Plant Export Operations

Work Plan

Australian Table Grape Exports to the Republic of Korea

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Owner Assistant Secretary, Plant Export Operations
Contact Director, Horticulture Export Program
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<thead>
<tr>
<th>ISSUE/REV</th>
<th>DATE</th>
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<th>BY</th>
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<tr>
<td>1.0</td>
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<td>2.1</td>
<td>Mar 2018</td>
<td>Vineyard block suffix must be accurate (section 7.8)</td>
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</table>
INTRODUCTION

This work plan incorporates the formal requirements of the protocol agreed between the Animal and Plant Quarantine Agency (APQA) of the Republic of Korea, and the Australian Department of Agriculture and Water Resources (the department) for the export of Australian table grapes to Korea.

The Australian table grape industry must comply with this work plan to ensure that Australian table grapes meet the requirements for export to Korea.

There are two pathways approved by APQA for the export of Australian table grape as a phytosanitary measure for fruit flies:

- **Fruit fly pest free area** – Tasmania and Riverland region of South Australia
- **Cold treatment** – Conducted onshore in Australia or in-transit during sea voyage to Korea under the joint supervision of Authorised Officers approved by Korea and Australia.

This work plan is not a standalone document and must be read in conjunction with the “Plant quarantine import requirements for the export of fresh table grapes from Australia to Korea” protocol.

This document is available on the Manual of Importing Country Requirements (MICoR) database (http://micor.agriculture.gov.au/Plants/Pages/default.aspx).
1 SUMMARY OF REQUIREMENTS

All varieties of table grapes (*Vitis vinifera*) are permitted to be exported to the Republic of Korea. Growers, packhouses and cold treatment facilities must be export approved by the department to grow, pack or cold treat table grapes for export to Korea. Cold treatment and export inspection facilities must be registered establishments under the *Export Control Act 1982*.

Growers must implement an Integrated Pest Management (IPM) program and have records demonstrating that vineyards have been monitored and found free from the pests of quarantine concern to Korea (see Table 1). Monitoring must be carried out by a person who is a registered crop monitor (RCM).

Field packing operations, packhouses and on farm cool stores where grapes are packed or stored must be maintained in a hygienic condition and ensure traceability of consignments. For field packing, vineyard managers must ensure that grapes are packed and maintained in a hygienic condition.

As part of the approval process, the department will conduct audits of vineyards, packhouses, on farm cool stores and cold treatment facilities to verify compliance with this work plan. APQA may also elect to carry out joint audits.

All fruit presented for export must comply with the *Export Control Act 1982*, its subordinate orders and Korea’s import requirements.

1.1 Import permit

An import permit is not required for the export of table grapes from Australia to Korea.

1.2 Registered establishments

Packhouses, inspection facilities, loadout facilities and treatment facilities must be a Department of Agriculture and Water Resources Registered Establishment and meet the requirements of the *Export Control Act 1982* and its subordinate orders when:

- they are the final establishment inside the fruit fly pest free area (PFA), and thereafter
- export inspections are performed, or containers are loaded
- onshore cold treatment is performed, and thereafter.

1.3 Export approval

Growers and packhouses must be export approved by the department via the Australian Table Grape Association (ATGA). Growers and packhouses must apply online using the ATGA export registration system by the nominated date as specified in the *Industry Advice Notice* (IAN).

Growers must have official surveys conducted by RCMs, to verify vineyards have been inspected and found free from quarantine pests and pathogens (table 1).

Onshore cold treatment facilities must be registered establishments and jointly approved for export to Korea by APQA and the department.

1.4 Permitted varieties

Table grapes (*Vitis vinifera*) from Australia are permitted export to Korea.

The variety is to be clearly stated on the appropriate documentation (e.g. phytosanitary certificate, delivery docket, invoice, etc.).
1.5 Quarantine pests and diseases

Table 1 Pests and diseases of quarantine concern to Korea

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Ceratitis capitata</em></td>
<td>Mediterranean fruit fly</td>
<td>Cold treatment / area freedom</td>
</tr>
<tr>
<td><em>Bactrocera tryoni</em></td>
<td>Queensland fruit fly</td>
<td>Cold treatment / area freedom</td>
</tr>
<tr>
<td><em>Bactrocera neohumeralis</em></td>
<td>Lesser Queensland fruit fly</td>
<td>Cold treatment / area freedom</td>
</tr>
<tr>
<td><em>Epiphyas postvittana</em></td>
<td>Light brown apple moth (LBAM)</td>
<td>Specific monitoring + trapping and control</td>
</tr>
<tr>
<td><em>Haplothrips victoriensis</em></td>
<td>Tubular black thrips</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Selenothrips rubrocintus</em></td>
<td>Redbanded thrips</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Thrips imaginis</em></td>
<td>Plague thrips</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Pseudococcus affinis</em></td>
<td>Glasshouse mealybug</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Pseudococcus calceolariae</em></td>
<td>Citrophilus mealybug</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Pseudococcus longispinus</em></td>
<td>Long tailed mealybug</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Brevipalpus phoenicis</em></td>
<td>Passion vine mite</td>
<td>Specific monitoring and control</td>
</tr>
<tr>
<td><em>Latrodectus hasselti</em></td>
<td>Redback spider</td>
<td>Vineyard surveillance and control</td>
</tr>
</tbody>
</table>

**Pathogens**

<table>
<thead>
<tr>
<th>Scientific name</th>
<th>Common name</th>
<th>Requirements</th>
</tr>
</thead>
<tbody>
<tr>
<td><em>Greeneria uvicola</em></td>
<td>Bitter rot</td>
<td>Vineyard freedom</td>
</tr>
<tr>
<td><em>Phaeomoniella chlamydospora</em></td>
<td>Grapevine decline virus</td>
<td>Vineyard freedom</td>
</tr>
<tr>
<td><em>Capnodium elongatum</em></td>
<td>Sooty mold fungi</td>
<td>Vineyard freedom</td>
</tr>
</tbody>
</table>

1.6 Other pests and pathogens of quarantine concern

A complete quarantine pest list for the Republic of Korea can be downloaded from: https://www.ippc.int/en/countries/republic-of-Korea/

Orchards must be effectively managed to maintain freedom from all pests and pathogens of quarantine concern.

The consignment will be rejected if prohibited pests or pathogens are found on export or import inspection. APQA will suspend the failed vineyard, packhouse or the entire program until the cause of the infestation is investigated and resolved.

1.7 Fruit fly pest free area

Table grapes picked and packed in fruit fly PFA (Tasmania and the Riverland) only can be exported to Korea without undergoing cold treatment, provided that product security is maintained in
accordance with the requirements specified in the Plant Export Operations Manual and product movement outside of the PFA is undertaken via a transfer certificate.

In the event of an outbreak, the department will suspend area freedom certification for fruit produced in the suspension areas and advise APQA of the outbreak.

Fruit from the suspended area may be exported but must undergo cold treatment.

1.8 Transfer certificates

Transfer certificates are required for consignments to be transported between export establishments. A transfer certificate is required for each consignment in the following situations:

- transportation from the PFA
- transportation after treatment
- transportation after export inspection.
2 GROWER RESPONSIBILITIES

Growers are responsible for ensuring that their vineyard and export fruit meets all the protocol requirements for Korea.

2.1 Export approval

Growers/vineyards must apply to the department for approval to grow table grapes for export to Korea. Growers must apply online using the ATGA export registration system by the nominated date as specified in the Industry Advice Notice (IAN).

Vineyards may be divided into patches which can be separately identified and registered with the physical address. Maps must be clearly marked with the separation of each patch. Each patch also must be individually crop monitored, inspected and audited.

Vineyards (and patches) will be issued with an individual registration number upon approval.

Growers are responsible for keeping a copy of the vineyard's approval letter for auditing purposes.

A grower may withdraw their application at any time. The department requires a written notification if a grower wish to withdraw from the export listing.

2.2 Integrated Pest Management (IPM)

Growers are responsible for implementing a program, including crop monitoring and pest control measures. Growers must utilise RCMs.

Growers must maintain vineyard hygiene through pruning, remove remaining fruits, weed control and trimming of dead branches, etc.

2.3 Crop monitoring responsibilities

Growers or RCMs must have completed and passed the online crop monitor training prior to implementing orchard monitoring and IPM control procedures. See 6.1.

Growers and Crop Monitors must undertake the following activities:

- Conduct fortnightly monitoring of each registered patch for all pests and diseases listed in Table 1. Monitoring must take place from bud burst until the completion of harvest. All monitoring activities must be documented and presented to the department or APQA upon request.

- Where pests or diseases or symptoms of pests or diseases listed in Table 1 are detected, control measures (chemical, biological or cultural) must be applied. The application of control measures must be documented and confirmed as effective during subsequent pest monitoring activities. When applying chemical controls growers must maintain spray records which include the name, active ingredient, concentration, rate and application date of chemicals used.

- For Light Brown Apple Moth (LBAM), a trapping device must be placed in each registered patch from bud burst until harvest. Each registered patch must be monitored for LBAM grubs (shoots and bunches) and adults (traps) every two weeks.

- Where LBAM are detected exceeding the thresholds in Table 2, biological or chemical control measures must be undertaken.
Table 2 Monitoring and response requirements for LBAM

<table>
<thead>
<tr>
<th>Growth stage</th>
<th>Monitoring regime</th>
<th>Threshold</th>
<th>Response action</th>
</tr>
</thead>
<tbody>
<tr>
<td>Pre-flowering</td>
<td>Visual inspection of 100 shoots</td>
<td>10 or more caterpillars per 100 shoots or bunches</td>
<td>Application of selective or broad-spectrum insecticides</td>
</tr>
<tr>
<td>Flowering to veraison</td>
<td>Visual inspection of 100 shoots or 100 bunches</td>
<td>5 or more caterpillars per 100 shoots or bunches</td>
<td>Application of selective or broad-spectrum insecticides</td>
</tr>
<tr>
<td>Veraison to harvest</td>
<td>Visual inspection of 100 shoots or 100 bunches</td>
<td>1 or more caterpillars per 100 shoots or bunches</td>
<td>Application of broad-spectrum insecticides or <em>Bacillus thuringiensis</em></td>
</tr>
<tr>
<td></td>
<td>At least one trapping device placed in each registered patch of registered vineyards</td>
<td>5 or more adults per trapping device per inspection cycle (2 weeks)</td>
<td>Application of broad-spectrum insecticides or <em>Bacillus thuringiensis</em></td>
</tr>
</tbody>
</table>

Growers who fail to demonstrate appropriate pest control and vineyard hygiene will not be approved for export to Korea or may be suspended.

2.4 Harvest and packing

Growers must maintain sanitary conditions during all stages of harvest and transport to the packhouse or cold store. Fruit must be culled and sorted to remove pests, damaged fruits and contaminants such as leaves, twigs or soil.

Field packing or packhouse supervisors must have received training about Korea’s pests of quarantine concern and implement training for fruit sorting personnel and packers.

2.4.1 Field packing

Packhouse export approval is not required if table grapes are packed in-field.

Where packing takes place in the field, growers must have measures in place to prevent packaging and harvested grapes from being contaminated with soil, weed seeds or other contaminants.

Harvested grapes must be safeguarded to prevent contamination or infestation during transport to cold stores (e.g. enclosed / covered trailers).

Growers must have a system in place to maintain traceability of harvested grapes from each registered patch to the cool room.

Growers must conduct a check of harvested grapes to confirm compliance with Korea’s requirements. Cartons must be lidded in an area that prevents grapes from being contaminated with pests, soil, weed seeds or other contaminants and stored in a manner which prevents pest infestation or contamination.

Storage facilities must be maintained in sanitary conditions during all stages of packing and storage, such as regularly cleaning, disinfecting and undertaking pest control activities.

Grapes for export to Korea must be stored separately from grapes for export to other markets.
Further information regarding product security can be found in the department’s website in the “Plant Export Operations Manual – Volume 14 Product Security”.

2.4.2 Shed (packhouse) packing

Export approval is required if table grapes are packed in packhouses. Refer to section 2.1.

Where packing takes place in a packhouse, growers must have a system in place that allows traceability of harvested grapes from each registered patch to the packhouse, through processing and into the cool room.

Grapes must be transported from the field to the packhouse in containers other than the export packaging.

Packhouse supervisors must conduct a check of harvested grapes to confirm compliance with Korea’s requirements. Cartons must be lidded in an area that prevents grapes from being contaminated with pests, soil, weed seeds or other contaminants and stored in a manner which prevents pest infestation or contamination.

Packhouses and storage facilities must be maintained in sanitary conditions during all stages of sorting, packing and storage, such as regularly cleaning, disinfecting and undertaking pest control activities.

Grapes for export to Korea must be stored separately from grapes for export to other markets. Further information regarding product security can be found in the department’s website in the “Plant Export Operations Manual – Volume 14 Product Security”.

2.5 Packaging requirements and security requirements

All packaging material must be new and clean. If wooden packaging is used, the wooden packaging must be compliant with the Australian Packaging Certification Scheme for export under the requirements of the International Standard for Phytosanitary Measures (ISPM) No. 15.

2.5.1 Security of individual cartons

In cases where there are vents in the packing carton, the packing carton must be made insect proof through the use of mesh or plastic wrap (any holes must be <1.6mm).

Individually secured packages may be palletised for transport and may be deconsolidated provided individual package security is not breached.

2.5.2 Security of palletised cartons

Cartons with unmeshed vents, or other unsecure packages that are placed on a pallet must be secured with insect proof mesh or plastic wrap covering all surfaces of the pallet.

Where goods are secured at pallet level and pallets have being transferred after inspection and/or treatment, a label with the following wording in large bold font must be attached to the face of the pallet:

“Export secure pallet. Do not deconsolidate”

2.6 Labelling requirements

Each pallet must be clearly labelled (printed not hand written) with:

- the product (table grapes)
- vineyard name and / or export approval number
- the words “For Korea”
- packhouse name and /or export approval number (this is not a requirement if product is field packed).
Where pallets are not used, each carton must be individually labelled with the above information.

The department recommends that labels are applied to the same location on each pallet / carton and are clearly legible and of consistent font size.

2.7 Security and movement

Fruit from PFA must be packed (s.2.5), inspected, loaded and sealed in the PFA.

Following treatment and/or inspection, product must be secured, loaded and transported between registered establishments.

Consignments can be transported by Pantech vehicles or shipping containers. The use of tarpaulins or tautliner type transport is not considered adequate security against fruit fly infestation.

2.8 Vineyard / patch suspension

If pests of quarantine concern to Korea (in Table 1) are detected during export inspection, the consignment will be rejected and the patches from which the grapes originated will be suspended for the remainder of the season.
3 COLD TREATMENT

3.1 General requirements
Table grapes for export to Korea that are produced outside of approved PFA must undergo cold treatment. Cold treatment may be conducted either:

- On shore prior to export to Korea (sea freight and air freight consignments)
- In-transit to Korea (sea freight consignments only).

An APQA inspector and an approved authorised officer (AO) are responsible for supervision of cold treatment; however, they are not responsible for operating or setting up the cold treatment recording system. The full cost of audit, inspection and supervision by APQA will be borne by industry.

Cold treatment facilities and self-refrigerated shipping containers must have refrigeration equipment that can attain and hold the required temperature for the required period of time listed in Table 3.

Cold treatment is assessed on fruit pulp temperature probes only, not air temperature probes.

3.2 Cold treatment schedule
The treatment schedules in Table 3 apply for both on shore and in-transit cold treatment of fruit flies of quarantine concern to Korea as listed in Table 3.

Table 3. Cold treatment schedule for table grape to Korea

<table>
<thead>
<tr>
<th>Temperature</th>
<th>Minimum exposure period</th>
</tr>
</thead>
<tbody>
<tr>
<td>1 °C or below</td>
<td>Continuous 16 days or more</td>
</tr>
<tr>
<td>2 °C or below</td>
<td>Continuous 18 days or more</td>
</tr>
<tr>
<td>3 °C or below</td>
<td>Continuous 20 days or more</td>
</tr>
</tbody>
</table>

3.3 Requirements for temperature recording system
The temperature probes and temperature recorders must fulfill the following:

- be suitable for purpose and accurate to ±0.1°C around 0°C
- the recording equipment shall be an automatic temperature recorder allowing frequent checks of the temperature from outside the cool room / container
- be capable of recording and storing data in a format that cannot be manipulated for the period of the treatment and until the data can be examined by the department and/or APQA
- be capable of recording all temperature sensors at least hourly to ±0.1°C
- be able to produce data downloads which identify each sensor, time and the temperature, as well as the identification number of the temperature recorder/container number.

3.4 Calibration of temperature sensors
Calibration of temperature sensors must take place immediately prior to the commencement of cold treatment. For onshore cold treatment, probes must also be calibrated immediately after completion of the cold treatment.

An authorised officer must supervise the calibration of temperature sensors using ice slurry and distilled water in an insulated container (the ice slurry method). The calibration must be repeated three times consecutively within 1 to 5 minute intervals.
If any sensor reads more than ± 0.3°C from 0°C during calibration, it must be replaced.

3.5 Pre-cooling

Packed fruit must be transported immediately to a cold room within the cold treatment facility and loaded to ensure that there is even flow of air.

All fruit must be pre-cooled to or below the target treatment temperature specified in Table 3 before cold treatment can begin.

Inspectors of both countries will randomly probe a minimum of 5 pieces of pre-cooled fruit prior to loading in the container or cold room to confirm that the required temperature has been met.

During loading, it is the exporter’s responsibility to ensure temperatures are maintained as close as possible to the target treatment temperature while sensors are being placed in the fruit.
4 ONSHORE COLD TREATMENT

4.1 Registered establishment and export approval

All facilities undertaking cold treatment of table grapes for export to Korea are required to be a registered establishment under the Export Control Act 1982.

Onshore cold treatment facilities must apply to the department for approval to treat table grapes for export to Korea each year. Applicants must contact the department at HorticultureExports@agriculture.gov.au by the date specified in the IAN.

Application forms and supporting documentation must be complete and accurate when submitted.

Participants must complete and sign the export application form verifying their agreement to comply with this work plan.

Onshore cold treatment facilities are subject to a joint audit by the department and APQA before approval is granted to treat table grapes for export to Korea.

All costs associated with the registration of onshore cold treatment facilities (i.e audits undertaken by the department and APQA and associated costs) are the responsibility of the cold treatment facilities applying for approval.

Cold treatment facilities must have the following:

- automatic doors
- rubber curtains or air curtains at the entrance of cold treatment facilities
- insect proof materials covering all openings such as windows
- an enclosed space for loading

4.2 Placement of temperature sensors

Fruit must be pre-cooled to below the nominated temperature (see Table 3) prior to the loading of cold treatment rooms and placement of temperature sensors. Palletised fruit must be loaded into the cold treatment room under supervision of inspectors of both countries.

If the fruit temperature exceeds the required temperature for cold treatment, the relevant pallets must continue pre-cooling.

A minimum of six temperature sensors are used during onshore treatment: four fruit pulp temperature sensors and two air temperature sensors.

The four fruit pulp temperature sensors must be placed in the following locations under the supervision of the APQA officer and approved AO:

- one at the centre of the stack, in the centre of the cold room
- one at the top of the top stack, in the centre of the cold room
- one at the centre of the stack near the cold air outlet
- one at the top of the stack near the cold air outlet.

The two air temperature sensors are to be located at the air inlet and air outlet locations. These sensors will not be used to determine treatment.

The treatment will commence once fruit sensors have reached the nominated temperature (Table 3).

Following commencement of treatment the treatment room must be sealed with a numbered industry seal under the supervision of the APQA officer and approved AO.
4.3 Recalibration of temperature sensors

Recalibration of temperature sensors must occur after the treatment parameters specified in Table 3 have been met. See 3.4 calibration details. Sensors should be re-calibrated before the fruit is removed from the treatment room.

If any sensor reads more than ± 0.3°C from 0°C during the re-calibration the treatment is considered to have failed and must start again. The offending sensor/s must be replaced prior to any further treatments and replacement sensors must be calibrated.

If a sensor reads higher than 0°C but less than +0.3°C after re-calibration, the treatment is unaffected and is considered complete.

If a sensor reads lower than 0°C but not below –0.3°C after recalibration, the treatment records must be adjusted upwards to compensate. If this occurs, there is a possibility that the treatment parameters listed in Table 3 have not been met and the treatment may have failed.

4.4 Verification of treatment

APQA officer and an approved AO will review documentation to ensure the treatment schedule listed in Table 3 has been met. It is recommended the treatment temperature is maintained until the APQA officer and the approved AO confirms the required treatment schedule has been met.

The cold treatment is only considered complete once the sensors have been recalibrated. Records are to be kept for audit by APQA and/or the department. If any probe shows a higher calibration reading at the completion of the treatment than at the initial calibration, the recordings from the probe(s) will be adjusted accordingly. If this adjustment reveals that the nominated treatment schedule was not met, the treatment will be deemed to have failed.

In the event that any fruit pulp probe fails to record a temperature for a period of more than four consecutive hours, the treatment will be deemed to have failed and must be started again.

The APQA officer and the approved AO must confirm the seal number and cold room number before the cold room is opened after treatment has been completed or for re-start.

Hard copy printouts of records of treatment are to be signed, stamped and endorsed as "COMPLETED" by the APQA officer and the approved AO and kept on file.

Records of the onshore cold treatment and any other relevant documents must be submitted to the PlantExportsNDH PlantExportsNDH@agriculture.gov.au for assessment and certification.

4.5 Continuation of a failed treatment

If the temperature of any fruit pulp probe exceeds the parameters specified in Table 3, the exporter can choose to re-start the treatment, provided the required temperature can be obtained within a period not exceeding 24 hours.

If the treatment fails because of a malfunctioning sensor, the faulty sensor must be replaced and the treatment re-started under the supervision of the APQA officer and the approved AO.

4.6 Storage

Fruit that has been successfully treated must be secured at all times in accordance with the requirements of the Plant Exports Operations Manual.

4.7 Loading

For airfreight consignments (which must undergo on-shore cold treatment (OSCT)), product must be secured after treatment and/or export inspection and transported under an endorsed transfer certificate.
4.8 EXDOC certification request functionality

The department strongly recommends clients utilise EXDOC’s Certificate Request “C” functionality for the export of onshore cold treated horticulture exports to Korea.

EXDOC Certificate Request functionality enables the commodity listed in the Request for Permit (RFP), which has been inspected and treated for export, to be assigned to multiple phytosanitary certificates.

There are specific rules that need to be adhered to when using Certificate Request functionality including ensuring the destination country and exporter are the same for all RFPs.

4.9 On-arrival inspection by APQA

Export consignments that have been treated by onshore cold treatment must be accompanied by an onshore cold treatment calibration and re-calibration certificate and a cold treatment temperature record endorsed by the department.

If live quarantine pests are found on inspection the consignment will be re-exported, destroyed or treated at the owner’s expense (limited to cases where pests can be exterminated effectively).

APQA may suspend orchard packhouse and treatment facility or entire program until the cause of the infestation is investigated and resolved.
5  IN–TRANSIT COLD TREATMENT

An approved AO must supervise all stages of in-transit cold treatment (ITCT) and follow *Initiating an in-transit cold treatment for plant exports work instruction.*

An APQA officer will supervise all stages of ITCT to ensure compliance with protocol requirements.

A certificate of loading and calibration record for ITCT must be signed by an approved AO upon commencement of ITCT.

For table grapes subject to ITCT, the treatment may be commenced onshore and be completed during the voyage between Australia or the first port of call in Korea after arrival.

5.1  Requirements for facilities loading containers for ITCT

All facilities loading containers for ITCT are required to be a registered establishment.

Exporters must ensure containers are suitable to perform ITCT.

5.2  Calibration of temperature sensors

The approved AO must enter the calibration readings from all three fruit pulp temperature sensors onto the calibration record. The completed calibration certificate must be endorsed by an officer of the department and the original attached to the phytosanitary certificate accompanying the consignment.

On arrival, the fruit sensors will be calibrated by APQA.

5.3  Placement of temperature sensors and loading of container

During loading, it is the exporter's responsibility to ensure temperatures are maintained as close as possible to the target treatment temperature while sensors are being placed in the fruit.

Containers must be packed in a manner which ensures an even airflow around pallets or cartons. The placement of temperature sensors is to be supervised by the APQA officer and the approved AO.

An approved AO and the APQA officer must supervise loading of the container.

ITCT must be recorded by a minimum of three fruit pulp temperature sensors and two air sensors. Treatment is considered to have started when the fruit pulp temperature meets the nominated temperature as specified in Table 3.

The sensors must be placed in the following locations:

- Sensor 1: fruit pulp temperature sensor must be placed at the bottom layer of the first pallet.
- Sensor 2: fruit pulp temperature must be placed at the middle layer of the pallet located in the centre.
- Sensor 3: fruit pulp temperature must be placed in the upper layer of the last pallet (see Figure 1 below).

The two air temperature sensors must be placed at the inlet and outlet points of air circulation.

The fruit pulp temperature sensors must be inserted into fruit to ensure that the core temperature of the fruit can be measured (as required, insert the temperature sensor into several grapes in a row). In cases where fruit size varies, the sensor should be inserted into the larger size grapes.
Figure 1. Location of the three fruit pulp temperature sensors for ITCT

5.4 Security and sealing of container

Security must be in place to ensure consignments are not exposed to possible infestation or contamination by quarantine pests following export inspection or after a treatment.

Any open container vents must be covered with fruit fly proof mesh to prevent the entry of pests. Mesh or gauze with openings ≤1.6mm is considered acceptable.

For sea freight, a numbered industry seal must be placed.

The APQA officer and the approved AO must supervise placement of a numbered seal on the container.

The approved AO must record the container and seal number into the calibration record as per ITCT work instruction. The seal must not be removed until arrival in Korea.

5.5 Temperature records

Temperature records for ITCT are to be downloaded by a representative of the shipping company on arrival in Korea. The downloaded data file(s) from the container must be sent to APQA at the first port of call in Korea.

APQA will verify the efficacy of the treatment. The treatment is not complete until APQA verifies the data download and checks the calibration of the fruit pulp sensors.
6 INDUSTRY RESPONSIBILITIES

All costs associated with the delivery of this work plan (i.e. departmental inspection and audits, APQA audits and pre-clearance inspections) are the responsibility of industry.

6.1 Grower/Crop monitor training

Industry is responsible for providing training for crop monitors to perform the requirements of in-field monitoring and IPM for Korea under this work plan and the protocol.

The department must authorise all crop monitor training packages before commencement of training. Any changes made to these packages must also be authorised by the department.

Crop monitors must be registered with the department through the Tocal College online system (https://tocal.instructure.com/enroll/HDYIDE) by the nominated date as specified in the Industry Advice Notice (IAN).

Only RCMs who have completed the online training and passed the assessment are eligible to conduct crop monitoring for the export of table grapes to Korea.

The department will keep a list of persons who have completed the training and assessment.
7 RESPONSIBILITIES OF THE DEPARTMENT OF AGRICULTURE AND WATER RESOURCES

7.1 Pre-season requirements

7.1.1 Audit
The department will carry out documented audits each year to ensure compliance for all treatment facilities, packhouses (not required if product is field packed), crop monitors and growers.

All costs associated with departmental audits and inspections, APQA audits etc. are the responsibility of industry. If a RCM has been suspended by the department, all growers inspected by that RCM may be suspended.

If the export program is suspended because of interception of a live pest of quarantine concern, or any irregularity, an audit will be conducted by APQA and/or the department to identify failures in the system. If critical failures are identified, the export entity/entities will be suspended until the system is demonstrated to be fully effective.

7.1.2 Maintenance of export list
The department will maintain a list of all export-approved growers, packhouses (not required if product is field packed) and treatment facilities.

The approved AO must inform HEP if any of the specific pests of concern in Table 1 are detected. HEP will update the export status via the ATG online system to reflect the necessity for treatment, withdrawal, or suspension.

7.2 APQA communication
Before the start of the export season, the department will forward names and addresses of all registered cold treatment facilities, export-approved growers and packhouses to APQA. The department will promptly notify APQA of any new registrations, amendments to existing registrations or any cancellations or suspensions.

If requested, the department must provide information to APQA on the management program undertaken for table grape industry throughout the growing season.

The department must inform APQA immediately if any fruit fly outbreak is confirmed in a defined area and advise APQA of the timetable for reinstatement of the outbreak area. The department must suspend area freedom certification of any untreated exports, following an outbreak.

7.3 Cold treatment supervision
An approved AO will supervise the following aspects of in-transit and onshore cold treatment:

- calibration of fruit pulp temperature sensors
- placement of fruit pulp temperature sensors
- verification of loading and security
- calibration records
- recalibration and correction of the data download if a correction factor is applied (OSCT)
7.4 Export inspection

The purpose of the department’s export inspection is to ensure that each consignment meets the Australian legislative requirements and Korea’s import requirements.

An approved AO will inspect a sample in accordance with the protocol, consisting of 2% of the total number of packaging cartons presented for inspection.

7.5 Rejection and suspension criteria

7.5.1 Detection of quarantine pests of concern

If any live pests of specific quarantine concern listed in Table 1 are detected on the fruit at export inspection, the entire consignment will be rejected for export to Korea.

The vineyard from which the fruit was sourced and the packhouse may be suspended from exporting table grape to Korea for the season.

The department will investigate the cause of non-compliance.

The department must keep records of the interceptions made during these inspections and make them available to APQA as requested.

7.5.2 Detection of live fruit flies

Should any live fruit flies be detected during inspection, the entire consignment will be rejected. The detection must be reported to the Horticulture Exports Program (HEP) immediately via email HorticultureExports@agriculture.gov.au.

Reconditioning is not permitted for consignments with live fruit fly detections.

If after treatment any live fruit flies listed in Table 1 are found during inspection, the entire consignment will be rejected. The treatment facility operations will be suspended until the cause of the treatment failure has been investigated.

Suspended treatment operations will only be reinstated to the export program once the department is satisfied the cause of the non-compliance has been identified and suitable corrective measures have been implemented.

7.5.3 Detection of other pests

If live pests other than those specified in Table 1 are found at inspection, the consignment will be rejected but may be reconditioned.

7.6 Reconditioning

If any live pests or pathogens not listed in Table 1 are found during inspection, reconditioning of the rejected consignments may be considered. The type of reconditioning is at the exporter’s discretion; however, the reconditioning method chosen must suitably address the quarantine risk and biology of the pest.

Reconditioned consignments intended for export to Korea must be re-presented for inspection in accordance with the Export Control (Plants and Plant Products) Order 2011. Details of goods being resubmitted must be detailed in writing and include corrective measures taken to ensure they meet export requirements.

7.7 Phytosanitary certification / Cold treatment certificate

A phytosanitary certificate will only be authorised by a departmental officer when all export conditions are met.

For sea freight shipments, both the container and seal numbers must be recorded on the phytosanitary certificate.
A cold treatment certificate for ITCT will be generated by the department. The cold treatment certificate must be attached to the phytosanitary certificate. APQA and the department must jointly endorse both documents.

For onshore cold treatment, the APQA officer and approved AO will check the results when cold treatment is completed before a cold treatment certificate is generated.

Exporters are required to submit cold treatment temperature record (data) along with the OSCT calibration and re-calibration certificate (cold treatment report).

Treated fruit must be exported within 28 days of inspection or it will require re-inspection.

### 7.8 Phytosanitary certification / EXDOC functionality

All phytosanitary certificates to Korea must be processes through EXDOC.

Details of the registered the export-approved vineyard number/s must be entered in the phytosanitary certificate under item 12 (Distinguishing marks and Container nos). This must be entered into the "shipping marks" section of the EXDOC Request for Permit (RFP) and be in the example format of: VINEYARD: TGXXX-XX or VINEYARD: TGXXX-TXX (depending on registration number format applicable to the block).

For sea freight shipments, both the container and seal numbers must be recorded on the phytosanitary certificate. Air freighted consignments should have the flight number, if known, included on the phytosanitary certificate.

For table grapes sourced from PFAs, the phytosanitary certificate shall specify the relevant PFAs.

### 7.9 Treatment certification / Additional declaration

If the consignment has been cold treated onshore the following information must be inserted into the DISINFESTATION AND/OR DISINFECTION TREATMENT section of the phytosanitary certificate:

- treatment temperature
- duration (number of consecutive days)

The name and number of the registered establishment where onshore cold treatment was conducted must be entered in the ‘Lot number’ field (a free text field) of the EXDOC Request for Permit (RFP) and be in the example format of: TREATMENT AT REGISTERED ESTABLISHMENT NAME / NUMBER. AT XXXX FREIGHT / XXXX.

Note: Completed treatment records (including calibration and recalibration of fruit pulp temperature sensors) must be presented with the phytosanitary certificate to enable authorisation by the department.

Additional declarations can be found in the MICO database at [http://authoringmicor.daff.gov.au/Plants/Pages/Korea_South_KR/Grapes.aspx](http://authoringmicor.daff.gov.au/Plants/Pages/Korea_South_KR/Grapes.aspx)
8 IMPORTING COUNTRY RESPONSIBILITIES

8.1 Audit

Prior to the start of the trade, an APQA officer will conduct a joint audit with the department of table grape growing areas, vineyards, packhouses and cold treatment facilities to ensure compliance with the protocol and this work plan.

8.2 Pre-clearance inspection

Through the pre-clearance program, an APQA officer shall conduct export inspection and supervise the process of cold treatment, together with the approved AO.

Korea is considering the removal of the mandatory pre-clearance program after three consecutive seasons of 95% of export compliance.

8.3 Import inspection

All documentation will be checked on arrival in Korea before inspection can occur. If the fruit is found to originate from unapproved vineyards, packhouses or treatment facilities, the shipment will not be permitted entry.

All consignments are subject to an import inspection on arrival.

If any live quarantine pests are found, the consignment will be rejected and returned/re-directed, destroyed or treated at the owner’s expense (limited to cases where pests can be exterminated effectively). APQA may suspend the offending vineyard, packhouse, cold store or the entire export program until the cause of the infestation is investigated.

Where the cold treatment is deemed to have failed, the consignment of table grapes will be subject to onshore cold treatment in Korea (if confirmed by the APQA) that the containers can meet cold treatment requirements), returned/re-directed or destroyed.