citrus, Kiwifruit, and Stone fruit.

Temperature	Minimum Number of Days	
0.0ºC ± 0.5ºC	14	
1.0ºC to 3.0ºC ± 0.5ºC	16	(Lemons 14)

Note: Produce treated in long term air or controlled atmosphere (CA) coldrooms, which use return air temperatures only, must be held for at least 28 days (4 weeks) prior to treatment commencing (refer 7.3.3).

Testing of small quantities of produce is recommended. Most tropical fruit and some temperate fruits are susceptible to cold injury and are not suitable for cold treatment. DJPR accepts no responsibility for any damage to produce from this treatment. Local and interstate quarantine authorities maintain the right to inspect certified produce at any time and to refuse to accept a certificate where produce is found not to comply with specified requirements.

7 Procedure: Part A – covers cold treatment

7.1 Facility Plan

The Certification Controller shall maintain a plan of the facility.

The facility plan shall include the following details:

- road access including street name/s;
- internal roadways within the facility providing access to the coldrooms;

- the location and identification of buildings at the facility; and
- the location and size (m^3) of each coldroom and the coldroom number or other code that uniquely identifies each coldroom at the facility.

A copy of the facility plan (Attachment 2) must be completed and attached to the Application for Accreditation (refer 9.1).

7.2 Cold Treatment Facilities

7.2.1 Coldrooms

Coldrooms in which cold treatment is to occur shall be purpose built, have appropriate cooling, temperature measurement and recording equipment and must be lockable to ensure the security and integrity of the fruit being treated.

Coldrooms shall have adequate air circulation to ensure effective cooling of all fruit in the room.

7.2.2 Temperature Sensing and Recording Equipment

Temperature sensing and recording systems shall have an overall variance of not more than ± 0.5°C in the range of -3°C to +3°C. The sensor and recording system must have a resolution of not more than 0.1°C.

The combined sensing and data recording systems must be accurate to within 0.5^{O}C of the true temperature and must be able to be read in increments of 0.1^{O}C or less).

Low resolution mini data loggers may be used if they have an overall accuracy of not more than ± 0.5°C at 0°C and a resolution of not more than 0.5°C. Where low resolution mini data loggers are used, treatment duration and certification shall be based on a temperature that is 0.5^{O}C above the maximum temperature recorded during the treatment period (e.g. if the maximum temperature reading during treatment is 1.0°C, then treatment duration and certification shall be at 1.5°C).

7.2.3 Temperature Sensors

Remote sensors used for measuring fruit pulp temperature shall have an outer sheath of 6.4mm diameter or less. The sensing unit shall be located within the first 25mm of the sensor. Sensors shall be accurate to within ± 0.2°C in the range of –3°C to +3°C.

Each sensor shall be uniquely identified e.g. a tag attached to the sensor or on the adjacent wall or fruit container. Each sensor shall be matched to a specific data recorder.

A plan indicating the location and identity of each sensor shall be kept with the data-recording instrument. A blank Sensor Placement Plan is provided as Attachment 7.

7.2.4 Temperature Recording Equipment

Output of recording instruments shall be accurate to within ± 0.2°C of the true temperature in the range of -3°C to +3°C in the normal operating environment. The instrument must be capable of repeatability in the range of -3°C to +3°C.

For low-resolution mini data loggers, temperature recording shall be accurate to ± 0.5^{O}C at 0°C.

Strip Chart Recorder Display Standards

The scale deflection for strip chart recorders shall not be less than 5 mm for each degree Celsius. A print interval of approximately two minutes and a chart speed of approximately 500mm per hour shall be used.

The chart scale shall be graduated with major scale marks at 1°C graduations and minor scale marks at 0.2°C graduations. Temperature values for each sensor shall be printed at least once every hour.

Each symbol on the wheel shall correspond to and identify the sensor it represents. The chart shall be of sufficient length to display a complete treatment record.

Data Logger Display Standards

For each sensor the temperature value shall be sampled at least once an hour with identified temperature points accurate to 0.2°C. Each hourly reading shall be displayed on the data log sheet and contain a clear, fully informative record including the sensor identity/location, the temperature reading to a resolution of at least 0.2°C, and the date and time of sampling.

Mini Data Logger Display Standards

For mini data loggers, temperature records shall be downloaded onto a personal computer at completion of the treatment period. At conclusion of the treatment, the Treatment Operator shall obtain print outs of the treatment temperatures throughout the treatment period and date and sign these data log sheets as being an accurate treatment record (refer 7.3.4).

For each sensor, the temperature value shall be sampled at least once an hour with identified temperature points accurate to 0.2°C (or 0.5°C for low-resolution data loggers). Each hourly reading shall be displayed on the data log sheet and contain a clear, fully informative record including the sensor identity/location, the temperature reading to a resolution of at least 0.2°C (or 0.5°C for low resolution data loggers), and the date and time of sampling.

Manual Recording Systems

Temperature reading and recording may be completed manually on log sheets maintained by the Treatment Operator. Temperatures shall be read from each sensor and recorded on log sheets at least every 12 hours for the duration of the cold treatment (see example, attachment 9).

Each reading shall contain a clear, fully informative record including the sensor identity/location, the temperature reading with a resolution of not more than 0.2°C, the date and time of sampling, and the identification and initials of the staff member taking the reading. Manual temperature sampling shall only be carried out by the Treatment Operator or Certification Controller.

7.2.5 Calibration of Temperature Sensing and Recording Equipment

The Treatment Operator shall ensure temperature sensors and recording systems are calibrated prior to commencement and on completion of each cold treatment. Temperature calibration shall be conducted at the freezing point of water (0°C). At calibration, each sensor must be uniquely identified and matched with the corresponding data recorder.

Calibration shall be undertaken by the Treatment Operator or by a recognised Testing Authority. For the purpose of this Procedure, a recognised Testing Authority is a person or company that is approved by the manufacturer or DJPR to calibrate cold treatment temperature sensing and recording equipment.

Calibration Method

Where calibration is undertaken by the Treatment Operator, the calibration method provided shall be used (refer Attachment 3).

The Treatment Operator shall maintain records of the results of calibration of all temperature sensors and recording equipment used under this Procedure.

Records shall be in the form of calibration test records from the recognised Testing Authority or a Cold Treatment Sensor Calibration Test (refer Attachment 8) or similar record that includes the following information:

- the business name and interstate produce number;
- the date of calibration;
- the identification of the sensor and data recording instrument;
- the results of the two readings taken at 0.0°C;
- the correction (±°C), if any, to be applied to the sensor reading; and
- the name of the person or recognised Testing Authority that conducted the calibration.

7.3 Cold Treatment

All fruit certified under this procedure must have been treated for fruit fly in an approved cold treatment facility in accordance with the required temperature and time schedule (refer 6).

Access to coldrooms during treatment shall be restricted to essential personnel. When access to coldrooms is not required, coldrooms shall remain locked during treatment.

7.3.1 Loading the Coldroom

Produce shall be loaded into the coldroom in such a way, as to ensure unrestricted circulation of refrigerated air through the stack and thus minimise the development of localised hot spots.

The Treatment Operator must ensure that each bin and/or package of produce placed in cold storage for treatment is clearly labelled with the treatment lot number and, if applicable, the owner of the fruit. The treatment lot code or number shall be a unique identifier that identifies the treatment lot and is traceable to the relevant Coldroom Loading and Treatment Record.

The Treatment Operator shall ensure a Coldroom Loading and Treatment Record is kept for each treatment lot placed in the coldroom. The record shall be in the form of Attachment 4, or similar record which captures the following information:

- the treatment lot code or number;
- the coldroom in which the lot is treated and number of sensors used;
- the date of loading;
- the type and quantity of produce in each lot;
- identification of the owner of the fruit;
- the date cold treatment commenced and was completed
- the maximum temperature recorded during cold treatment (treatment temperature).
- the treatment operator's signature certifying the treatment.

Multiple lots may be treated in one coldroom at one time.

Identification of the owner of the treatment lot is not required where the business only treats their own fruit.

7.3.2 Verification of Cold Treatment Using Pulp Temperatures

Sensor Placement

During the first use of the coldroom or stack configuration, the warmest area in the load of fruit is to be determined by placing sensory probes or thermometers in air and fruit pulp at various locations in the stack. The record of the temperature profiles shall be used to determine optimum sensor placement for a particular coldroom and/or stack configuration.

For each treatment, a minimum of three sensors shall be used for volumes of up to 250 cubic metres of fruit. One sensor shall measure air temperature and two shall measure fruit pulp temperature. One additional fruit pulp sensor shall be used for each additional 250 cubic meters of fruit or part thereof. These requirements also apply where mini data loggers are used for sensing and recording treatment temperatures.

Fruit pulp sensors shall be inserted into the centre of a piece of fruit in the top layer of the package or bin. The fruit chosen for the pulp sensor shall be selected from the largest fruit size in the lot. Where small fruit, such as grapes are being treated, the sensor shall penetrate a number of fruit, so as to totally cover the temperature sensor on the probe. To ensure accuracy of readings, cartons if used, must be restored to original fully closed condition following insertion of the sensors.

At commencement of treatment, a sensor shall be installed to measure air temperature and one to measure pulp temperature in the warmest part of the load as determined by temperature profiles.

Further sensors shall be placed to measure pulp temperatures at locations representing different areas of the coldroom from midway to the top of the load.

Treatment Method

Treatment shall commence only when fruit pulp temperature has equilibrated for at least 24 hours at the specified target temperature (refer 6).

The treatment must be recommenced as if starting a new treatment if pulp temperature rises 0.5°C above the specified target temperature (the tolerance limit) at any time during the treatment period. Alternatively, treatment may be continued at a higher target temperature and correspondingly longer treatment period where available (see Section 6).

The Treatment Operator shall regularly check temperature recording equipment to ensure it continues to function correctly. If the equipment fails during the treatment, the equipment must be repaired and the treatment recommenced as if starting a new treatment.

7.3.3 Verification of Cold Treatment Using Return Air Temperature

Records of the return air temperature may be used to verify cold treatment for fruit in long term air or controlled atmosphere (CA) cold storage. Where this occurs, return air temperature must be maintained at or below the selected target temperature for at least 28 days (4 weeks) prior to treatment commencing.

Note: This option shall only be used for controlled atmosphere or air stored fruit that cannot be accessed to place pulp temperature sensors.

Sensor Placement

Return air temperature shall be monitored by a single sensor located near the thermostat probe in the return air stream to the cooling unit. This requirement also applies where a mini data logger is used for sensing and recording return air temperature.

Once the coldroom has been loaded and prior to commencement of treatment, the coldroom temperature must be monitored for a period of not less than 28 days (4 weeks). During this period, the Treatment Operator shall record the return air temperature of the coldroom for a period of 26 days. Temperature readings shall be recorded not less than every 5 days. For the 48 hour period following the initial 26 days, the treatment operator shall ensure temperature readings are recorded hourly. Treatment may commence once this 28 day period is complete and the room has proven to be able to hold the temperature consistently at or below the selected target temperature.

Following commencement of treatment, return air temperatures must remain at or below the target temperature during the treatment period. If the temperature of return air (other than that associated with periodic defrost cycle fluctuations) exceeds the return air target temperature by more than +0.5^{O}C during the treatment period, the treatment is deemed to be invalid and recording must recommence as if starting a new treatment period. Alternatively, a higher target temperature (if one is specified in Section **Error! Reference source not found.**) may be selected and records kept for the corresponding longer treatment period.

The Treatment Operator shall regularly check temperature recording equipment to ensure it continues to function correctly. If temperature sensing or recording equipment fails during the treatment, the equipment must be repaired and the treatment recommenced as if starting a new treatment period.

7.3.4 Treatment Records

The Treatment Operator shall maintain records of each cold treatment. Cold treatment records shall include a Coldroom Loading and Treatment Record (refer Attachment 4) for each treatment lot and a strip chart, continuous data log sheet or manual data log sheet for each cold treatment.

Strip charts, continuous data log sheets or manual data log sheets shall be maintained with the Coldroom Loading and Treatment Record to which they relate.

For mini data loggers, temperature records may be downloaded onto a personal computer at completion of the treatment period. At conclusion of the treatment, the Treatment Operator shall obtain printed data log sheets of the treatment temperatures for the treatment period.

Treatment temperature records must identify:

- the coldroom;
- the date and time of temperature sampling;
- the sensor identification to which the temperature reading relates; and
- the temperature reading to a resolution of at least 0.2°C (or 0.5°C for low-resolution temperature mini data loggers).

The Treatment Operator shall date and sign the treatment record at the conclusion of the treatment as verification of the accuracy of the record.

Any alterations to temperature or time schedules must be noted on the relevant treatment temperature record with an explanation for the alterations and the date and initials of the Treatment Operator.

7.4 Post Treatment Security

Fruit must be packed, stored and transported in a manner which prevents infestation by fruit fly.

Secure conditions include:

- unvented packages;
- vented packages with the vents secured with gauze/mesh with an aperture of 1.6 mm (max);

- fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides an aperture of 1.6 mm (max);
- shrink-wrapped and sealed as a palletised unit; and
- fully enclosed or screened buildings, coldrooms, vehicles or other facilities free from gaps or other entry points greater than 1.6 mm.

7.5 Cold Treatment Declaration

A business which cold treats fruit to be packed by another business for certification must be accredited under Part A of this procedure. The business shall supply a Cold Treatment Declaration (Attachment 5) with each delivery of fruit supplied to the packing business for certification. The Cold Treatment Declaration must identify:

- the name and interstate produce number of the accredited Business that cold treated the fruit;
- a statement the business is accredited under Part A of this Protocol for the source cold treatment facility;
- the identity of the facility in which the fruit was treated;
- identification of the treatment lot number and the type and quantity of produce from the treatment lot in the delivery covered by the declaration;
- the details of the cold treatment of each treatment lot covered by the declaration including the commencement and completion dates and the maximum temperature reached during the treatment period; and
- the authorised signatories name and signature.

A declaration is not required where the business that treats fruit is the same business that packs the fruit.

8 Procedure: Part B – fruit receipt, packing and certification

8.1 Fruit Receipt

The Fruit Receipt Person shall ensure that all fruit received under this procedure for certification is:

- supplied by a business accredited under Part A of this procedure; and
- each bin or pallet is identified with the treatment lot number of the treatment lot in which it was treated.

Any bin or pallet that is not clearly identified with the treatment lot number shall be regarded as untreated for the purpose of this procedure.

8.1.1 Receipt of Fruit Treated by another Business

A business that packs and/or certifies fruit that has been cold treated by another business shall ensure:

- each delivery of fruit received is accompanied by a Cold Treatment Declaration (refer 7.5);
- fruit supplied for certification has undergone a cold treatment regime in accordance with the requirements of this procedure (6);
- the treatment lot number and cold treatment details are maintained for all produce received and certified under his procedure from receipt through to certification and dispatch.

The business shall maintain copies of each Cold Treatment Declaration received under this procedure.

8.2 Packing

The Certification Controller shall oversee the packing process to ensure only fruit that has been cold treated in accordance with this procedure is packed for certification (refer 7.3).

8.2.1 Packing Records

The Certification Controller shall ensure produce cold treated in bulk and packed after treatment remains traceable to the original treatment lot. Packing records shall be maintained to provide trace back of certified produce to the relevant Cold Treatment Declaration (attachment 5) or Coldroom Loading and Treatment Record (attachment 4).

Packing records shall be in the form of a Package Inspection Record (refer Attachment 6) or a similar form, which captures the following information:

- the Interstate Produce (IP) number of the Business that operates the approved facility in which the produce was packed;
- the date of packing;
- the treatment lot code or number;
- the number and net weight of the bulk containers being packed;
- the type and variety or cultivar of the produce being packed;
- the number and count or net weight of packages packed from the lot; and
- PHAC number/s covering the packed produce and the certification controller's signature.

8.2.2 Identification of Fruit During Packing

A business that packs treated and untreated fruit shall implement systems to identify the treatment status of fruit during packing to prevent mixing of treated and untreated fruit.

Examples of acceptable methods of identifying treated and untreated fruit during packing include:

- packing treated fruit at different times to untreated fruit and clearing lines before changing over; or
- packing treated and untreated produce on different packing lines.

Other methods may be used, provided they clearly identify and segregate treated and untreated fruit.

8.2.3 Identification of Fruit After Packing

A business that packs treated and untreated fruit shall implement systems to identify the treatment status of fruit after packing to prevent mixing of treated and untreated fruit.

Examples of acceptable methods of identifying treated and untreated fruit after packing include:

- using packaging which differs significantly in appearance; or
- marking each package of treated fruit in a manner that clearly identifies the fruit as treated in accordance with this procedure.

8.3 Post Treatment Security

Packing shall commence as soon as practicable after treatment. Any treated fruit that is not in the process of packing must be held in secure conditions until packed.

Completed pallets of packed produce shall be held for the minimum practical period before placing in secure conditions. Certified fruit must be stored at and transported from the packing facility in secure conditions that prevent infestation by fruit fly.

Secure conditions include:

- unvented packages;
- vented packages with the vents secured with gauze/mesh with an aperture of 1.6 mm (max);
- fully enclosed under tarpaulins, hessian, shade cloth, mesh or other covering which provides an aperture of 1.6 mm (max);
- shrink-wrapped and sealed as a palletised unit; and
- fully enclosed or screened buildings, coldrooms, vehicles or other facilities free from gaps or other entry points greater than 1.6 mm.

8.4 Dispatch

8.4.1 Package Identification

The Authorised Dispatcher shall ensure that, after treating and packing, each package is marked in indelible and legible characters of at least 5 mm, with:

- the Interstate Produce (IP) number of the accredited Business that certified the fruit;
- the words “MEETS ICA-07”; and
- the date (or date code) on which the fruit was certified or packed;

prior to the issuance of an Assurance Certificate by the Business under this Procedure.

Any packages containing fruit that has not been cold treated in accordance with the requirements of this procedure shall not be marked as stated above.

8.4.2 Assurance Certificates

The Authorised Dispatcher shall ensure an Assurance Certificate in the form of a Plant Health Assurance Certificate (Attachment 1), is completed and signed by an Authorised Signatory prior to consignment of produce to a market requiring certification of cold treatment for fruit fly.

Assurance Certificates shall include:

in the “Accredited Business that Prepared the Produce” section -

- the name and address of the accredited business that packed the fruit;

in the “Grower or Packer” section -

- the name and address of the accredited business that treated the fruit. In the case that the consignment contains fruit treated by a number of businesses, the word ‘VARIOUS’ shall be used;

in the “Treatment” section -

- in the date column, the date the cold treatment period was completed;
- in the treatment column, the words “Cold Treatment”;
- in the duration and temperature column, the words “XX days at ##°C or below”, where XX is the number of days in the treatment period and ## is the maximum temperature reached.

Where temperature verification is based on return air temperature (refer 7.3.3), the declared maximum temperature must be 0.5°C above the maximum temperature recorded throughout the treatment period.

Individual Assurance Certificates shall be issued to cover each consignment (i.e. a discrete quantity of product transported to a single consignee at one time) to avoid splitting of consignments.

Assurance certificates shall be completed, issued and distributed in accordance with the Work Instruction Guidelines for Completion of Plant Health Assurance Certificates [PSW-02].

8.4.3 Assurance Certificate Distribution

The **original** (yellow copy) must accompany the consignment.

The **duplicate** (white copy) must be retained by the Business.

9 Accreditation

9.1 Application for Accreditation

A business seeking accreditation for an ICA arrangement under this procedure must make an application for accreditation at least 10 working days prior to the intended date of commencement of certification of produce.

If the Business:

- grows and cold treats produce for packing by another business, indicate Part A on the application and attach a Property Plan;
- packs produce cold treated by other businesses, indicate Part B on the application
- grows and packs cold treated produce, indicate Part A and B on the application.

9.2 Audit process

9.2.1 Initial audit

Prior to accrediting a business, an Authorised Inspector shall conduct an initial audit of the business to verify the system is implemented and capable of operating in accordance with the requirements of this ICA procedure, and the system is effective in ensuring compliance with the specified requirements of the arrangement.

On completion of a successful initial audit, applicants will be granted provisional accreditation and issued a Certificate of Accreditation (refer 9.3).

9.2.2 Compliance Audits

Compliance Audits are conducted to verify that the ICA system continues to operate in accordance with the requirements of this procedure. Compliance audits are, wherever practical, conducted when the system is operating.

A compliance audit is conducted:

- within four weeks of the initial audit and accreditation or issue of the first PHAC; and
- within twelve weeks of the business being reaccredited; and

- in the case of a business operating for more than six months of a year, between six and nine months after accreditation or reaccreditation.

Upon completion of a successful initial compliance audit, accreditation is granted to cover the current season, up to a maximum of twelve months.

Random audits are conducted on a selected number of accredited businesses each year. Random audits may take the form of a full compliance audit, or audits of limited scope to sample certified produce, ICA system records or ICA system documentation.

Unscheduled compliance audits may be conducted at any time to investigate reported or suspected non-conformances.

9.2.3 Re-Accreditation

Accredited businesses are required to re-apply for accreditation each year the business seeks to operate under the arrangement. Businesses seeking re-accreditation must lodge a renewal application prior to accreditation lapsing, or if accreditation has lapsed, prior to commencing further certification of produce under the arrangement.

A compliance audit is conducted within twelve weeks of the business applying for re-accreditation each year.

9.3 Certificate of Accreditation

An accredited business will receive a Certificate of Accreditation detailing the facility location, procedure, scope (type of produce covered) and period of accreditation. This Certificate of Accreditation will also detail which interstate markets the business is permitted to send to.

The business must maintain a current Certificate of Accreditation and make this available on request by an Authorised Inspector.

A business may not commence or continue certification of produce under this arrangement unless it is in possession of a valid and current Certificate of Accreditation for the procedure and produce type covered by the Assurance Certificate.

9.4 Non-conformances and Sanctions

9.4.1 Non-conformances

Audits are regularly undertaken to evaluate the effectiveness of implementation requirements. If, in the opinion of the auditor, there is evidence indicating that there has been a failure to meet one or more accreditation requirements, the auditor may raise a Non-conformance Report (NCR). Actions required to address the non-conformance shall be discussed and recorded on the NCR.

If the integrity of the accreditation has been significantly compromised, the non-conformance may provide grounds for the suspension or cancellation of the accreditation and prosecution.

9.4.2 Incident Reports

Incident Reports may be raised by interstate quarantine authorities to report the detection of a non-conformance in produce certified under this arrangement. An investigation into the incident shall be conducted and findings reported back to the originator.

If the integrity of the accreditation has been significantly compromised, the incident may provide grounds for the suspension or cancellation of the accreditation and prosecution.

9.4.3 Suspension and Cancellation

The DJPR may suspend or cancel an accreditation when an accredited business is found, for example, to have:

- obtained accreditation through the provision of false or misleading information;
- not paid fees owing to the DJPR;
- contravened a requirement that compromises the integrity of the arrangement;
- not rectified a non-conformance.

Any action taken by the DJPR to suspend or cancel an accreditation shall be provided in writing to the business. This shall also provide guidance on the lodgement of a written appeal requesting that the decision be reviewed.

9.4.4 Prosecution

Businesses found to be operating contrary to the Act may be liable for prosecution.

9.5 Charging Policy

The business will be charged for all audit and investigation activities and an annual accreditation fee. This fee may be waived if other accreditations are held by the business.

A fee will be charged for all scheduled audits conducted. Unannounced audits will not be charged. The DJPR can be contacted for a schedule of fees.

10 Records and Document Control

10.1 ICA System Records

The business shall maintain the following records:

PART A

- a Facility Plan (refer 7.1);
- Coldroom Loading and Treatment Records (refer 7.3.1 and 7.3.4);
- Coldroom Sensor Placement Plans (refer 7.2.3);
- Coldroom Sensor Calibration Test Records (refer 7.2.5); and
- Cold Treatment Temperature Records (strip charts, data log sheets etc.) (refer 7.3.4).

PART B

- if applicable, a copy of each Cold Treatment Declaration received (refer 8.1.1);
- Cold Treatment Packing Records (refer 8.2.1); and
- a copy of each Plant Health Assurance Certificate (refer 8.4.3).

ICA system records shall be retained for a period of at least 24 months from completion, or until the next compliance audit of the ICA arrangement, whichever is the later.

ICA system records shall be made available on request by an Authorised Inspector.

10.2 ICA System Documentation

The business shall maintain the following documentation:

- a copy of the business's current endorsed Application for Accreditation;
- a copy of the current endorsed Authorised Signatory forms;
- a current copy of this Operational Procedure; and
- a current Certificate of Accreditation.

ICA system documentation shall be made available on request by an Authorised Inspector.

11 Attachments

Attachment 1	Plant Health Assurance Certificate (PSE-31)
Attachment 2	Facility Plan (PSF-095)
Attachment 3	Calibration of Temperature Sensors and Recording Equipment (PSF-096)
Attachment 4	Cold Room Loading and Treatment Record (PSF-097)
Attachment 5	Cold Treatment Declaration (PSF-098)
Attachment 6	Package Inspection Record (PSF-070)
Attachment 7	Sensor Placement Plan (PSF-100)
Attachment 8	Sensor Calibration Test Record (PSF-101)
Attachment 9	Cold Treatment Record (PSF-046)

Plant Health Assurance Certificate

Certificate number
XXXXXXXX

Consignment details (please print)

Consignor	
Name	**ABC PTY LTD**
Address	**STREET ROAD, MELBOURNE VIC 3000**

Consignee	
Name	**PRODUCE PEOPLE**
Address	**SOMEWHERE ROAD, ADELAIDE SA**

Reconsigned to (splitting consignments or reconsigning whole consignments)
Name
Address

Certificate details (please print)

IP Number	Facility number	Procedure
V9999	**01**	**ICA-07**

Accredited business that prepared the produce	
Name	**ABC PTY LTD**
Address	**STREET ROAD, MELBOURNE VIC 3000**

Grower or Packer	
Name	**ABC PTY LTD**
Address	**STREET ROAD, MELBOURNE VIC 3000**

Other facilities supplying produce

Brand name OR identifying marks (as marked on packages)	**Date OR date code** (as marked on packages)
ABC PRODUCE	**25/08/2020**

Number of packages	**Type of packages** (e.g. trays, cartons)	**Type of produce**	**Authorisation for split consignment**
200	**Boxes**	**Apples**	

Treatment details

Treatment date	**Treatment**	**Chemical** (active ingredient)	**Concentration / duration and temperature**
26/08/2020	**Cold Treatment**		**16 days at 1.0°C**

Additional certification / Codes

Declaration: I, an Authorised Signatory of the accredited business that prepared the plants, plant products, used equipment, used packages or earth materials described above, hereby declare that the plants, plant products, used equipment, used packages or earth materials have been prepared in the business' approved facility in accordance with the business' Certification Assurance arrangement and that the details shown above are true and correct in every particular. I acknowledge that it is an offence under the ***Plant Biosecurity Act 2010*** to issue assurance certificates without being accredited and/or to make false statements in certificates and declarations.

Authorised Signatory (print name)	**Signature**	**Date**
A.Signature	A.Sign	25 / 08 / 2020

FACILITY PLAN

Facility plan details

The facility plan (overleaf) is to include the following:

1. road access including street name/s;
2. internal roadways within the facility providing access to the Facility;
3. the location and identification of buildings at the facility;
4. the location and size (m^3) of each facility and the facility number or other code that uniquely identifies each facility on the plan.

Complete the following details for each facility shown on the plan:

Facility Reference Code or No.	Size (m^3)

Arrangement details

Applicant's Name *(as shown on the application form)*

Street Address of Facility *(as shown on the application form)*

Scope of arrangement

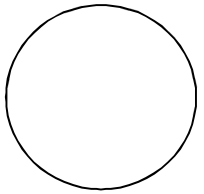
Application is made for accreditation

I ..... *(full printed name)* the

(position in business) am authorised to sign on behalf of the business and I under that-

(a) accreditation will only be granted for the facility nominated on the Facility Plan;
(b) following accreditation, certification can only be issued in accordance with scope of accreditation detailed in the Certificate of Accreditation for an Interstate Certification Assurance (ICA) Arrangement covering the arrangement;
(c) application must be made to amend any of the current details in the Application for Accreditation of a Business for an Interstate Certification Assurance Arrangement or this Facility Plan.

..... / /
Signature Date



INDICATE NORTH

VICTORIA
State Government

CALIBRATION OF TEMPERATURE SENSORS AND RECORDING EQUIPMENT

1. Sensor Identification

Each sensor shall be uniquely identified by means of a tag attached to the sensor or on the adjacent wall or fruit container.

Each sensor shall be matched with the output data recorder.

A plan showing the location and identity of each sensor shall be maintained with the data-recording instrument.

2. Equipment and Supplies

- An insulated container with a volume of at least 1 litre and an open neck.
- Thermometer clamp or similar device.
- 5 litres of chilled deionised water.
- Crushed ice made from deionised water.

3. Sensor Calibration Procedure

Sensor calibration shall be undertaken prior to commencing, and on completion of each cold treatment.

Calibration shall be conducted using a mixture of crushed ice made from deionised water, and deionised water in an insulated container using the following procedure –

- Fill the insulated container with crushed ice. Add sufficient pre-cooled deionised water to cover the ice.
- Thoroughly stir the ice/water mixture. Add additional ice as the ice melts.
- Using the thermometer clamp or similar device, submerge each sensor in the ice/water mixture. Sensors must not touch the sides or bottom of the container.
- Constantly stir the ice/water mixture while testing is being carried out. Allow the temperature shown by the sensors to stabilise at the lowest temperature obtainable.
- Two consecutive readings shall be recorded for each sensor at the lowest temperature obtainable. There shall be at least a 60 second interval between the two readings for any one sensor.

Calibration shall be to the nearest 0.2^{o} C. For low-resolution mini data loggers, calibration shall be to the nearest 0.5^{o} C.

Any sensor that records a temperature of $\pm$ 0.5^{o} C or more from the standard of 0.0^{o} C shall be replaced.

The temperature variance of each sensor shall be calculated as the mean of the variation of the two readings from 0^{o} C and shall be clearly identified for each sensor and traceable to the data recording instrument.

COLDROOM LOADING AND TEMPERATURE RECORD

Business Name _____ Interstate Produce No. **V** | | | | |

Coldroom ID. _____ Treatment Lot Code or No. _____

Date of Loading	Owner's Name	Fruit (Type & Variety)	Quantity (No. & Type)	Comments (i.e. the owner of the fruit, etc.)

Date Treatment Commenced / / Date Treatment Completed / /

Treatment Temperature °C Number of Sensors Used

I certify that this treatment lot has been treated in accordance with the requirements of the Operational Procedure *Cold Treatment* [ICA-07].

_____ / /
Signature Date

COLD TREATMENT DECLARATION

A Cold Treatment Declaration must be provided to the certifying/packer business to cover each delivery (lot) of fruit delivered to the other business for certification under the Operational Procedure ICA-07.

I _____ *(full printed name)*

an Authorised Signatory of -

_____ *(Business name),*

Interstate Produce (IP) No. **V** | | | | |

hereby declare that the fruit listed below and delivered to -

_____ *(Business name)*

Interstate Produce (IP) No. **V** | | | | |

on - / / *(date)*

for certification under the Operational Procedure *Cold Treatment* [ICA-07], were cold treated as follows –

Treatment Lot Code or Number	Fruit Type and Variety	Number and Type of Packages	Date Treatment Commenced	Date Treatment Completed	Number of Treatment Days	Maximum Temperature (°C)

_____ / /
Signature Date

PACKAGE INSPECTION RECORD

Business Name -- Interstate Produce No. **V** | | | | |

Date of Packing	Treatment Lot Code or Number	Produce Type & Variety/Cultivar being Packed	Number & Net Weight of Bulk Containers	Number and Count/Net Weight of Packages Packed	PHAC Number	Certification Controller's Initials

VICTORIA
State
Government

Sensor Placement Plan

The Sensor Placement Plan should comprise a diagram of the treatment vessel/room/area and include the location and identification of each temperature sensor.

SENSOR CALIBRATION TEST RECORD

Business details						
Business name	Data recoding instrument ID					
Place of Sensor	Interstate produce number	**V**				

Date of testing	Sensor identification	First reading	Second reading	Sensor correction value (± ℃)	Batch/ size treated	Authorised Inspector name	Signature

VICTORIA State Government

COLD TREATMENT RECORD

Business Name _____ Interstate Produce No. **V** | | | | |

Coldroom _____ Page Number _____

Date	Time	Sensor ID and Reading	Sensor ID and Reading	Sensor ID and Reading	Sensor ID and Reading	Sensor ID and Reading	Sensor ID and Reading	Printed Name	Initials

VICTORIA State Government