



# Facility Standard

## Post Entry Quarantine for Plants

PEQ.STD

21 June 2022

## **TITLE**

Facility Standard: Post Entry Quarantine for Plants

## **COMMENCEMENT**

This consolidated Facility Standard comes into force on 21 June 2022.

## **COMMENCEMENT**

This facility standard amends the Facility Standard: Post Entry Quarantine for Plants, which came into force on 31 June 2021, and consolidates all amendments made up to the commencement of this standard.

The amendment history to this import health standard is set out in the document history.

## **ISSUING AUTHORITY**

This Facility Standard is issued under section 39 of the Biosecurity Act 1993.

Dated at Wellington this day of 21 June 2022.

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## Introduction

This introduction is not part of the Facility Standard, but is intended to indicate its general effect.

## Purpose

This standard relates to transitional facilities for Post Entry Quarantine (PEQ) for Plants that hold any plant material imported as nursery stock or seed for sowing that requires PEQ before the plant material can be given a biosecurity clearance, moved to another facility, or exported.

The purpose of this standard is to set out the standards relating to building, maintaining, and operating this kind of transitional facility.

## Background

The Biosecurity Act 1993 (the Act) provides the legal basis for excluding, eradicating, and effectively managing pests and unwanted organisms that may cause harm to natural and physical resources and human health. Imported risk goods have the potential to introduce pests and unwanted organisms into New Zealand. For that reason, imported risk goods must obtain biosecurity clearance before they are allowed to officially enter New Zealand.

The risk goods that this standard relates to must go to a transitional facility on arrival in New Zealand. They must remain there until they are given biosecurity clearance or are moved to another facility or exported.

The aim of PEQ is to effectively manage imported plant material to exclude regulated organisms from New Zealand. Plant health cannot easily be assessed on material that is not actively growing. Therefore, if required by an IHS, imported plant material must be isolated and held for inspection and/or testing to detect any regulated organisms before the plants are given a biosecurity clearance. PEQ facilities and operating systems are designed and managed to prevent the escape of organisms that may be associated with imported plant material.

It is expected that imported plant material will arrive free of regulated organisms; PEQ is not a process for curing or freeing plant material of regulated organisms. Where a particular pathway or plant species is found to routinely harbour regulated organisms, MPI may take action to close that pathway or impose further restrictions or conditions on imports of that plant species.

A place cannot operate as a transitional facility unless it is approved by the Director-General. In order to be approved, it must comply with the Act and the requirements of this standard. Application for facility approval can be found at the following MPI website (<https://www.mpi.govt.nz/dmsdocument/3376-Application-for-approval-of-an-MPI-transitional-or-containment-facility>). Facility approvals may be subject to conditions.

A transitional facility must be operated by an approved operator. The MPI website (<https://www.mpi.govt.nz/dmsdocument/43354-Application-for-approval-of-an-MPI-transitional-or-containment-facility-operator>) explains how to become an approved operator. Operator approvals are subject to the condition that the operator will comply with this standard and with any other conditions imposed by the Director-General. Part 1.5 of the Guidance Document to this standard provides further information on how to become an approved operator.

## Who should read this Facility Standard?

Operators and prospective operators of transitional facilities processing plant material in post entry quarantine should read and be familiar with this standard.

## Why is this important?

If a place does not comply with the building, maintenance, and operating requirements of this standard, it will not be approved as a transitional facility and, if already approved, the approval may be suspended or cancelled.

If an operator does not comply with the operating requirements of this standard, the operator's approval may be suspended or cancelled.

It is an offence to operate a place as a transitional facility if it is not approved as a transitional facility or if the person operating the place is not an approved operator, or if those approvals are suspended. It is also an offence for a person who operates a transitional facility to not comply with the operating standards for the facility.

## Document History

Refer Schedule 1: Document History.

## Other information

### Guidance document

MPI has prepared a guidance document (MPI-GD-PEQ) to accompany this standard. The guidance document sets out ways in which the requirements of this standard can be met and contains other useful information. Operators and applicants for approval should read and be familiar with the guidance document.

### Costs

Applicants for a facility approval, and for approval to be an operator, must pay an application fee.

MPI will charge for ongoing monitoring of compliance with this standard and any conditions of an approval. Fees are at the rates set out in the [Biosecurity \(Costs\) Regulations 2010](#).

## Part 1: General Requirements

### 1.1 Application

- (1) This standard applies to all facilities that receive the following types of material:
  - a) nursery stock (including cuttings [dormant and/or non-dormant], whole plants, dormant bulbs and tubers, and tissue cultures) eligible for import into New Zealand under the IHS 155.02.06: [Importation of Nursery Stock](#) or any import health standard that replaces that standard;
  - b) seed for sowing eligible for import into New Zealand under the IHS 155.02.05: [Importation of Seed for Sowing](#), or any import health standard that replaces that standard;
  - c) plants that are new organisms<sup>1</sup>, including genetically modified plant material, that must be held in a transitional facility before receiving authorisation for movement to be held permanently in a containment facility of exported;
  - d) plant species that are not new organisms, but which are not eligible for biosecurity clearance, that must be held in quarantine before they receive authorisation for movement to an MPI-approved containment facility or are re-shipped or destroyed.
- (2) This standard does not apply to the following:
  - a) facilities that hold plant material (including nursery stock) that are new organisms, including genetically modified plants, that are not required to be held in a transitional facility and must be moved directly to a containment facility;
  - b) facilities that are used for the containment of plant cell cultures (as defined in Schedule 2 of this standard);
  - c) facilities that hold non-viable plants or plant products, or plant material destined for processing;
  - d) facilities that hold the types of material described in section 1.1(1) for a temporary period or for treatment prior to transfer to a Post Entry Quarantine facility.

### 1.2 Incorporation by reference

- (1) The current editions of the following standards are incorporated by reference in this Facility Standard under section 142M(1)(a) of the Act:
  - a) Australian Standard AS 1324.1: Air filters for use in general ventilation and airconditioning Part 1: Application, performance and construction;
  - b) Australian Standard AS 1324.2: Air filters for use in general ventilation and airconditioning Part 2: Methods of test;
  - c) Australia/New Zealand Standard (AS/NZS) 2243.3: *Safety in laboratories Part 3: Microbiological safety and containment*.
- (2) Under section 142O(3) of the Act it is declared that section 142O(1) does not apply, that is, a notice under section 142O(2) of the Act is not required to be published before material that amends or replaces the above listed standards, guideline or lists has legal effect as part of these documents.
- (3) The standards listed above are incorporated into this Facility Standard as specified in the relevant sections; only those parts specified in this Facility Standard are requirements.

### 1.3 Abbreviations and definitions

- (1) Abbreviations and definitions of terms used in this standard are set out in Schedule 2.

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<sup>1</sup> As defined under the Hazardous Substances and New Organisms (HSNO) Act 1996; see schedule 2 of this standard.

## Part 2: Physical and Structural Requirements

- (1) Physical and structural requirements given in Part 2 are general requirements that are applicable to all levels of facility. Specific physical and structural requirements for different levels of facility are given in Part 4.

### 2.1 General

- (1) The facility must be designed, constructed, and maintained to ensure that plant material held within the facility and any biosecurity risks associated with them are effectively managed to ensure containment at all times.

### 2.2 Site, buildings, and structures

- (1) The facility must be located in an area that is provided with the necessary services and systems to meet the requirements of this standard and to ensure that the biosecurity risks of, and associated with, imported plant material are managed at all times.
- (2) The facility must be a defined place, which may comprise a room or series of rooms, building(s), structure(s), and/or open area(s). Such structures may include perimeter fences, access gates, drainage, and waste management systems, etc.
- (3) The materials used for buildings and structures within the facility must be suitable for the purpose required, especially for the management of biosecurity risks.

### 2.3 Leased facilities

- (1) A facility, or part thereof, may be leased. The lease arrangement (for example contract, *non-gratia*) must be documented and made available to the MPI Inspector and must clearly identify the operator of the facility.

### 2.4 Physical or structural changes to a facility

- (1) Any physical or structural changes that fit within the categories described below must be approved by an MPI Inspector before any changes are made:
  - a) changes to external features of buildings (for example walls, mesh, or roofs);
  - b) changes to structures relating to waste management, drainage, perimeter fencing and security;
  - c) changes that may compromise (even temporarily) the ability to effectively manage biosecurity risks.
- (2) Changes that do not fall within the above categories do not need prior approval from the MPI Inspector.

### 2.5 Signage

- (1) All entrances to the facility must have signs specifying:
  - a) that the place is a transitional facility approved by MPI;
  - b) the PEQ level of facility;
  - c) that access is restricted to authorised persons only;
  - d) the name and contact details of the operator and deputy operator (where applicable).
- (2) Signs must be waterproof, permanently affixed and clearly visible at all entrances.

## **2.6 Decontamination of facilities and/or equipment**

- (1) The facility must be designed and constructed in a way that enables it and/or any equipment within it to be easily decontaminated. Decontamination, and the equipment used, must be appropriate to the type of pests or diseases that may be associated with plants in the facility.

## **2.7 Use and maintenance of equipment**

- (1) Equipment in the facility must only be operated by authorised personnel who have been determined to be competent to do so by the operator (or a nominated delegate).
- (2) Equipment must be maintained to ensure effective and reliable operation, and instructions on the use and maintenance of equipment must be readily available.
- (3) Equipment that is critical to the effective management of biosecurity risks (for example autoclaves, hot water treatment incubators, soil pasteurisers, spray equipment) must be maintained according to the manufacturer's instructions and calibrated as described in the manual at intervals appropriate for the type of equipment and/or its level of use.
- (4) Records must be kept of any maintenance and calibration of equipment.

## Part 3: Operational Requirements

### 3.1 Operating manual

- (1) An operating manual (the 'manual') must be documented for each facility and must be approved by the MPI Inspector before use.
- (2) The most recent version of the manual must be readily accessible to facility users and must be made available to an MPI Inspector at least three days prior to an [external MPI inspection](#) or on request.

#### 3.1.1 Content of operating manual

- (1) The manual must set out or include all of the following matters:
  - a) the name and contact details of the operator and all personnel with key responsibilities relating to the management of the facility, including those responsible for training, records, internal audits, and manual review;
  - b) the purpose of the facility, the scope of activities undertaken and the type(s) of plant material that will be imported;
  - c) a description of the roles and responsibilities of all personnel having management responsibilities for the facility and/or uncleared plant material;
  - d) the name and contact details of the MPI Inspector and the contact details of the local MPI office;
  - e) a description of the training programme, as required in [section 3.9.2](#) of this standard;
  - f) the location of the visitors' logbook;
  - g) a site plan of the facility showing:
    - i) the geographical location of the facility and proximity to other significant structures, features, and roads;
    - ii) the general layout of the facility, clearly identifying the perimeter boundary, individual buildings, and each quarantine unit (i.e., separate growing areas or separate rooms within buildings);
    - iii) the location and identity of areas with specific functions within the facility, identifying areas used for physical containment of plants;
    - iv) all exit and entry points.
  - h) the manual review process, including who will be responsible for manual review;
  - i) the decontamination processes and procedures for the facility;
  - j) the procedures used to maintain [security](#) and control [access to the facility](#), including who will be responsible for this;
  - k) the processes and procedures used for holding plant material and the activities undertaken with that material, which must include (at a minimum) those used to (as applicable):
    - i) [receive plant material into the facility](#);
    - ii) [maintain traceability of plant material](#);
    - iii) [manage cleanliness and hygiene within the facility](#);
    - iv) [move plant material from the facility](#);
    - v) [multiply plant material](#).
  - l) [keep plant material segregated and monitor and maintain segregation](#).
  - m) the procedures that will be used to [inspect plants](#) to ensure that any pests and diseases are readily detected;
  - n) the procedures to be followed if [pests or diseases are detected](#), which must include (as a minimum):
    - i) the immediate steps that will be taken to manage biosecurity risk;
    - ii) how detections will be reported, to who and by when;
    - iii) the procedures used for [diagnosis of pests or diseases](#), including procedures for collecting, storing, packaging, and moving samples.

- o) a description of any treatments that will be applied to plants;
- p) how the training programme will be implemented;
- q) a description of the processes and procedures for ensuring that the facility and its operations complies with the requirements of this standard, any permit(s) to import, any direction issued by a CTO and any applicable IHS, which must include (at a minimum):
  - i) any regular checks of the facility, equipment and/or operations;
  - ii) internal audits;
  - iii) external inspections by the MPI inspector.
- r) a description of the pest and vermin control program (if applicable);
- s) a description of the records that will be kept and where these will be stored;
- t) a description of the contingency plans that will be implemented to manage such risks such as those relating to fire, natural disasters, security breach and breach of containment.

### 3.1.2 Format of operating manual

- (1) The manual must be in English, must be clearly and unambiguously worded and must include:
  - a) a table of contents;
  - b) sequentially numbered pages in the format 'Page X of Y';
  - c) a version number and date of issue on every page;
  - d) all sections numbered.

### 3.1.3 Manual review and amendment

- (1) The manual must be reviewed annually and/or amended to ensure that it continues to meet the requirements of this standard through incorporation of the following:
  - a) changes to the facility and/or facility management system (for example, through the results of internal audits and external inspections; review at least annually);
  - b) regulatory changes (for example, changes to this standard or a relevant IHS; amend as required);
  - c) any MPI directions (for example, in a BACC or from an inspector or CTO; amend as required).
- (2) Written records of manual reviews must be kept including:
  - a) date of review;
  - b) person(s) who undertook the review;
  - c) review findings;
  - d) any corrective action requests or recommendations;
  - e) a description of any manual changes.
- (3) A copy of the amended manual must be forwarded to the MPI Inspector when changes are proposed.
- (4) The MPI Inspector must have approved any amendments before operational changes may be implemented.

### 3.1.4 Document control

- (1) The most recently approved version of the manual must be used.
- (2) The manual must describe:
  - a) how new procedures are approved before being used;
  - b) how it is ensured that only the latest version of the manual is used;
  - c) how obsolete documents are managed;
  - d) how changes or amendments to the manual are shown in the manual.

### 3.1.5 Access to operating manual

- (1) The manual (electronic or hard copy) must be readily accessible to staff within the facility at all times.

- (2) The MPI Inspector must have ready access to the current version of the manual (electronic or hard copy) at all times.

## 3.2 Records

- (1) The facility must have an effective record-keeping system to ensure that all the following requirements in section 3.2 are met.
- (2) Records must be kept of all operations that are relevant in showing that the facility meets the requirements of the standard.
- (3) Records must be kept for a minimum of seven years from receipt, preparation, or amendment.
- (4) Records must be made available to MPI on request.
- (5) The following facility file records must be kept:
  - a) name, address, and other contact details of the legally identifiable owner of the facility;
  - b) facility and operator approvals (and deputy operator approvals, where applicable);
  - c) staff records including competencies, experience, skills and [training](#) for all people working in the facility;
  - d) records of [monthly facility checks](#) and [internal audits](#) including date, auditor, non-compliances, and any corrective actions taken;
  - e) a copy of standards relevant to the facility approval;
  - f) vermin control records (where required by this standard);
  - g) any [non-compliances](#) raised (during internal audits, external inspections, or at any other time);
  - h) corrective and preventative actions taken;
  - i) records of all management reviews and meetings which are relevant to the operation of the facility.
- (6) The following consignment file records must be kept:
  - a) copies of phytosanitary certificates;
  - b) BACCs and/or movement authorisation forms relating to the consignment;
  - c) import permits;
  - d) consignment numbers;
  - e) genus, species, and cultivar names of imported plant material;
  - f) arrival date of each consignment in the facility and records of checks done on arrival;
  - g) any [treatment\(s\)](#) undertaken on arrival at the facility or during the quarantine period;
  - h) dates of propagation (including planting, multiplication, sub-culturing, deflasking, or potting) and date when plants enter a state of active growth;
  - i) records of regular [plant inspections](#) including:
    - i) dates of inspections;
    - ii) name of the person conducting the inspection;
    - iii) any pest or diseases found;
    - iv) any actions taken.
  - j) MPI approved movement of plant material to and from approved storage facilities (cold rooms etc.);
  - k) date of removal of any [waste material](#) from the facility, and location to which it was moved (if transferred to an off-site treatment facility);
  - l) records of any plant material that was [moved or exported](#) from the facility;
  - m) room or bench location of plant material during quarantine (where applicable);
  - n) results of [diagnostic tests or pest identifications](#), pest detection's and any associated control action(s) (where applicable);
  - o) results of any pre-determined testing (where applicable);
  - p) dates of biosecurity clearance;
  - q) any MPI approved experiments or trials conducted on the plant material (if applicable).

### 3.3 Security and access

- (1) The facility must have an effective security and access system to ensure that all the following requirements in section 3.3 are met.
- (2) The operator must ensure that access to the facility is restricted to authorised people only, and that unauthorised access does not occur.

#### 3.3.1 Access by an MPI Inspector

- (1) The MPI Inspector must be granted access to a facility at any reasonable time, or at any other time when the operator has been provided with a minimum of 24 hours' notice.

#### 3.3.2 Access by staff and visitors

- (1) The operator (or a nominated delegate) must approve visitors (including contractors and tradespeople) before granting them access to the facility. Visitors must be given suitable training before access is permitted, and must be accompanied by a permitted person (where possible).
- (2) The operator must ensure that all staff and visitors comply with the requirements of this standard.
- (3) All visitor names, organisations, contact details (phone number or email address) and the date and purpose of the visit must be recorded in a visitor logbook.
- (4) The manual must specify the location of the visitor logbook.

### 3.4 Dealing with plant material

- (1) The facility must have an effective system for dealing with plant material to ensure that all the following requirements in section 3.4 are met.

#### 3.4.1 Containment of plant material

- (1) All plant material must remain in the facility until a biosecurity clearance is issued, or authorisation is given under the Act to [move plants from the facility](#) or to destroy plants.
- (2) Any plant material that does not comply with the relevant IHS, or import permit, must be controlled to prevent its release (unintentional or intentional) from the facility.

#### 3.4.2 Receiving plant material into the facility

- (1) When plant material first arrives at a facility, the facility operator must:
  - a) within one business day after the arrival, notify the MPI Inspector that the material has arrived;
  - b) check that the material is accompanied by valid MPI documentation (a BACC or movement authorisation form) that correctly describes the contents of the consignment, and appropriately authorises the transfer of material from the border to the facility.
- (2) If any plant material arrives without MPI documentation, or with documentation that is incorrect, the operator must inform the MPI Inspector within one business day after its arrival.
- (3) Any packages that have not been inspected by MPI immediately upon arrival in New Zealand, or that are not accompanied by MPI documentation, must not be opened, and must be stored securely until an MPI Inspector is present, or until written advice is obtained from the MPI Inspector describing how such consignments must be handled. All packaging and documentation associated with such consignments must be retained for assessment by the MPI Inspector.
- (4) If any pests or diseases are observed when plant material is being unpacked, all activity must cease, and packages must immediately be secured to prevent the escape of any pests or diseases.

- (5) If any pests or diseases are observed when plant material arrives at a facility, the MPI Inspector must be notified within 24 hours. If the MPI inspector cannot be contacted, MPI must be notified using the exotic pests and diseases hotline on 0800 80 99 66.
- (6) If any mobile pests are observed, an appropriate knock down spray must be applied as soon possible and MPI must be notified immediately on 0800 80 99 66.

{Note: Specific requirements for the detection of pests or diseases are set out in [section 3.7](#)}.

### 3.4.3 Keeping track of plant material

- (1) Procedures must be developed to ensure that all plant material can be traced when the material is in the facility.

{Note: Specific requirements for each level of facility are set out in [Part 4](#)}.

### 3.4.4 Facility hygiene

- (1) All practicable steps must be taken to avoid the spread of pests and diseases within a facility.

{Note: Specific requirements for each level of facility are set out in [Part 4](#)}.

- (2) Plant material from different consignments, or different lots within the same consignment, must be effectively segregated to prevent cross-contamination.
- (3) Procedures must be put in place to ensure that there is no mixing of plants from different lots or consignments.

### 3.4.5 Moving or exporting plant material from the facility

- (1) Before plant material can be moved between facilities or removed from the facility to be exported from New Zealand a [movement request form](#) must be filled in and submitted to the MPI Inspector for completion.
- (2) When material is moved within New Zealand the receiving facility must be:
  - a) A PEQ facility capable of operating at the same or a higher level than the original facility, and that can comply with any additional conditions relevant to the plant material being transferred; or
  - b) A containment facility approved by the Director-General under the Act for receipt of the plant material, that is operating at a level which is required by a relevant Approval given under the HSNO Act; or
  - c) A transitional or containment facility specifically approved by the Director-General under the Act for receipt of the plant material.
- (3) Traceability to the original imported material must be maintained.
- (4) Plant material to be moved or exported must be securely packaged to prevent the escape of any pests and diseases and to ensure that there is no loss of contents during transport.
- (5) The manual must describe the procedures used to:
  - a) Apply for movement requests;
  - b) Notify the receiving facility (for example expected date and time of arrival, method of transfer);
  - c) Securely package material;
  - d) Transport material;
  - e) Process material that is received from another facility.
- (6) When plant material is moved between facilities a copy of the completed movement request form must be sent to the operator of the receiving facility before movement occurs. A copy of the movement authorisation must also accompany the plant material during movement.
- (7) A receiving facility must confirm receipt of the plant material by informing the MPI Inspector within one business day of material arriving at the facility.

- (8) When plant material is exported from New Zealand, documented evidence must be sent to the MPI Inspector to verify that the consignment has left New Zealand.

### 3.4.6 Multiplying plant material

- (1) Before plant material is multiplied within the facility the approval of the MPI Inspector must be obtained.
- (2) If plant material is multiplied:
  - a) all progeny must be retained within a facility until the originally imported material has been given a biosecurity clearance; and
  - b) the quantity of plants must not exceed the capacity of the facility; and
  - c) records must be retained to identify the parental plants from which any progeny were derived.
- (3) If quarantine issues arise (for example a regulated organism is detected within a consignment), all progeny will be subject to the same conditions as the original imported plant material.
- (4) Progeny of plant material must be inspected by the operator and MPI Inspector as described in [section 3.6](#).

### 3.4.7 Mixing consignments

- (1) If different consignments are to be held within the same unit of the facility, the prior approval of the MPI Inspector must be obtained.

## 3.5 Managing waste

- (1) The facility must have an effective system for managing waste to ensure that all the following requirements in section 3.5 are met.
- (2) All plant material that does not receive a biosecurity clearance, as well as packaging and any other materials that have been in contact with plants in quarantine must be destroyed in accordance with the procedures in the manual unless an MPI Inspector gives permission to retain, store or otherwise dispose of the material.

{Note: If a regulated organism is detected within a consignment the MPI Inspector may issue a direction under the Act regarding the appropriate disposal of material}.
- (3) Waste material must be stored in a robust container that can be completely sealed to prevent the escape of any pests or diseases.

{Note: If waste is too large to fit in a bin it should be held securely (e.g., wrapped) and kept within the facility until direction under the Act is given from the MPI Inspector}.
- (4) Waste containers must be kept in the facility until waste is disposed of in accordance with procedures in the manual.
- (5) Non-disposable protective clothing must be handled according to requirements set out in [Part 4](#).
- (6) Records of the date and method of disposal of all waste material must be kept.
- (7) Records must be kept of any plant material that is destroyed, including the reason for destruction, the import permit number, the consignment number, plant ID number (if applicable), and the date and method of destruction.
- (8) Specific record keeping requirements for each level of facility are set out in [Part 4](#).

## 3.6 Inspecting plants

- (1) The facility must have an effective system for plant inspection to ensure that all the following requirements in section 3.6 are met.

### 3.6.1 Plant inspections by the operator

- (1) The operator (or a delegate nominated by the operator) must regularly inspect all plants in the facility for signs and symptoms of pests or diseases.
- (2) A record must be kept of all inspections stating, as a minimum, the date of inspection, who did the inspection and whether any signs and symptoms of pests or diseases were detected.
- (3) Specific inspection requirements for each level of facility are set out in [Part 4](#).

### 3.6.2 Plant inspections by the MPI Inspector

- (1) The operator must ensure that all plant material is regularly inspected by the MPI Inspector for pests and diseases.
- (2) The operator (or a delegate nominated by the operator) must inform the MPI Inspector when plants enter a state of active growth; and must make arrangements for plant inspections to be undertaken by the MPI Inspector, as described in section 3.6.2 of the guidance document.
- (3) For species which require pre-determined testing (as specified in an import health standard), the operator (or a nominated delegate) must record the date at which each individual plant enters a state of active growth.

## 3.7 Pests and diseases

- (1) The facility must have an effective system for reporting and diagnosing pests and diseases to ensure that all the following requirements in section 3.7 are met.

### 3.7.1 Reporting of organisms or symptoms in facilities

- (1) The presence, or symptoms, of any pests or diseases in a facility (aside from those described in section [4.1.3.2](#)) must be reported to the MPI Inspector, or MPI's Pest and Disease hotline (0800 80 99 66), within 24 hours of detection.
- (2) If any regulated, suspected new, or unwanted organisms are detected in a facility, the MPI Inspector, or MPI's Pest and Disease hotline (0800 80 99 66) must be notified as soon as practicable in the circumstances (and within 24 hours of detection).
- (3) If any regulated, new, or suspected new organisms escape, or are suspected to have escaped, from the facility, the MPI Inspector or MPI's Pest and Disease hotline (0800 80 99 66) must be notified immediately.

### 3.7.2 Diagnosing pests and diseases

- (1) If a pest or disease is found, or if pest or disease symptoms are detected (aside from those described in section [4.1.3.2](#)) in any facility, the following actions must be taken (in addition to those described in section [3.7.1](#)) if the inspector directs that a sample must be sent for diagnosis:
  - a) a representative sample must be taken immediately;
  - b) the sample must be securely packaged;
  - c) the MPI Inspector must be emailed with a description of the samples and a laboratory submission form must be requested;
  - d) the securely packaged sample(s) must be sent, along with the completed laboratory submission form, to an MPI-approved diagnostic facility for identification;
  - e) the diagnostic facility and MPI Inspector must be informed that samples have been sent.
- (2) Procedures for collecting and transporting samples must be documented in the manual.
- (3) Samples must be collected, stored, and transported in such a way as to minimise tissue deterioration, prevent the spread of pests and diseases, and prevent the loss of any plant material.

- (4) All plants from which samples are taken must be clearly labelled so that each sample can be traced back to the exact plant from which it was obtained.
- (5) Any equipment used when collecting samples must be decontaminated after use.
- (6) All samples must be sent to the diagnostic laboratory as soon as possible after collection. Samples must be sent to the appropriate laboratory in the manner directed by the MPI Inspector.

### 3.8 Treatments

- (1) The facility must have an effective system for applying treatments to ensure that the following requirements in section 3.8 are met.
- (2) Before any treatments are applied to plants in quarantine the approval of the MPI Inspector must be obtained.
- (3) Treatments must not be applied unless:
  - a) they are pre-approved in the relevant IHS and/or import permit and are documented in the manual; or
  - b) they have been approved by the MPI Inspector for specific cases; or
  - c) a CTO guideline or direction has been issued authorising treatment of the plants; or
  - d) they are permitted as described in Part 4: of this standard.
- (4) All treatments (including those listed in [Part 4](#) of this standard) must be applied either:
  - a) by a treatment technician approved for applying biosecurity treatments under this section; or
  - b) by a treatment supplier approved by the Director-General for the treatment of risk goods.
- (5) In deciding whether to approve a person as a treatment supplier under sub-section (4) b), the Director-General must consider whether the person has the appropriate qualifications and expertise to apply any treatments in a manner which will effectively control the organism(s) at which the treatment is directed.
- (6) Treatments must be applied:
  - a) within the time period specified by the MPI Inspector (where applicable); and
  - b) using a method of application that has been authorised by the MPI Inspector, or that is specified in the relevant IHS or import permit.
- (7) When treatments are applied, all plants in the quarantine unit must be treated.
- (8) A treatment register must be maintained that:
  - a) records all treatments applied to plants in the facility, including;
    - i) consignment identification number(s);
    - ii) authorisation to give treatment;
    - iii) product name and active ingredient;
    - iv) rate, quantity used and expiry date;
    - v) date of application;
    - vi) quarantine unit.
  - b) is made available upon request at all reasonable times for review by the MPI Inspector.
- (9) The MPI Inspector may approve a person as a treatment technician for a facility if the MPI Inspector is satisfied that the person has undertaken a relevant training programme (for example Growsafe certificate).
- (10) A person approved under sub-section (9) may only apply treatments at the facility for which approval has been granted.
- (11) Treatment technicians must be identified in the manual, and documented evidence of the treatment technician's training programme must be retained.

- (12) Treatment technicians must undertake repeat training at least once every five years.

## 3.9 Staff

### 3.9.1 Operator

- (1) A facility must have an operator who is approved under section 40 of the Act.
- (2) The operator must be identified in the manual.  
{Note: More information about a facility operator is given in section 1.5 of the guidance document}.

### 3.9.2 Training

- (1) The facility must have an effective system for staff training to ensure that the following requirements in section 3.9.2 are met.
- (2) Training must be provided for all staff (permanent and temporary) and visitors to ensure that they:
  - a) have appropriate working knowledge, commensurate with their responsibilities, of:
    - i) biosecurity systems; and
    - ii) the requirements of the manual; and
    - iii) the requirements of this standard.
  - b) are aware of the consequences of not following the requirements of the manual or this standard;
  - c) are made aware of any relevant changes to the manual or to this standard.
- (3) Staff must be supervised when undergoing training until they can demonstrate competency in all operating procedures which they are required to use.
- (4) A named person or position must be responsible for providing training.
- (5) The manual must describe how the training programme will be implemented and must identify the timescales for implementation and for any refresher courses that may be run.
- (6) Records of competencies, training, skills, and experience must be documented for all staff, and signed off by the person responsible for training of staff within the facility.

## 3.10 Inspections of facilities and operations

### 3.10.1 Checks of the facility by the operator

- (1) The operator (or a person nominated by the operator) must check the facility at least once per month to verify ongoing compliance with the physical and structural requirements of this standard.  
{Note: Physical and structural requirements are set out in [Parts 2](#) and [4](#)}.
- (2) Records must be kept of all checks stating, as a minimum, the date of inspection, who did the inspection and whether any non-compliances were noted.

### 3.10.2 Internal audits

- (1) The operator (or a person nominated by the operator) must complete an internal audit once every six months unless:
  - a) a facility has not been used to contain PEQ material for more than six months. In this case, an internal audit must be conducted within one month prior to the arrival of a new consignment. Any corrective actions must be completed before the arrival of the new consignment.
- (2) Records of internal audits must be kept, including any non-compliances, [CARs](#), completed actions and closeout.

- (3) The manual must be updated to include any improvements that could be made to the system, and the MPI inspector must be notified as described in section [3.1.3](#).
- (4) Audit reports must be sent to the MPI Inspector for review within two weeks of the audit being undertaken.
- (5) Internal audit procedures must be documented in the manual.
- (6) If non-compliances are identified (during an internal audit, or at any other time) the operator must follow the actions set out in section [3.11](#).

### 3.10.3 External MPI inspection

- (1) The operator must request that an external MPI inspection is undertaken by the MPI inspector at least once every six months unless an inspection frequency reduction has been granted as described in section 3.10.3 of the guidance document.  
{Note: Any decision to grant an audit frequency reduction will be made by MPI}.
- (2) The operator must provide the MPI Inspector access to the facility and all records and documents when requested to verify compliance with this standard. The operator (or a person nominated by the operator) must be present to facilitate the inspection.
- (3) If a facility has not been used to contain PEQ material for more than 6 months, the operator must ensure that the MPI Inspector conducts an inspection within the 30-day period immediately before the arrival of a new consignment.
- (4) The operator or a nominated technical representative must be available throughout the inspection to assist the MPI Inspector and to ensure that all relevant documents, procedures, and records are made available to the MPI Inspector as requested.

## 3.11 Non-compliance

{Note: A non-compliance audit escalation pathway will operate to manage situations where:

- a) an MPI Inspector has detected obvious non-compliances that should have been identified, notified, and actioned by a competent operator;
  - b) a critical non-compliance has been identified;
  - c) an MPI Inspector repeatedly identifies the same non-compliances or negligence on the part of the operator}.
- (1) The facility must have an effective system for managing non-compliances to ensure that all the following requirements of section 3.11 are met.
  - (2) All non-compliances must be reported to the MPI Inspector.
  - (3) Internal audit reports must list all non-compliances and [CARs](#), and the timeframe within which CARs must be completed.
  - (4) If a critical non-compliance is identified the operator (or a person nominated by the operator) must:
    - a) notify the MPI Inspector immediately or (if the MPI Inspector cannot be contacted) call the Pest and Disease hotline on 0800 80 99 66; and
    - b) take immediate corrective action to restore compliance; and
    - c) discontinue any activity related to the critical non-compliance that presents a biosecurity risk; and
    - d) notify the MPI Inspector when corrective actions have been completed; and
    - e) record the incident, and any corrective action(s) taken.
  - (5) If a major non-compliance is identified the operator must:
    - a) notify the MPI Inspector as soon as practicable and within one business day of the major non-compliance being identified; and
    - b) take immediate corrective action to restore compliance; and

- c) discontinue any activity related to the major non-compliance that presents a biosecurity risk; and
  - d) notify the MPI Inspector when corrective actions have been completed; and
  - e) record the incident, and any corrective action(s) taken.
- (6) If a minor non-compliance is identified the operator must:
- a) take corrective action to rectify the non-compliance within five working days; and
  - b) record the incident and any corrective actions taken; and
  - c) notify the MPI Inspector during the next audit or visit by the MPI Inspector.

### **3.11.1 Corrective action requests (CARs)**

- (1) The facility must have an effective system for managing CARs to ensure that the following requirements in section 3.11.1 are met.
- (2) When a CAR is issued the operator must:
- a) implement the required corrective action as specified by an MPI Inspector; and
  - b) review the non-compliance and determine the cause; and
  - c) evaluate the need for action to ensure the non-compliance does not recur; and
  - d) review the corrective action to determine its effectiveness.

## **3.12 Contingency planning and preventative actions**

- (1) The facility must have an effective system for contingency planning and preventative actions to ensure that the following requirements in section 3.12 are met.
- (2) The operator must ensure that contingency plans are in place to manage any situation or incident which may compromise the biosecurity of plant material in a facility.
- (3) Contingency plans must be prepared for potential breakdowns in containment and must address the actions to be taken in the case of an emergency or other unexpected event. Plans must be based on a contingency assessment for each facility, and must consider the facility location and associated environmental factors.
- (4) Contingency plans must identify the necessary resources required to effectively manage the emergency or event.
- (5) The operator must ensure that the necessary resources required to effectively manage the contingency are readily available.
- (6) Contingency plans must be described in the manual.

## Part 4: Specific Additional Requirements for Different Types of Facility

### 4.1 Level 1 (L1) open field facilities

#### 4.1.1 Site, buildings, and structures

##### 4.1.1.1 Area surrounding the facility

- (1) The facility site must be clearly delineated on all sides, with boundaries clearly defined by a marker at every corner.
- (2) Signs must be placed at the main entrance and at every corner of each Level 1 PEQ site (see [Part 2.5](#)).
- (3) Both ends of all plots or rows within a quarantine site must be clearly marked with the date of planting and the unique identification code of the consignment, or of each lot (if a consignment consists of more than one lot).
- (4) L1 facilities must meet the following minimum isolation requirements (from plants outside the PEQ facility), unless otherwise stated in a facility approval condition or the relevant IHS or import permit.
  - a) for herbaceous plants in PEQ:
    - i) 50 metre distance from plants of the same genus;
    - ii) 20 metre distance from all other herbaceous plants (excluding lawn);
    - iii) 5 metre distance from woody plants.
  - b) for woody plants in PEQ:
    - i) 50 metre distance from plants of the same genus;
    - ii) 20 metre distance from all other woody plants;
    - iii) 5 metre distance from herbaceous plants (excluding lawn).

#### 4.1.2 Operation

- (1) The facility must have an effective system for managing operations to ensure that all the following requirements in section 4.1.2 are met.

##### 4.1.2.1 Receiving plant material into the facility

- (1) Plant material must be held and opened either:
  - a) within a designated place (e.g., greenhouse room/unit) in the facility identified as such in the manual; or
  - b) in a transitional facility associated with the facility that is approved to [MPI-STD-TFGEN](#) and approved for the receipt of plant material.

##### 4.1.2.2 Keeping track of plant material

- (1) A unique code must be assigned to every consignment when it arrives at a facility, or to each lot if a consignment consists of more than one lot.
- (2) The consignment (or lot) must retain the same code until it is given a biosecurity clearance.

#### 4.1.3 Facility hygiene

- (1) A weed control programme must be implemented to effectively control weeds within the facility and minimise the risks of the spread of pests and diseases.

- (2) [Contingency plans](#) must describe how equipment used at the facility will be decontaminated if a regulated organism is detected within a consignment.

#### 4.1.3.1 Managing waste

- (1) Any material relating to a consignment must not be removed from a facility until a biosecurity clearance is issued for the waste.
- (2) Requirements of [section 3.5](#) (managing waste) must be complied with.
- (3) Records must be kept of any plants that are destroyed, including:
  - a) the reason for destruction;
  - b) the number of plants destroyed;
  - c) the permit number;
  - d) the consignment number and lot number (if applicable);
  - e) the date and method of destruction.

#### 4.1.3.2 Pests and diseases

- (1) Any pests or diseases detected on plants in L1 facilities must be reported to the MPI Inspector as described in [section 3.7.1](#), with the following exception:
  - a) insect pests (or damage or symptoms that are directly attributable to insect pests) do not need to be reported to the MPI Inspector.  
{Note: As per sections 44 and 46 of the Act, the presence of what appears to be an organism not normally seen or otherwise detected in New Zealand, or of any notifiable organism, either in a PEQ facility or in the wider environment, must be reported}.

#### 4.1.3.3 Treatments

- (1) Requirements of [section 3.8](#) must be complied with.
- (2) As well as any treatment described in [section 3.8](#), the following may also be applied:
  - a) fungal protectants can be applied to healthy plants, unless this is specifically prohibited in a relevant IHS or import permit, as follows:
    - i) treatments must not be applied to treat visible symptoms of fungal infection. Where visible symptoms are present, the procedures described in [section 3.7](#) must be followed;
    - ii) treatments must be approved by the MPI Inspector and documented in the manual (including a description of what treatments are approved, the application rates, the method of application and how often they will be applied).
  - b) insecticides can be applied, unless this is specifically prohibited in a relevant IHS or import permit, as follows:
    - i) treatments must not be applied if the operator believes that insect pests (or damage or symptoms that are directly attributable to insect pests) are new or unwanted organisms. If the presence of new or unwanted organisms is suspected, actions described in [section 3.7.1](#) must be met;
    - ii) treatments must be approved by the MPI Inspector and documented in the manual (including a description of what treatments are approved, the application rates, the method of application and how often they will be applied).
  - c) a single on-arrival fungicide treatment can be applied as follows:
    - i) any on-arrival treatment must be applied within 48 hours of plant material entering the facility;
    - ii) treatments must be approved by the MPI Inspector and documented in the manual (including a description of what treatments are approved, the application rates and the method of application).

- iii) a withholding period may apply when on-arrival treatments are applied; if so the minimum PEQ period will not start until the withholding period is over. The MPI Inspector will notify the operator if a withholding period will apply at the time that treatments are approved.

#### **4.1.3.4 Plant inspections by the operator**

- (1) All plant material must be inspected for signs and symptoms of pests and disease at least once per week as described in [section 3.6.1](#), unless a different inspection frequency is required by the relevant IHS.

## 4.2 Level 2 (L2) greenhouse facilities

### 4.2.1 Site, buildings, and structures

#### 4.2.1.1 Construction

- (1) The facility must have a concrete floor with a drain that is connected through a gully or soil trap to sewerage, a septic tank, or a suitable rubble drain.
- (2) Locks must be fitted to all external doors and windows.
- (3) Facilities must be constructed using one of the following types of cladding, or a combination of these types of cladding (excluding entry/exit and ventilation requirements):
  - a) glass, polycarbonate, or other rigid material;
  - b) twin skin polyethylene (polyfilm) or equivalent provided that:
    - i) polyethylene is at least 200 microns thick;
    - ii) integrity of both skins (i.e., no holes) is maintained at all times;
    - iii) polyethylene is replaced at regular intervals, as directed by the MPI Inspector.

{Note: Depending on the facility design and location, and the biological risk associated with material to be held in a facility, if a facility is constructed of a combination of types of cladding, a twin skin design may not be mandatory}.
  - c) Insect proof mesh with a maximum opening size of 0.36mm<sup>2</sup>. Mesh must be made of polyethylene monofilament, stainless steel, or another type of material approved by the Director-General.

{Note: When an application is made to clad a facility with insect proof mesh, the plant species being held in the facility, and the potential pests and diseases that could be associated with the material will be assessed before approval is granted}.
- (4) Joins between rigid surfaces must form an insect-proof seal.
- (5) Windows, vents, and doors must be tight fitting, form an insect-proof seal, and be constructed of material which remains rigid at all times.
- (6) Windows, louvres, or vents must be screened with insect-proof mesh with a maximum opening size of 0.36mm<sup>2</sup>. Mesh must be made out of polyethylene monofilament, stainless steel, or another type of material approved by the Director-General.
- (7) In deciding whether to approve another type of material under sub-sections (3)c) and (6), the Director-General must consider whether the other type of material will be of equivalent physical robustness and provide the same level of physical security as those materials listed in sub-sections (3)c) and (6).
- (8) The roof must be constructed of a continuous weather-proof material (excluding ventilation requirements), or the facility must be contained within a building with a weather-proof roof.
- (9) Benches must be constructed of dressed and treated timber, metal, or similar inert material and must be able to be easily cleaned and decontaminated.
- (10) Chairs or seats must be made of smooth material that is impervious to liquids and can be easily cleaned and decontaminated.

#### 4.2.1.2 Anteroom

- (1) An anteroom must be installed at each entrance/exit to the facility (excluding emergency exits). The anteroom is part of the facility and must:
  - a) comply with the requirements of [section 4.2.1.1](#);
  - b) be insect proof and free from recesses which may conceal insects or other pests;
  - c) be large enough to allow one door to remain closed at all times (including when moving plants and equipment in or out of the facility);

- d) contain an area for storing protective clothing to be worn when in the facility;
  - e) contain hand washing facilities, paper hand towels and soap.  
{Note: Hand washing facilities may also be located in an enclosed room immediately adjacent (and connected to) the anteroom};
  - f) contain a waste container as described in [section 3.5](#) of this standard.
- (2) As well as the above, an anteroom may also be used to store items such as visitor logbooks and paper records, as specified in the manual.
- (3) Equipment (other than items listed in sub-section (1)) must not be stored in the anteroom unless approval has been given by the MPI Inspector. Any such items must be listed in the manual.

#### **4.2.1.3 Area surrounding the facility**

- (1) A buffer strip, a minimum of 1 metre wide must be present on all sides of the facility. The buffer strip must either be covered to prevent the growth of plants, or must be closely mowed lawn, or must be regularly treated with herbicide to prevent plant growth.

#### **4.2.1.4 Facilities for plant inspection**

- (1) The operator must ensure that facilities and staff are available to enable the following requirements to be met:
- a) sufficient lighting for inspection (minimum 1000 lux) must be provided upon request from the MPI Inspector;
  - b) benches for inspection must be provided upon request from the MPI Inspector;
  - c) if requested, the operator must also provide staff to assist the MPI Inspector (for example with lifting plants, etc.) during plant inspections.

### **4.2.2 Operation**

- (1) The facility must have an effective system for managing operations to ensure that all the requirements in section 4.2.2 are met.

#### **4.2.2.1 Receiving material into the facility**

- (1) Plant material must be held and opened within designated places (e.g., greenhouse room/unit) that are identified in the manual.

#### **4.2.2.2 Insect monitoring**

- (1) Yellow sticky insect traps must be used to monitor insects in the facility as follows:
- a) traps must be installed in each compartment or room of a facility at a minimum rate of one per 15 square metres of planted area;
  - b) traps must be hung approximately 25 – 30 cm above the crop canopy;
  - c) traps must also be placed in the anteroom and near all vents to detect insect pests that could enter a greenhouse.
- (2) With the exception of sciarid flies, the MPI Inspector must be informed as soon as practicable when any insects are caught in a trap.
- (3) Traps must be replaced when full. New traps must be installed before the arrival of a new consignment.
- (4) Traps must be retained until they have been inspected by the MPI Inspector.
- (5) Traps should be checked at least once per week, and records must be kept of such checks.

#### 4.2.2.3 Growing medium

- (1) Plants must be grown in either pasteurised growing medium, or inert growing medium, or in commercially prepared potting mix.
- (2) The growing medium must be stored in a manner that protects it from contamination, external elements, and degradation.
- (3) The type of growing medium, along with where and how it will be stored must be recorded in the manual.

#### 4.2.2.4 Water

- (1) Only potable water may be used (for example treated, mains supply, roof-collected or deep borehole water).
- (2) Any water that is collected for re-use must be disinfected before reuse to ensure that it is free from pathogens.

#### 4.2.2.5 Keeping track of plant material

- (1) A unique code must be assigned to every consignment when it arrives at a facility, or to each lot if a consignment consists of more than one lot.
- (2) The consignment (or lot) must retain the same code until it is given a biosecurity clearance.
- (3) A unique code must be assigned to every plant that requires pre-determined testing (as identified in an import health standard).
- (4) Where material that requires pre-determined testing is grafted onto rootstocks in PEQ, each rootstock must only be grafted with buds derived from a single imported budstick. Each grafted rootstock is considered as a single daughter plant and must have a unique code assigned to it.

#### 4.2.2.6 Facility hygiene

- (1) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (2) As a minimum, all tools must be decontaminated between use on each consignment, or between use on each lot (if a consignment consists of more than one lot).
- (3) All people entering the facility must wear protective clothing. When plants are grown on low benches or on the floor, suitable protective clothing (for example overalls, leggings, or knee-high gumboots) must be worn.
- (4) Protective clothing must be labelled and retained within the facility except when being cleaned as follows:
  - a) clothing to be cleaned must be bagged and sealed and delivered to a commercial laundry or an onsite washing machine;
  - b) clothing which is no longer required must be handled as set out in [section 3.5](#);
- (5) The facility must be kept clean and as far as practicable must be kept free from algae, lichen, moss, and weeds.
- (6) The facility must as far as practicable be kept free from live pests such as arthropods (insects and spiders) and molluscs (slugs and snails).
- (7) A footbath filled to a minimum depth of 10 mm, or an absorbent foot mat containing disinfectant, must be placed at the main entrance to the facility (inside the anteroom) and:
  - a) must be used by all persons when entering and leaving the facility;

- b) must have disinfectant replaced as required to maintain efficiency;
  - c) the facility must have records retained of replacement of disinfectant;
  - d) disinfectant must be stored in accordance with label recommendations.
- (8) All staff and visitors must wash their hands with soap and water and dry them thoroughly when leaving the facility.
- (9) Gloves must be removed and placed in the quarantine waste bin when exiting the facility.
- (10) Where capillary matting is used the manual must include procedures for decontaminating and replacing the matting.
- (11) When plants are grown on capillary matting or in trays, adequate separation must be provided to ensure that plants do not come into contact with wastewater from different lots (or consignments).

#### 4.2.2.7 Managing waste

- (1) Records must be kept of any plants that are destroyed, including:
- a) the reason for destruction;
  - b) the number of plants destroyed;
  - c) the permit number;
  - d) the consignment number and lot number (if applicable);
  - e) the date and method of destruction.
- (2) Requirements of [section 3.5](#) must be complied with.

#### 4.2.2.8 Treatments

- (1) Requirements of [section 3.8](#) must be complied with.
- (2) As well as any treatment described in [section 3.8](#), the following may also be applied:
- a) a single on-arrival fungicide treatment can be applied as follows:
    - i) treatment must be applied within 48 hours of material entering the facility;
    - ii) treatments must be approved by the MPI Inspector and documented in the manual (including a description of what treatments are approved, the application rates and the method of application);
    - iii) a withholding period may apply when on-arrival treatments are applied; if so the minimum PEQ period may not start until the withholding period is over. The MPI Inspector will notify the operator if a withholding period will apply at the time that treatments are approved.

#### 4.2.2.9 Plant inspections by the operator

- (1) Plants must be inspected for signs and symptoms of pests and diseases at least once per week as described in [section 3.6.1](#), unless a different inspection frequency is required by the relevant IHS.

## 4.3 Level 3A (L3A) greenhouse facilities

### 4.3.1 Site, buildings, and structures

#### 4.3.1.1 Construction

- (1) The floor of the facility must be constructed of a solid, rigid material that is impermeable to liquids, easy to clean and resistant to commonly used disinfectants.
- (2) All water must be decontaminated before exiting the facility, using a method proven to kill plant disease organisms:
  - a) the method of decontamination must be described in the facility operating manual;
  - b) the operating manual must describe the methods that will be used to monitor decontamination efficacy.
- (3) Locks must be fitted to all external doors.
- (4) Facilities must be constructed of glass, polycarbonate, or other rigid cladding (excluding entry/exit and ventilation requirements).
- (5) Joins between rigid surfaces must be caulked with a suitable sealant forming an insect-proof seal.
- (6) Vents and doors must be tight fitting, form an insect-proof seal, and be constructed of material which remains rigid at all times.
- (7) Vents must be screened with stainless steel insect-proof mesh with a maximum opening size of 0.04mm<sup>2</sup>.
- (8) A mechanically ventilated heating and cooling system must be fitted with no windows that open to the external environment.
- (9) All benches must be constructed of metal or similar inert material, and easily cleaned and decontaminated.
- (10) Chairs or seats must be made of smooth material that is impervious to liquids and can be easily cleaned and decontaminated.

#### 4.3.1.2 Anteroom

- (1) An anteroom must be installed at each entrance/exit to the facility (excluding emergency exits). The anteroom is part of the facility and must:
  - a) comply with the requirements of [section 4.3.1.1](#);
  - b) be insect proof and free from recesses which may conceal insects or other pests;
  - c) be large enough to allow one door to remain closed at all times (including when moving plants and equipment in or out of the facility);
  - d) contain an area for storing protective clothing to be worn when in the facility;
  - e) contain a hand basin with a hands-free mechanism, paper hand towels and soap;  
{Note: Hand basin may also be located in an enclosed room immediately adjacent to (and connected to) the anteroom}
  - f) contain an approved waste container.
- (2) Equipment (other than items listed in sub-section (1)) must not be stored in the anteroom unless specific approval has been given by the MPI Inspector. Any such items must be listed in the manual.

#### 4.3.1.3 Area surrounding the facility

- (1) A buffer strip, a minimum of 1 metre wide, must be present on all sides of the facility.
- (2) The buffer strip must be covered and maintained free from plants.

#### 4.3.1.4 Facilities for plant inspection

- (1) The operator must ensure that facilities and staff are available to enable the following requirements to be met:
  - a) sufficient lighting for inspection (minimum 1000 lux) must be provided upon request from the MPI Inspector;
  - b) benches for inspection must be provided upon request from the MPI Inspector;
  - c) if requested, the operator must also provide staff to assist the MPI Inspector (for example with lifting plants, etc.) during plant inspections.

#### 4.3.2 Operation of facilities

- (1) The facility must have an effective system for managing operations to ensure that all the requirements in section 4.3.2 are met.

##### 4.3.2.1 Records

- (1) In addition to requirements set out in [section 3.2](#), the following records must also be retained:
  - a) for material which is grafted onto New Zealand-origin rootstocks:
    - i) cultivar name of rootstock(s);
    - ii) the date grafting was completed;
    - iii) the unique codes assigned to each daughter plant (each individual rootstock that has been grafted with imported material is referred to as an individual 'daughter plant');
    - iv) the original imported budstick from which each daughter plant was derived;
    - v) the number of buds grafted onto each daughter plant;
    - vi) the date active growth commenced for each daughter plant.
- (2) The operator must provide a quarterly report to the MPI Inspector summarising the following:
  - a) the number and species of plants currently held in the facility;
  - b) whether any material has been imported, and if any plants have been propagated from any imported material since the last report;
  - c) the status of all plant material in the facility (for example under treatment, awaiting biosecurity clearance etc.);
  - d) which plants have been removed from the facility (i.e., given a biosecurity clearance, transferred to another facility, or destroyed) since the previous report.

##### 4.3.2.2 Receiving material into the facility

- (1) Plant material must be held and opened within designated places (e.g., greenhouse room/unit) that are identified in the manual.

##### 4.3.2.3 Insect monitoring

- (2) Yellow sticky insect traps must be used to monitor insects in the facility as follows:
  - a) traps must be installed in each compartment or room of a facility at a minimum rate of one per 15 square metres of planted area;
  - b) traps must be hung approximately 25 – 30 cm above the crop canopy;
  - c) traps must also be placed in the anteroom and near all vents to detect insect pests that could enter a greenhouse.
- (3) With the exception of sciarid flies, the MPI Inspector must be informed as soon as practicable when any insects are caught in a trap.
- (4) Traps must be replaced when full. New traps must be installed before the arrival of a new consignment.
- (5) Traps must be retained until they have been inspected by the MPI Inspector.

#### 4.3.2.4 Growing medium

- (1) Plants must be grown in either pasteurised growing medium or inert growing medium.
- (2) The growing medium must be stored in a manner that protects it from contamination, external elements, and degradation.
- (3) The type of growing medium, along with where and how it will be stored must be recorded in the manual.

#### 4.3.2.5 Water

- (1) Only potable water may be used (for example treated, mains supply, roof-collected or deep borehole water).
- (2) Any water that is collected for re-use must be disinfected before reuse to ensure that it is free from pathogens.

#### 4.3.2.6 Keeping track of plant material

- (1) A unique code must be assigned to every plant in a facility.
- (2) Where material is grafted onto rootstocks in PEQ, each rootstock must only be grafted with buds derived from a single imported budstick. Each grafted rootstock is considered as a single daughter plant and must have a unique code assigned to it.

#### 4.3.2.7 Facility hygiene

- (1) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (2) All tools must be decontaminated (or discarded) between use on each plant.
- (3) Disposable gloves must be worn whenever handling plant material and must be:
  - a) changed between use on each plant;
  - b) removed and placed in the quarantine waste bin when exiting the facility.
- (4) All people entering the facility must wear protective clothing. Where plants are grown on low benches, overalls or leggings must be worn.
- (5) Protective clothing must be labelled and retained within the facility except when being cleaned;
  - a) clothing to be cleaned must be bagged and sealed and delivered to a commercial laundry;
  - b) clothing which is no longer required must be handled as set out in [section 3.5](#).
- (6) All plants must be grown on raised benches with adequate drainage.
- (7) The facility must be kept clean and as far as practicable must be retained free from algae, lichen, moss, weeds, and live pests such as arthropods (insects and spiders) and molluscs (slugs and snails).
- (8) Either:
  - a) The facility must have a footbath filled to a minimum depth of 10 mm, or an absorbent foot mat containing disinfectant, placed at the main entrance to the facility (inside the anteroom) and:
    - i) must be used by all persons when entering and leaving the facility;
    - ii) must have disinfectant replaced as required to maintain efficiency;
    - iii) the facility must have records retained of replacement of disinfectant;
    - iv) disinfectant must be stored in accordance with label recommendations;

**OR**

- b) all people entering the facility must either:

- i) use a change of footwear. The in-facility footwear must be kept inside the facility at all times.
  - OR
  - ii) wear protective shoe covers. Protective shoe coverings must be removed and disposed of in a quarantine waste bin in the anteroom before exiting the facility.
- (9) All staff and visitors must wash their hands with soap and water and dry them thoroughly when leaving the facility.

#### **4.3.2.8 Managing waste**

- (1) Records must be kept of any plants that are destroyed, including:
- a) the reason for destruction;
  - b) the number of plants destroyed;
  - c) the permit number;
  - d) the unique identification code of the individual plant;
  - e) the date and method of destruction.
- (2) Requirements of [section 3.5](#) must be complied with.

#### **4.3.2.9 Plant inspections by the operator**

- (1) All plants must be inspected either:
- a) as required in the relevant IHS; or
  - b) at least twice per week during periods of active growth and once per week during dormancy (unless otherwise specified in the IHS). Where plants are not retained within a greenhouse room/unit during dormancy (for example if plants are bagged and held in cool storage for dormancy) weekly inspections are not required, although plants must be thoroughly inspected when returned to the greenhouse.

#### **4.3.2.10 Plant growing conditions**

- (2) Specific plant requirements for irrigation, nutrition, temperature, and winter chilling must be met.
- (3) All plants must be grown in individual containers. Surplus containers must be disposed of as set out in [section 3.5](#), or thoroughly cleaned and disinfected before reuse.
- (4) Plants must not be allowed to flower unless it is known that there are no pollen transmitted pests or diseases in the species being quarantined, or unless flowering is required to check for flower-specific symptoms.

## 4.4 Level 3B (L3B) greenhouse facilities

### 4.4.1 Site, buildings, and structures

#### 4.4.1.1 Construction

- (1) The floor of the facility must be constructed of a solid, rigid material that is impermeable to liquids, easy to clean and resistant to commonly used disinfectants.
- (2) All water must be decontaminated before exiting the facility, using a method proven to kill plant disease organisms:
  - a) the method of decontamination must be described in the facility operating manual;
  - b) the operating manual must describe the methods that will be used to monitor decontamination efficacy.
- (3) Locks must be fitted to all external doors.
- (4) Facilities must be constructed of glass, polycarbonate, or other rigid cladding (excluding entry/exit and ventilation requirements).
- (5) Joins between rigid surfaces must be caulked with a suitable sealant forming an insect-proof seal.
- (6) Vents and doors must be tight fitting, form an insect-proof seal, and be constructed of material which remains rigid at all times.
- (7) Walls, floors, and ceilings must have smooth internal surfaces that are resistant to potential damage during decontamination.
- (8) A mechanically ventilated heating and cooling system must be fitted with no windows that open to the external environment.
- (9) An autoclave must be available onsite.
- (10) Space must be available within the facility for supporting equipment operations and tools.
- (11) All benches must be constructed of metal, or similar inert material, and easily cleaned and decontaminated.
- (12) Chairs or seats must be made of smooth material that is impervious to liquids and can be easily cleaned and decontaminated.

#### 4.4.1.2 Ventilation

- (1) A ventilation system that establishes a negative pressure in the facility must be provided so that there is a directional airflow throughout the facility, from clean (lowest risk) areas towards the potentially contaminated (highest risk) areas.
- (2) Each greenhouse room/unit must be maintained at a negative air pressure relative to corridors and/or adjacent laboratory areas within the facility.
- (3) The air pressure within greenhouse rooms/units must:
  - a) remain at least 12.5 Pa below that of adjacent areas within the facility when the door closed, and
  - b) remain at least 25 Pa below the atmosphere outside the facility.
- (4) The pressure differential must be achieved by means of an independent room exhaust fan located downstream of a high-efficiency particulate air (HEPA) filter and discharging to the outside atmosphere.

- (5) The exhaust HEPA filter must comply with the *HEPA Filter Specification* and *HEPA Filter Installation and Maintenance* requirements set out in AS/NZS 2243.3<sup>2</sup>. An exhaust pre-filter of the same standard as the supply filter must be provided, and mounted upstream of the HEPA filter.
- (6) Supply air to the facility must be filtered using Type 1 Class A or Class B filters complying with AS 1324.1 and having a minimum arrestance efficiency of 90% when tested in accordance with AS 1324.2 with Test Dust No. 4. Where replacement air is drawn from adjacent areas, adjustable dampers must be provided in the transfer aperture to assist in setting up the reduced air pressure. This aperture and filter must not be mounted in the door.
- (7) The operating manual must include a description of the specifications of the filtration system(s) used for supply and exhaust air and the means by which this is determined to meet requirements, and a description of the procedures that will be used during maintenance and disposal of filters to maintain containment.
- (8) Air may be recirculated within the facility provided that equipment used for this purpose will allow complete penetration of gas or vapour during decontamination. Recirculation must not compromise the ability to meet the requirements of clauses 4.4.1.2 (4) and (5) above.

#### 4.4.1.3 Anteroom

- (1) An anteroom must be installed at each entrance/exit to the facility (excluding emergency exits). The anteroom is part of the facility and must:
  - a) comply with the requirements of [section 4.4.1.1](#);
  - b) be insect proof and free from recesses which may conceal insects or other pests;
  - c) be large enough to allow one door to remain closed at all times (including when moving plants and equipment in or out of the facility);
  - d) contain an area for storing protective clothing to be worn when in the facility;
  - e) contain a hand basin with a hands-free mechanism, paper hand towels and soap. The hand basin may also be located in an enclosed room immediately adjacent to (and connected to) the anteroom;
  - f) contain an approved waste container.
- (2) Equipment (other than items listed above) must not be stored in the anteroom.
- (3) Structural, mechanical and/or operational measures must be in place to prevent the escape of pests and pathogens from inside the PEQ when the anteroom doors are open (i.e., when people, equipment, and/or materials enter or exit).

#### 4.4.1.4 Area surrounding the facility

- (1) A buffer strip, a minimum of 1 metre wide, must be present on all sides of the facility.
- (2) The buffer strip must be covered and maintained free from plants.
- (3) A security fence with a lockable gate must be installed to prevent access to the site by unauthorised persons.
- (4) The fence must be a minimum of 2m high and with a minimum distance between the fence and buildings of 2m.  
{Note: Plants of the same genus as plants being held in quarantine that are growing in close proximity to the facility may need to be removed as part of the conditions of a facility's approval. This will depend on the level of risk and types of organisms that are potentially associated with the imported material}.

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<sup>2</sup> For AS/NZS 2243.3 2010 refer to clauses 10.9.1 *HEPA Filter Specification* and 10.9.2. *HEPA Filter Installation and Maintenance*.

#### 4.4.1.5 Facilities for plant inspection

- (1) The operator must ensure that facilities and staff are available to enable the following requirements to be met:
  - a) sufficient lighting for inspection (minimum 1000 lux) must be provided upon request from the MPI Inspector;
  - b) benches for inspection must be provided upon request from the MPI Inspector;
  - c) if requested, the operator must also provide staff to assist the MPI Inspector (for example with lifting plants, etc.) during plant inspections.

#### 4.4.2 Operation of facilities

- (1) The facility must have an effective system for managing operations to ensure that all the following requirements in section 4.4.2 are met.

##### 4.4.2.1 Records

- (1) In addition to requirements set out in [section 3.2](#), the following records must also be retained:
  - a) for material which is grafted onto New Zealand-origin rootstocks:
    - i) cultivar name of rootstock(s);
    - ii) the date grafting was completed;
    - iii) the unique codes assigned to each daughter plant (each rootstock that has been grafted with imported material is referred to as an individual 'daughter plant');
    - iv) the original imported budstick from which each daughter plant was derived;
    - v) the number of buds grafted onto each daughter plant;
    - vi) the date active growth commenced for each daughter plant.
- (2) The operator must provide a quarterly report to the MPI Inspector summarising the following:
  - a) the number and species of plants currently held in the facility;
  - b) whether any material has been imported, and if any plants have been propagated from any imported material since the last report;
  - c) the status of all plants in the facility (for example under treatment, awaiting biosecurity clearance etc.);
  - d) which plants have been removed from the facility (i.e., given a biosecurity clearance, transferred to another facility, or destroyed) since the previous report.

##### 4.4.2.2 Receiving material into the facility

- (1) Material must be held and opened within designated places (e.g., greenhouse room/unit) that are identified in the manual.

##### 4.4.2.3 Insect monitoring

- (1) Yellow sticky insect traps must be used to monitor insects in the facility as follows:
  - a) traps must be installed in each compartment or room of a facility at a minimum rate of one per 15 square metres of planted area;
  - b) traps must be hung approximately 25 – 30 cm above the crop canopy;
  - c) traps must also be placed in the anteroom and near all vents to detect insect pests that could enter a greenhouse;
  - d) the date of first use must be clearly written on each trap.
- (2) With the exception of sciarid flies, the MPI inspector must be informed as soon as practicable when any insects are caught in a trap.
- (3) Traps must be replaced at least once every 3 months. Traps must also be replaced when full. New traps must be installed before the arrival of a new consignment.

- (4) Traps must be retained until they have been inspected by the MPI Inspector.

#### 4.4.2.4 Growing medium

- (1) Plants must be grown in either pasteurised growing medium or inert growing medium.
- (2) The growing medium must be:
  - a) stored in a manner that protects it from contamination, external elements, and degradation (e.g., within closed containers or sealed bags);
  - b) stored away from imported plant material.
- (3) The type of growing medium, along with where and how it will be stored must be recorded in the manual.

#### 4.4.2.5 Water

- (1) Only potable water may be used (for example treated, mains supply, roof-collected or deep borehole water).
- (2) Any water that is collected for re-use must be disinfected before reuse to ensure that it is free from pathogens.

#### 4.4.2.6 Keeping track of plant material

- (1) A unique code must be assigned to every plant in a facility.
- (2) Where material is grafted onto rootstocks in PEQ, each rootstock must only be grafted with buds derived from a single imported budstick. Each grafted rootstock is considered as a single daughter plant and must have a unique code assigned to it.

#### 4.4.2.7 Facility hygiene

- (1) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (2) All tools must be decontaminated (or discarded) between use on each plant.
- (3) Disposable gloves must be worn whenever handling plants and must be:
  - a) changed between use on each cultivar or species;
  - b) removed and placed in the quarantine waste bin when exiting the facility.
- (4) Protective clothing must be worn by all persons entering the facility.
- (5) Protective clothing must be labelled and retained within the facility except when being cleaned;
  - a) clothing to be cleaned must be autoclaved on site before being delivered to a commercial laundry for cleaning;
  - b) disposable protective clothing must be handled according to the requirements of [section 3.5](#);
- (6) All plants must be grown on raised benches with adequate drainage.
- (7) The facility must be kept clean and as far as practicable must be retained free from algae, lichen, moss, weeds, and live pests such as arthropods (insects and spiders) and molluscs (slugs and snails).
- (8) Either:
  - a) The facility must have a footbath filled to a minimum depth of 10 mm, or an absorbent foot mat containing disinfectant, placed at the main entrance to the facility (inside the anteroom) and:
    - i) must be used by all persons when entering and leaving the facility;
    - ii) must have disinfectant replaced as required to maintain efficiency;

- iii) the facility must have records retained of replacement of disinfectant;
- iv) disinfectant must be stored in accordance with label recommendations;

**OR**

- b) all people entering the facility must either:
  - i) use a change of footwear. The in-facility footwear must be kept inside the facility at all times.

**OR**

- ii) wear protective shoe covers. Protective shoe coverings must be removed and disposed of in a quarantine waste bin in the anteroom before exiting the facility.
- (9) All staff and visitors must wash their hands with soap and water and dry them thoroughly before leaving the facility.
  - (10) Staff working in agricultural or horticultural areas must shower and change clothes before entering the facility to avoid transporting pests or diseases into the facility.

#### **4.4.2.8 Managing waste**

- (1) Records must be kept of any plants that are destroyed, including:
  - a) the reason for destruction;
  - b) the number of plants destroyed;
  - c) the permit number;
  - d) the unique identification code of the individual plant;
  - e) the date and method of destruction.
- (2) Requirements of [section 3.5](#) must be complied with.

#### **4.4.2.9 Plant inspections by the operator**

- (1) All plants must be inspected either:
  - a) as required in the relevant IHS; or
  - b) at least twice per week during periods of active growth and once per week during dormancy (unless otherwise specified in the IHS). Where plants are not retained within a greenhouse room/unit during dormancy (for example if plants are bagged and held in cool storage for dormancy) weekly inspections are not required, although plants must be thoroughly inspected when returned to the greenhouse.

#### **4.4.2.10 Plant growing conditions**

- (1) Specific plant requirements for irrigation, nutrition, temperature, and winter chilling as set out in the IHS must be met.
- (2) All plants must be grown in individual containers. Surplus containers must be disposed of as set out in [section 3.5](#), or thoroughly cleaned and disinfected before reuse.
- (3) Plants must not be allowed to flower unless it is known that there are no pollen transmitted pests or diseases in the species being quarantined, or unless flowering is required to check for flower-specific symptoms.

## 4.5 Level 2 tissue culture laboratory facilities

### 4.5.1 Site, buildings, and structures

- (1) Facilities must be constructed in accordance with Physical Containment Level 1 (PC1) requirements for Laboratory Containment Facilities<sup>3</sup> as specified in AS/NZS 2243.3.

### 4.5.2 Operation of facilities

#### 4.5.2.1 Keeping track of plant material

- (1) A unique code must be assigned to every consignment when it arrives at a facility, or to each lot if a consignment consists of more than one lot.
- (2) The consignment (or lot) must retain the same code until it is given a biosecurity clearance.
- (3) All culture containers must be directly labelled with the unique code.

#### 4.5.2.2 Growing medium

- (1) Tissue culture medium must not contain fungicides or antibiotics.

#### 4.5.2.3 Facility hygiene

- (1) Culture containers must not be opened where this is specifically prohibited in an IHS.
- (2) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (3) All tools must be decontaminated (or discarded) between use on each lot of plant material.
- (4) Culture containers must be wiped or sprayed with sanitiser solution before being opened.
- (5) Any contamination of cultures must be reported to the MPI Inspector.
- (6) All people entering the facility must wear protective clothing.
- (7) Protective clothing must be labelled and retained within the facility except when being cleaned:
  - a) clothing to be cleaned must be bagged and sealed and delivered to a commercial laundry or an onsite washing machine;
  - b) clothing which is no longer required must be handled as set out in [section 3.5](#).
- (8) Sticky mats or absorbent foot mats must be placed inside the door on the floor at the entrance to the facility and:
  - a) must be used by all persons when entering and leaving the facility;
  - b) must be replaced, or have disinfectant replaced as required to maintain efficiency;
  - c) must have records retained of replacement of disinfectant;
  - d) disinfectant must be stored in accordance with label recommendations.
- (9) All staff and visitors must wash their hands with soap and water and dry them thoroughly when leaving the facility.
- (10) Documented procedures must be put in place to prevent cross-contamination of quarantine material and non-quarantine material.
- (11) The procedures must be included in the manual.

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<sup>3</sup> For AS/NZS 2243.3 2010 refer to clause 5.2.2 *Construction*.

- (12) Work surfaces must be decontaminated at least daily and immediately after all work involving consignments of imported material.

#### **4.5.2.4 Managing waste**

- (1) Records must be kept of any plants that are destroyed, including:
- a) the reason for destruction;
  - b) the permit number;
  - c) the consignment number and lot number (if applicable);
  - d) the date and method of destruction.
- (2) Requirements of [section 3.5](#) must be complied with.

#### **4.5.2.5 Plant inspections by the operator**

- (1) Plants must be inspected for signs and symptoms of pests and diseases at least once per week as described in [section 3.6.1](#), unless a different inspection frequency is required by the relevant IHS.

## 4.6 Level 3 tissue culture laboratory facilities

### 4.6.1 Site, buildings, and structures

- (1) Facilities must be constructed in accordance with Physical Containment Level 2 (PC2) requirements for Laboratory Containment Facilities as specified in AS/NZS 2243.3<sup>4</sup>, excluding the requirements for emergency drench showers.

### 4.6.2 Operation of facilities

#### 4.6.2.1 Records

- (1) The operator must provide a quarterly report to the MPI Inspector summarising the following:
  - a) the number and species of plants currently held in the facility;
  - b) whether any material has been imported, and if any plants have been propagated from any imported material since the last report;
  - c) the status of all plants in the facility (for example under treatment, awaiting biosecurity clearance etc.);
  - d) which plants have been removed from the facility (i.e., given a biosecurity clearance, transferred to another facility, or destroyed) since the previous report.

#### 4.6.2.2 Keeping track of plant material

- (1) A unique code must be assigned to every consignment when it arrives at a facility, or to each lot if a consignment consists of more than one lot.
- (2) The consignment (or lot) must retain the same code until it is given a biosecurity clearance.
- (3) All culture containers must be directly labelled with the unique code.

#### 4.6.2.3 Growing medium

- (1) Tissue culture medium must not contain fungicides or antibiotics.

#### 4.6.2.4 Facility hygiene

- (1) Vessels containing plants must not be opened where this is specifically prohibited in an IHS.
- (2) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (3) All tools must be decontaminated (or discarded) between use on every plant.
- (4) Culture containers must be wiped or sprayed with sanitiser solution before being opened.
- (5) Any contamination of cultures must be reported to the MPI Inspector.
- (6) All people entering the facility must wear protective clothing.
- (7) Protective clothing must be labelled and retained within the facility except when being cleaned:
  - a) clothing to be cleaned must be bagged and sealed and delivered to a commercial laundry or an onsite washing machine;
  - b) clothing which is no longer required must be handled as set out in [section 3.5](#).

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<sup>4</sup> For 2243.3:2010 refer to clause 5.3.3 *Construction*.

- (8) Sticky mats or absorbent foot mats must be placed inside the door on the floor at the entrance to the facility and:
  - a) must be used by all persons when entering and leaving the facility;
  - b) must be replaced, or have disinfectant replaced as required to maintain efficiency;
  - c) must have records retained of replacement of disinfectant;
  - d) disinfectant must be stored in accordance with label recommendations.
- (9) All staff and visitors must wash their hands with soap and water and dry them thoroughly when leaving the facility.
- (10) Documented procedures must be put in place to prevent cross-contamination of quarantine material and non-quarantine material.
- (11) The procedures must be included in the manual.
- (12) Work surfaces must be decontaminated at least daily and immediately after all work involving consignments of imported material.

#### **4.6.2.5 Managing waste**

- (1) Records must be kept of any plants that are destroyed, including:
  - a) the reason for destruction;
  - b) the permit number;
  - c) the consignment number and lot number (if applicable);
  - d) the date and method of destruction.
- (2) Requirements of [section 3.5](#) must be complied with.

#### **4.6.2.6 Plant inspections by the operator**

- (1) Plants must be inspected for signs and symptoms of pests and diseases at least once per week as described in [section 3.6.1](#), unless a different inspection frequency is required by the relevant IHS.

## 4.7 Level 2 quarantine aquarium facilities

### 4.7.1 Site, buildings, and structures

- (1) Each aquarium must be inside a building which can be secured.
- (2) Each aquarium must be at least 5m away from a non-quarantine aquarium.
- (3) Each aquarium must be clear sided.

### 4.7.2 Operation of facilities

#### 4.7.2.1 Water

- (1) Only potable water must be used (for example treated, mains supply, roof-collected or deep borehole water).
- (2) Any water that is collected for re-use must be disinfected before reuse to ensure that it is free from pathogens.

#### 4.7.2.2 Keeping track of plant material

- (1) A unique code must be assigned to every consignment when it arrives at a facility, or to each lot if a consignment consists of more than one lot.
- (2) The consignment (or lot) must retain the same code until it is given a biosecurity clearance.
- (3) Each lot must be contained within a separate aquarium that is clearly identified with the lot number and is clearly labelled as being a quarantine aquarium.

#### 4.7.2.3 Facility hygiene

- (1) Each aquarium must be placed in a watertight tray, the bottom of which must contain a dilute solution of copper sulphate (5 parts per million or a small grain of a copper sulphate crystal in a litre of water).
- (2) Tools and other equipment must be labelled and must not be removed from the facility unless they are:
  - a) decontaminated before removal using an approved method that is documented in the manual; or
  - b) disposed of according to the requirements of [section 3.5](#) (for example when single-use or disposable implements are used).
- (3) As a minimum, all tools must be decontaminated between use on each consignment, or between use on each lot (if a consignment consists of more than one lot).
- (4) Protective clothing must be labelled and retained within the facility except when being cleaned:
  - a) clothing to be cleaned must be bagged and sealed and delivered to a commercial laundry or an onsite washing machine;
  - b) clothing which is no longer required must be handled as set out in [section 3.5](#).
- (5) The facility must be kept clean and as far as practicable must be retained free from algae, lichen, moss, and weeds.
- (6) The facility must as far as practicable be kept free from live pests such as arthropods (insects and spiders) and molluscs (slugs and snails).
- (7) A footbath filled to a minimum depth of 10mm, or an absorbent foot mat containing disinfectant, must be placed at the main entrance to the facility (inside the anteroom) and must:
  - a) be used by all persons when entering and leaving the facility;
  - b) have disinfectant replaced as required to maintain efficiency;
  - c) have records retained of replacement of disinfectant;
  - d) disinfectant must be stored in accordance with label recommendations.

- (8) All staff and visitors must wash their hands with soap and water and dry them thoroughly when leaving the facility.
- (9) Gloves must be removed and placed in the quarantine waste bin when exiting the facility.

#### **4.7.2.4 Managing waste**

- (1) Records must be kept of any plants that are destroyed, including:
  - a) the reason for destruction;
  - b) the permit number;
  - c) the consignment number and lot number (if applicable);
  - d) the date and method of destruction.
- (2) Water must be disposed of as described in the manual.
- (3) Requirements of [section 3.5](#) must be complied with.

#### **4.7.2.5 Plant inspections by the operator**

- (1) Plants must be inspected for signs and symptoms of pests and diseases at least once per week as described in [section 3.6](#), unless a different inspection frequency is required by the relevant IHS.

## Schedule 1: Document History

	Date First Issued	Title	Short code
	01 March 2016	<i>Post Entry Quarantine for Plants</i>	MPI.STD.PEQ
#	Date of Issued Amendments	Title and description of amendment	Short code
1	24 August 2017	<i>Post Entry Quarantine for Plants</i> – addition of a new section (4.4.1.2) describing ventilation requirements for Level 3B greenhouse facilities.	MPI.STD.PEQ
2	15 May 2018	<i>Post Entry Quarantine for Plants</i> – addition of new clauses [4.3.1.1(2) and 4.4.1.1(2)] describing requirements for decontamination of wastewater from Level 3A and Level 3B greenhouse facilities.	MPI.STD.PEQ
3	08 March 2019	<i>Wording changed in part 4.3.1.1(1) &amp; 4.4.1.1(1) describing requirements for flooring of Level 3A and 3B facilities.</i>	PEQ.STD
4	31 May 2021	<i>Clarification of mesh sizing descriptions in Sections 4.2.1.1(3)(c), 4.2.1.1(6) and 4.3.1.1(7).</i>	PEQ.STD
5	21 June 2021	<i>Correction of mesh size error from 0.32mm<sup>2</sup> to 0.36mm<sup>2</sup> in Sections 4.2.1.1(3)(c) and 4.2.1.1(6) inadvertently made in the amendment of 31 May 2021.</i>	PEQ.STD
6	21 June 2021	Clarify status of anteroom (4.2.1.2(1), 4.3.1.2(1), and 4.4.1.3(1)); requirements for storage of growing medium (4.4.2.4(2)); requirements for footbaths (4.3.2.7(8), and 4.4.2.7(8)), inspection of plants by operators. Update ventilation requirements (4.4.1.2). Additional definitions for inert growing medium and pasteurisation. Minor editorial changes for grammar and consistency of language, updating commencement section and removing implementation sections.	PEQ.STD

## Schedule 2: Abbreviations and Definitions

Terms used in this standard that are defined in the Act have the meanings set out in the Act unless a different meaning is given below. The Act is available at the following website: <http://www.legislation.govt.nz/>.

**a.i.**

Active ingredient.

**Act**

Biosecurity Act 1993.

**Approved by the Director-General**

Having written approval from the Director-General of MPI or a delegated authority.

**AS/NZS**

Australian/New Zealand Standard.

**Audit**

An evaluation to determine the degree of conformity with criteria prescribed in an MPI standard.

**Authorised movement**

Authority from an inspector, given under section 25 of the Biosecurity Act (1993), for uncleared goods to be moved to a transitional facility, containment facility or biosecurity control area, or to be exported from New Zealand.

**BACC**

Biosecurity Authority/ Clearance Certificate.

**Biosecurity clearance**

A clearance under section 26 of the Biosecurity Act (1993) for the entry of goods into New Zealand.

**Biosecurity risk**

A risk to any natural and physical resources or human health

**Bulb**

A thickened, vegetative part of a plant in a dormant state, for example true bulbs, bulbils, corms, tubers, and rhizomes.

**Chief Technical Officer**

A person appointed by the Director-General as Chief Technical Officer under section 101 of the Biosecurity Act (1993).

**CAR**

Corrective action request.

**Consignment**

A quantity of plants, plant products or other articles being moved from one country to another and covered, when required, by a single phytosanitary certificate (a consignment may be composed of one or more commodities or lots).

**Containment facility**

A facility registered by the Director General of the Ministry for Primary Industries as a containment facility under section 39 of the Biosecurity Act (1993).

**Corrective action request**

A request for a corrective action to remedy a non-compliance.

**Critical non-compliance**

A major failure in an operation or system that caused, or could have caused, a serious to biosecurity risk.

**CTO**

Chief Technical Officer.

**Cuttings**

A nursery stock commodity sub-class for propagation material from the stem only (no roots). Cuttings may be required to be dormant.

**Decontamination**

Removal and/or sterilisation of contaminants.

**Destroyed**

An official method of destroying risk goods.

**DG**

Director-General.

**Diagnostic facility**

A transitional facility approved by the Director-General of the Ministry for Primary Industries as a plant diagnostic facility under section 39 of the Biosecurity Act (1993), for diagnosing (identifying) plants or plant pests.

**Director-General**

The chief executive of the Ministry for Primary Industries.

**Dormant**

Temporarily inactive/suspended growth (cuttings of deciduous species should have no leaves; bulbs should have no leaves or roots).

**Facility**

A transitional facility approved under the Act to receive plant material for PEQ purposes.

**Genetically modified (as defined by the HSNO Act 1996)**

Any organism in which any of the genes or any other genetic material: (a) has been modified by in-vitro techniques or (b) is inherited or otherwise derived, through any number of replications, from any genes or other genetic material which has been modified by in-vitro techniques.

**HEPA**

High efficiency particulate air.

**HSNO**

Hazardous Substances and New Organisms Act (1996).

**IHS**

Import health standard.

**Import health standard**

A document issued under the Biosecurity Act (1993) by a chief technical officer, specifying the requirements to be met for the effective management of risks associated with the importation of risk goods before those goods may be imported, moved from a biosecurity control area or a transitional facility, or given a biosecurity clearance.

**Import permit**

Official document authorising importation of a commodity in accordance with specified phytosanitary requirements.

{Note: Permits for imports into New Zealand are issued by the Ministry for Primary Industries}.

**Inert growing medium**

A type of growing medium that provides no nutrients.

**Inspection**

Official examination of plants, plant products or other regulated articles to determine if pests are present, or to determine compliance with phytosanitary regulations.

**IPPC**

International plant protection convention.

**Level 1 (L1) PEQ open field facility**

Facilities that are designated as Level 1 open field facilities under a facility approval.

**Level 2 (L2) PEQ greenhouse facility**

Facilities that are designated as Level 2 greenhouse facilities under a facility approval.

**Level 3A (L3A) PEQ greenhouse facility**

Facilities that are designated as Level 3A greenhouse facilities under a facility approval.

**Level 3B (L3B) PEQ greenhouse facility**

Facilities that are designated as Level 3B greenhouse facilities under a facility approval.

**Level 2 tissue culture laboratory facility**

Facilities that are designated as Level 2 tissue culture laboratory facilities under a facility approval.

**Level 3 tissue culture laboratory facility**

Facilities that are designated as Level 3 tissue culture laboratory facilities under a facility approval.

**Level 2 quarantine aquarium facility**

Facilities that are designated as Level 2 quarantine aquarium facilities under a facility approval.

**Lot**

A number of units of a single commodity forming part of a consignment, which is identifiable by features such as its homogeneity of composition, place of origin etc.

**Major non-compliance**

A major failure in an operation or system that may cause, or lead to, a biosecurity risk. It may be a specific non-compliance or a system with multiple non-compliances having a cumulative effect.

**Minor non-compliance**

A situation that does not represent a major failure of an operation or system but results in a decrease in confidence in the management of the facility that may not immediately cause or lead to a biosecurity risk.

**MPI**

Ministry for Primary Industries.

**MPI Inspector**

A person who is appointed an inspector under section 103 of the Biosecurity Act (1993). (Explanatory Note: An Inspector is appointed to undertake administering and enforcing the provisions of the Biosecurity Act

(1993) and controls imposed under the Hazardous Substances and New Organism Act 1996, and the Convention on the International Trade in Endangered Species.

**New organism (as defined by the HSNO Act 1996)**

Under section 2 of the HSNO Act 1996, new organism means (with some qualifications):

- (a) an organism belonging to a species that was not present in New Zealand before 29 July 1998:
- (b) an organism belonging to a species, subspecies, infrasubspecies, variety, strain, or cultivar prescribed as a risk species, where that organism was not present in New Zealand at the time of promulgation of the relevant regulation:
- (c) an organism for which a containment approval has been given under this Act:
  - (ca) an organism for which a conditional release approval has been given:
  - (cb) a qualifying organism approved for release with controls:
- (d) a genetically modified organism: (e) an organism belonging to a species, subspecies, infrasubspecies, variety, strain, or cultivar that has been eradicated from New Zealand.

**Non-compliance**

An incidence where the requirements of a facility approval condition, contract, regulation, or standard are not met.

**Non-dormant**

Normal state of plant growth, not in suspended growth.

**Nursery Stock**

Whole plants or parts of plants imported for growing purposes, for example cuttings, scions, budwood, marcots, off-shoots, root divisions, bulbs, corms, tubers, rhizomes, and plants in vitro.

**Operator**

A person registered by the Director General of MPI, under section 40 of the Biosecurity Act (1993), to operate a facility in accordance with this standard.

**Pathway**

Any means that allows the entry or spread of a pest.

**Pasteurisation**

A process whereby organic materials are treated to significantly reduce numbers of plant and animal pathogens and plant propagules.

**PC**

Physical Containment.

**PEQ**

Post Entry Quarantine.

**Pest**

Any species, strain or biotype of plant, animal, or pathogenic agent injurious to plants or plant products.

**Phytosanitary certificate**

An official paper document or its official electronic equivalent, consistent with the model certificates of the IPPC, attesting that a consignment meets phytosanitary import requirements.

**Plant cell cultures**

Plant cells derived from tissues and grown in vitro. These include and generally are cell lines.

**Plants in tissue culture**

Plants in vitro that have been prepared as tissue culture from one parent by asexual reproduction (clonal techniques) under sterile conditions.

**Plants in vitro**

A commodity class for plants growing in an aseptic medium in a closed container.

**POFA**

Place of first arrival.

**Pre-determined testing**

Specific testing for pests and diseases as stated in the import health standard.

**Regulated organism**

Those organisms for which phytosanitary actions would be undertaken if they were intercepted/detected.

**Re-shipped**

An authorised movement given by an MPI Inspector under section 25 of the Biosecurity Act (1993) specifying that risk goods are to be exported from New Zealand.

**Risk good**

Any organism, organic material, or other thing, or substance, that (by reason of its nature, origin, or other relevant factors) it is reasonable to suspect constitutes, harbours, or contains an organism that may: (a) cause unwanted harm to natural and physical resources or human health in New Zealand; or (b) interfere with the diagnosis, management, or treatment, in New Zealand, of pests or unwanted organisms.

**Seed for Sowing**

A unit of reproduction used for sowing. This includes spores but excludes vegetative propagules.

**Test(ing)**

Official examination, other than visual, to determine if pests are present, or to identify pests.

**The Act**

Biosecurity Act (1993).

**The MPI Inspector**

The inspector with primary responsibility for supervision of the facility.

**Transitional facility**

(a) any place approved as a transitional facility in accordance with section 39 of the Biosecurity Act (1993) for the purpose of inspection, testing, storage, treatment, holding or destruction of uncleared goods; or (b) a part of a port declared to be a transitional facility in accordance with section 39 of the Biosecurity Act (1993).

**Treatment**

Official procedure for the killing, inactivation, or removal of pests, or for rendering pests infertile, or for devitalisation.

**Uncleared goods**

Imported goods for which no biosecurity clearance has been given.

**Unwanted organism**

Any organism a chief technical officer believes capable of causing unwanted harm to any natural and physical resources or human health.

**Viable**

Capable of germination or other means of maintaining life.

**Whole plants**

A nursery stock commodity sub-class for rooted cuttings and whole plants.