Import plant quarantine requirements for fresh fruits of mango from Australia

1. **Items and production areas subject to the requirements**
   Fresh fruits of mangoes (*Mangifera indica*) produced in Australia

2. **Means of conveyance**
   Ship-cargo or air-cargo

3. **Registration of export orchards, packing facilities and vapour heat treatment facilities**
   3.1 Orchards, packing facilities and Vapour Heat Treatment (Hereinafter referred to as VHT) facilities for export mangoes to Korea should be registered with Department of Agriculture and Water Resources (Hereinafter referred to as the department).

   3.2 The department should provide a list of registered orchards, packing facilities and VHT facilities to Animal and Plant Quarantine Agency (Hereinafter referred to as QIA), at least 14 days before exportation every year.

4. **Orchards inspection and control for quarantine pests**
   4.1 The department shall ensure that the registered orchards have been inspected and controlled effectively during the growing period of mangoes for *Sternochetus mangiferae*, *Xanthomonas campestris pv. mangiferaeindicae* and *Cytosphaera mangiferae*. Especially, good orchard management program shall be implemented during the growing period of mangoes for *Sternochetus mangiferae* control, and appropriate chemicals shall be sprayed against detection of this pest at the field inspection during the early egg laying period.

   4.2 The department shall provide a result of orchards inspection and pest control measures applied in export orchards to QIA inspectors, when required.

   4.3 Upon reviewing the result, QIA inspectors can check the on-site status of quarantine pest in the export orchards, when necessary.

   4.4 When the current status of *Deanolis albizonalis* is changed, the department shall notify it to QIA immediately. QIA can introduce additional measures for *Deanolis albizonalis*, upon recognition of a risk of this pest such as a change of occurrence status, detection at import/export inspection.

   4.5 When other quarantine pests of Korea are detected at the export orchards, the department shall notify it to QIA.

5. **Vapour heat treatment against fruit flies**
   5.1 Mangoes for export to Korea must be vapour heat treated at VHT facilities approved by the department, for 15 minutes at a pulp temperature of 47 °C or more.

   5.2 Temperature sensors of the VHT facilities shall be calibrated periodically (once a month). Scope of the error shall not be beyond ±0.3 °C.
5.3 Temperature sensors shall be set in the centre of fruits. One or more sensors shall be placed each in upper, middle and lower part of the loaded fruits in a chamber. The treatment time shall be calculated from when the temperature of every sensor reaches 47 °C. In the outside of the facilities, there shall be automatic temperature recording equipments to check the temperatures on occasion.

5.4 Officers authorised by the department shall attend every VHT for supervision.

5.5 The department shall provide VHT records when requested by QIA.

6. **Sorting and packing facilities**
6.1. The department shall inspect the phytosanitary status of sorting and packing facilities before exportation every year.

6.2. The department shall ensure that only fruits produced from approved export orchards for Korea enter the packing facilities.

6.3. Packing facilities shall be equipped properly so that fruit flies cannot enter the facilities.

7. **Packaging and transportation following VHT**
7.1 If cartons for treated fruits have any holes, they shall conform to one of the following requirements.

7.1.1 Individual cartons shall have holes covered with a netting (diameter of the mesh size shall not exceed 1.6mm or less), or

7.1.2 Pallets of stacked cartons (vent holes not covered by netting) containing the fruits, shall be wrapped securely in polythene (shrink wrap) or nets (diameter of the mesh shall not exceed 1.6 mm or less) after treatment, or

7.1.3 Cartons shall be loaded directly into containers from a treatment facility without being exposed to the environment, or loaded into a container from an area that has been secured to exclude insects.

7.2 When treated fruits are transported from the VHT facilities to other location, closed means of transportation (every openings are covered with nets not exceeding 1.6 mm in diameter) shall be used. Otherwise, the fruits shall be transported after packing as stipulated in Article 7.1.1 or 7.1.2.

7.3 After loading the fruits into a container, it shall be sealed in the presence of an officer authorised by the department. In case of air cargo, it is allowed to seal each carton using methods approved by the department ("Plant Quarantine Australia" sticker or label), instead of sealing the container itself.

8. **Labelling**
8.1 Each carton or palletized unit must have the mark 'For Korea' displayed on it.

8.2 Each carton should be labelled indicating the name/code of a production orchard.

9. **Export Inspection**
9.1 The inspection of the fruits must be undertaken by an officer authorised by the department in a secure area so that fruits have no risk of re-infestation.

9.2 An officer authorised by the department shall conduct inspection on treated and packed fruits at the rate of 2% of cartons, for quarantine pests.
9.3 If live fruit flies are detected in the consignments, the treatment facility must be suspended until the department/QIA are satisfied that appropriate corrective action has been taken.

9.4 If Xanthomonas campestris pv. mangiferaeindicae, Cytosphaera mangiferae, Sternochetus mangiferae or Deanolis aibizonalis is detected, orchards where the fruits are produced shall be excluded from exportation, until the department/QIA are satisfied that appropriate corrective action has been taken.

9.5 If other live quarantine pests in Annex 1 are detected, the lot concerned shall be rejected. However, the rejected lot can be shipped after disinestation or removing of all of the pests.

10. Phytosanitary certificate
10.1 The department shall issue a phytosanitary certificate upon successful completion of pre-export VHT and export inspection.

10.2 Name of the VHT facility, date, temperature and duration of the treatment shall be indicated in treatment section of the phytosanitary certificate.

10.3 The following sentence shall be added in additional declaration section of the phytosanitary certificate for ship and airfreight cargo:
"The consignment conforms to the requirements agreed by QIA, and found to be free from quarantine pests of Korea as a result of export inspection."

In case of ship cargo, the container seal number shall be included in the body of the phytosanitary certificate.

11. Verification visit
11.1 QIA inspector shall carry out a verification visit during the export season to applicable VHT facilities to verify treatment and relevant export practices. Or pre-clearance inspection by joint inspection of officers authorised by the department and QIA inspectors may be conducted upon request of QIA.

11.2 All details are described in Annex 2.

11.3 When pre-clearance inspection is necessary, the department shall request QIA to send QIA inspectors, and provide information on the number of inspectors required, period, expected volume of exportation, location, etc., before 30 days from exportation.

11.4 All the expenses required for the verification visit shall be covered by Australian side, according to the guidelines established by QIA.

11.5 A QIA inspector may check, during verification visit, overall issues involving the export certification system including orchards, packing facilities and orchards inspection.

12. Import Inspection
12.1 When consignments arrive at the point of entry, QIA shall check the following things.

12.1.1. Appropriateness of described items on the phytosanitary certificate.

12.1.2. The status of sealing and damage of packages.
12.2. If certain problem(s) is/are found in the consignments by checking under Article 12.1, all or parts of the consignments shall be destroyed or reshipped.

12.3. If no problem(s) is/are found in the consignments by checking under Article 12.1, QIA shall conduct inspection of the consignment according to the relevant regulations. In the case of the consignments for which pre-clearance inspection has been conducted, if any pests are suspected, import inspection will be conducted.

12.4. If any pests of Korean quarantine concern (Annex 1) are found during import inspection, the consignments shall be treated as follows:

12.4.1. If listed live prohibited pests such as fruit flies are intercepted, the consignment shall be destroyed or reshipped. The importation of mangoes from Australia shall be suspended until the department /QIA identifies the reasons and corrects them.

12.4.2. If other live quarantine pests of concern are intercepted, the consignment concerned shall be destroyed or reshipped, or fumigated according to Korea’s Plant Protection Act.

13. Others

13.1 Other matters that are not defined in these requirements shall be dealt with according to the relevant regulations of Plant Protection Act of Korea.

13.2 When necessary, these requirements can be amended under the agreement of both sides.

Additional Clause
This Notice takes effect from the date of notification.
[Annex 2]

Quarantine Pests of Concern for Australian Mangoes

A. Pathogens (23 species)
1. Asterina punctiformis
2. Bipolaris hawaiiensis
3. Ceratocystis paradoxa
4. Chaetothyris tenuissima
5. Coniella castaneicola
6. Cytosphaera mangiferae *
7. Dothiorella aromatica
8. Dothiorella dominicana
9. Dothiorella mangiferae
10. Elsinoe mangiferae
11. Fusicoccum mangiferae
12. Gloeosporium lagenarium
13. Gloeosporium mangiferae
14. Mucor circinelloides
15. Oidium mangiferae
16. Pseudalotipsis mangiferae
17. Phomopsis mangiferae
18. Phytophthora heveae
19. Pithomyces chartarum
20. Pithomyces sacchari
21. Stemphylium vesicarium
22. Xanthomonas campestris pv. mangiferaeindicae *
23. Hendersonula sp.

* Disease required for orchard inspection and control

B. Insect (30 species)
24. Amblypelta lutescens lutescens
25. Amblypelta nitida
26. Aonidiella aurantii
27. Aonidiella orientalis
28. Aulacaspis tubercularis
29. Bactrocera aquilonis *
30. Bactrocera cucumis *
31. Bactrocera fraunfeldi *
32. Bactrocera jarvisi *
33. Bactrocera kraussi *
34. Bactrocera murrayi *
35. Bactrocera neohumeralis *
36. Bactrocera opiliae *
37. Bactrocera tryoni *
38. Ceratitis capitata *
39. Coccus viridis
40. Colgaroides acuminata
41. Cryptoblabeles adsocetra
42. Deanolis albizonalis
43. Dirioxa pornia
44. Ephesia sp.
45. Epiphyas postvittana
46. Hemiberlesia rapax
47. Isotenes miserana
48. Lobesia sp.
49. Lymantria lunata
50. Nipaecoccus viridis
51. Selenothrips rubrocinctus
52. Sternochetus mangiferae **
53. Tirathaba sp.

* Insect required for vapour heat treatment.
** Insect required for orchard inspection and control.

※If other pests not mentioned above are intercepted during import inspection, QIA will conduct an identification and PRA and decide appropriate phytosanitary measures.
Systems Verification Agreement

1. **GROWER RESPONSIBILITIES**

*Pre-season export approval activities*
- To apply for export approval as instructed in the departmental Industry Advice Notice for that growing season
- To prepare for a scheduled departmental annual audit
- To ensure production is carried out in accordance with protocol section 4.

*QIA visit*
- To have available, for the QIA officer to view, all documentation and records as per protocol section 4 ('Orchards inspection and control for quarantine pests').

2. **Treatment facility / post-treatment packhouse responsibilities**

*Pre-season export approval activities*
- To apply for export approval with the department
- To prepare for annual pre-season audit by the department, and have all necessary documentation and systems available for verification
- To ensure that VHT for export of Australian mangoes to Korea is carried out in accordance with:
  - Protocol sections 5 ('Vapour heat treatment against fruit flies'), 6 ('Sorting and packing facilities'), 7 ('Packaging and transportation following VHT'), 8 ('Labelling') and 9 ('Export inspection')
  - VHT Standard sections 2 ('Treatment facility requirements'), 3 ('Treatment') and 4 ('Post treatment security')
  - The department’s Plant Export Operations Manual (PEOM).

*QIA visit*
- To have available, for the QIA officer to view, all documentation and records as per VHT Standard section 2 ('Treatment facility requirements')
- To meet the packaging requirements contained in protocol section 7 ('Packaging and transportation following VHT')
- To meet the labelling requirements contained in protocol section 8 ('Labelling').

3. **Department of Agriculture and Water Resources responsibilities**

*Pre-season export approval activities*
- To carry out export approval processes for growers / treatment facilities / post-treatment packhouses
- To conduct an annual pre-season audit of growers / treatment facilities / post-treatment packhouses. Audits will verify that Australian mango exports to Korea adhere to conditions detailed in:
  - Protocol sections 3 ('Registration of export orchards, packing facilities and Vapour Heat Treatment facilities'), 4 ('Orchards inspection and control for quarantine pests'), 5...
('Vapour heat treatment against fruit flies'), 6 ('Sorting and packing facilities'), 7 ('Packaging and transportation following VHT'), 8 ('Labelling') and 9 ('Export inspection')
- VHT Standard sections 2 ('Treatment facility requirements') and 3 ('Treatment')
- PEOM.

QIA visit
- To accompany the QIA officer during their verification of VHT facilities exporting mango to Korea
- To provide QIA with an itinerary for the verification visit, once a date has been agreed.

4. QIA responsibilities
- To conduct a verification visit of VHT facilities performing mango treatment and export to Korea
- To confirm, where elected, the VHT facility traceability and export approval procedures as detailed in protocol section 5 ('Vapour heat treatment against fruit flies'), protocol section 6 ('Sorting and packing facilities'), protocol section 7 ('Packaging and transportation following VHT').