BOARD NOTICE 709 OF 2024

PERISHABLE PRODUCTS EXPORT CONTROL BOARD

PERISHABLE PRODUCTS EXPORT CONTROL ACT, 1983 (ACT NO. 9 OF 1983)

REGULATIONS RELATING TO THE EXPORT OF PERISHABLE PRODUCTS

The Minister of Agriculture has under section 25 of the Perishable Products Export Control Act No 9 of 1983, made the regulations in the schedule.

MR JH STEENHUISEN (MP)
MINISTER OF AGRICULTURE
DATE: 04-12-24

CHAPTER 1
INTERPRETATION

Definitions

1 (1) In these Regulations, any word or expression to which a meaning has been assigned in the Act shall have that meaning, unless the context indicates otherwise:

"Act" means the Perishable Products Export Control Act, 1983 (Act 9 of 1983), and as amended;

"agent" means an agent of an exporter or cold chain service provider;

"APS Act" means the Agricultural Product Standards Act, 1990 (Act 119 of 1990);

"Board" means the Perishable Products Export Control Board established in terms of section 2 of the Act;

"˚C" means degrees centigrade;

"carrying temperature instruction letter" means the written and/or electronic instruction issued by the Board to a vessel (cold chain service provider) to carry perishable products;

"certificate of authority" means a certificate issued by any statutory or regulatory authority in South Africa;

"Chief Executive Officer" means the chief executive officer of the Board in terms of section 13 of the Act, and shall bear the same meaning as the "General manager" referred to in that section;

"classification certificate" for a container means a certificate of compliance in respect of a container issued by a classification society;

"classification society" means a classification society that is a member of the International Association of Classification Societies (IACS);

"CO_2" means carbon dioxide;

"cold chain" means all aspects of the handling, packing, temperature management, transportation and storage of perishable products, and the principles of procedure relating to the analysis, measuring, evaluation, control, documentation and validation of the cold chain;

"cold chain service provider" means any person who provides a service in respect of the cold chain;

"cold storage facility" means any facility used to store perishable product intended for export, and which may be refrigerated, controlled atmosphere, modified atmosphere, or at an ambient temperature;

"cold treatment" means the process used to eradicate quarantine pests and diseases, which is also referred to as "sterilisation"; which process includes exposing a perishable product to low temperatures over a pre-determined period of time, either in a cold storage facility, refrigerated container and/or a refrigerated space;

"Cold Treatment Markets" means a foreign country market that is subject to special cold treatment requirements;

"container" shall mean standardised intermodal equipment intended for carrying perishable product at sea, on land or in the air, consisting of a large metal, glass or re-enforced plastic box in which several packages can be stowed, and capable of being loaded, stowed and discharged as a unit;

"container number" means the unique code or serial number allocated to an intermodal shipping container in accordance with ISO 6346 (or any international standard replacing same) as presently managed by the International Container Bureau ("BIC");

"**container vessel**" means a vessel designated to carry refrigerated and unrefrigerated containers;

"cooling facility" means a facility designed to maintain an ambient temperature (if applicable), or to reduce the temperature of perishable product from the ambient temperature to the carrying temperature prescribed in the Schedule, and to maintain the latter temperature;

"CTO" means Container Terminal Order;

"data" means electronic representations of information relating to the cold chain;

"data base" means the collection or storage of data relating to the cold chain, in electronic form, from where it may be accessed, reproduced or extracted;

"the Department" means the Department responsible for Agriculture;

"DAT" or **"Delivery Air Temperature"** means the temperature of the air exiting the refrigeration unit;

"de-stuffing" means the unloading of perishable product from a container or other mode of transport, and de-stuffed has a corresponding meaning;

"dunnage" means loose wood, matting or similar material used to secure perishable product in position in the hold of a vessel or in any other mode of transport;

"electronic" means, to do, submit, provide a service or store any information by electronic means and electronically shall have a corresponding meaning;

"electronic service" means such electronic information system as may be indicated by the Board from time to time;

"empty deck test" means the cooling of a cargo space on a vessel or in a container, in the absence of any cargo stored therein, for the purposes of determining its suitability for the temperature management of a perishable product as stipulated by the Board;

"equipment" means all equipment used in respect of a perishable product during handling, storage and transport, including but not limited to temperature recording devices, data loggers, safety apparatus, handling and loading gear;

"EU" means the European Union;

"exporter" means any person who despatches or conveys a perishable product by ship, or other means of transport, out of the Republic or makes any arrangement for the despatch or conveyance of a perishable product out of the Republic, and "export" has a corresponding meaning;

"FBO" means a Food Business Operator registered as such with the Department;

"generic information" means historical information presented or ordered in such a manner that it does not relate to, or disclose the identity or the affairs of any business or person, and may include volumes of any particular perishable product exported during any particular period, the production area, port of shipment, export destination, type, class, count, weight and packaging type;

"GMT +2" is equivalent to South African Standard Time. South Africa is 2 hours ahead of Greenwich Mean Time ("GMT");

"ICT" means Information and Communication Technology;

"information" means information in any form, including, but not limited to, documentary and electronic information that relates to the export of perishable product from the Republic and includes information regarding the identity or the affairs of any business or person and the total volumes and temperatures of any perishable product exported from the Republic;

"information system" means a system for generating, sending, receiving, storing or otherwise processing and disseminating information relating to the cold chain;

"ISO" means International Organization for Standardisation;

"ISPM 15" means the International Standards for Phytosanitary Measures No. 15, being known as "ISPM 15, Regulation of wood packaging material in international trade", developed by the International Plant Protection Convention that addresses the need to treat wood packaging materials (such as pallets, crates and dunnages) used to ship product between countries;

"loading completed" means the point at which a vessel or other mode of transport, having loaded all the perishable product, and or containers, that it is engaged to carry or can physically carry, closes its main hatch covers and/or ensures that all loaded containers are secured;

"logbook" means the document or register, with all pages numbered consecutively, in which particulars of the temperature of the perishable product or the space and all operational details of the refrigeration machinery are recorded at regular intervals;

"m³" means cubic meters;

"m" means meters;

"mm" means millimeters;

"Manifest" shall mean a document containing the information required in terms of this regulation;

"MAP Act" means the Marketing of Agricultural Products Act, 1996 (Act 47 of 1996);

"N-Code" means the numbers and/or letters allocated by the Board for reference purposes to any trade facility granted by the Board to any exporter or cold chain service provider registered with the Board in terms of the Act and these regulations;

"online" means utilising such electronic service as may be indicated by the Board from time to time;

"PBR Right" means a plant breeder's right granted in respect of a variety by the registrar in terms of Plant Breeders' Rights Act, 1976 (Act 15 of 1976), or recognised in any subsequent or other act in force in the Republic;

"**port terminal**" means terminal buildings, surfacing, rail sidings, stacking area, quay side, perishable product handling equipment, cold storage facilities, sheds and other land-based structures used for the loading, storage, cooling, trans-shipment and discharging of perishable product at a port;

"**port terminal operator**" means Transnet Port Terminals, an operating division of Transnet SOC Limited, registration number 1990/000900/30 or any lawful successor in title thereto that has the function of the operation of any port terminal;

"pre-cooled" means the condition of any perishable product and the storage or transportation space, as prescribed in the Schedule;

"PUC" means a production unit code as registered by or with the Department, the Board or any other statutory regulator;

"**RAT**" or "**Return Air Temperature**" means the temperature of the air coming directly off the perishable product;

"refrigerated container" means a shipping container for transporting perishable product, that has its own cooling system;

"Regime Code" means the reference, expressed in letters and numbers, used to identify the carrying temperature and recipe selected by an exporter or cold chain service provider for a particular consignment of perishable product;

"**regulation**" means a regulation made under the Act;

"registration certificate" means a registration certificate of an exporter or a cold chain service provider issued by the board in terms of these regulations;

"representative" shall mean a member, official or employee of the Board acting on a written authorisation of the Board;

"Republic" shall mean the Republic of South Africa, and a reference in these regulations to South Africa shall have the same meaning;

"RH" means relative humidity;

"RRMT" means Refrigerated Road Motor Transport transporting perishable product intended for export;

"satisfactory storage conditions" in relation to a perishable product, shall mean the conditions under which these regulations require such perishable product to be stored prior to export;

"Schedule" means the Carrying Temperature Regimes of Perishable Products for Export Schedule annexed to these regulations;

"**shipping line**" means any person that operates a vessel carrying perishable product loaded at any port to any destination outside the Republic, and a shipping line is a cold chain service provider;

"specialised refrigerated vessel" means a vessel designed to carry perishable product in a refrigerated atmosphere in break bulk or on pallets;

"Special Markets" means any foreign country market that is subject to special export requirements;

"specialised unrefrigerated vessel" means a vessel designated to carry perishable product that is not refrigerated;

"statistics" means aggregated numerical information, relating to the export of perishable product from the Republic, which is compiled and analysed by the Board according to relevant scientific and statistical methodology;

"**stuffing**" means the process of loading perishable product into a container or other mode of transport ready for shipping, and "stuffed" has a corresponding meaning;

"Temperature regime" means, in respect of any perishable product, the applicable carrying temperature regime as specified in the Schedule;

"transportation" means the conveyance of a perishable product in any manner by land, sea or air: and **"transport"** has a corresponding meaning;

"TTT" or **"Time Temperature Tolerance"** shall mean the total length of time for which a perishable product may be left without cooling, and during which time no significant rise in temperature must take place that could lead to any deterioration of such perishable product;

"UCN" means a unique Board reference number or letter that the Board allocates to any exporter and/or cold chain service provider upon the registration of such exporter or cold chain service provider with the Board in terms of the Act and these regulations;

"UPN" means a unique reference number or letter that the Board may allocate to any consignment of perishable product for traceability purposes;

"USDA" means United States Department of Agriculture;

"validation" means the process and procedure adopted by the Board from time to time for the evaluation and/or certification of all aspects of the cold chain in connection with perishable product, and the performance by exporters and cold chain service providers in connection therewith, and "**validate**" shall have a corresponding meaning; and

"website of the Board" means https://ppecb.com.

CHAPTER 2
EXCHANGE OF INFORMATION AND ISSUE OF DOCUMENTS

Use of electronic forms of communication

2 (1) For purposes of these regulations, online and electronic communications may be utilised as may be indicated by the Board from time to time.

(2) Any form that is required to be submitted to the Board in terms of these regulations shall, subject to the provisions of regulation 6, be completed online and submitted electronically.

Performance by non-electronic means

3 (1) Where any regulation requires that something be done electronically, or online (including the submission of any form to the Board), this shall not preclude the Board from requiring any person to do or perform such thing in writing or in a non-electronic form, or in any other manner or form as the Board may deem fit.

(2) Where any regulation requires the Board to issue any certificate or do anything electronically, or online, this shall not preclude the Board from doing so in non-electronic form or in any other manner or form as the Board may deem fit.

Change of address

4 Where these regulations provide for physical, postal or email addresses for the Board, this shall not preclude the Board from providing for additional and/or or substituted addresses by way of notice on the website of the Board.

CHAPTER 3
ROLE PLAYERS

Registration of Exporters

5 (1) Any exporter intending to export any perishable product to a place outside the Republic shall, prior to exporting any such perishable product, apply online to the Board, for its registration by the Board as an exporter and for the allocation to it of a UCN and the issue of an electronic registration certificate.

(2) Every application addressed to the Board in terms of sub-regulation (1) shall be made online by completing an electronic form that shall contain such information as required by the Board, and the Board may call upon the applicant to furnish any further information that the Board deems to be necessary.

(3) After consideration of an application in terms of sub-regulation (2) together with any further information that may be required by the Board, the Board may register such applicant as an exporter and allocate such exporter a UCN number and issue it with an electronic registration certificate.

(4) The Board may, on an application by an exporter online that has discharged its liabilities to the Board, cancel the registration of such exporter by issuing to the exporter an electronic notice of de-registration.

Obligations of Exporters and the Board for the export of perishable products

6 Whenever the Board deems it necessary in terms of section 10(e) of the Act to arrange port facilities and shipping space for the export of perishable products –

(a) the Board may require any exporter registered with the Board to lodge a guarantee with the Board designed to defray the expenses referred to in section 14 of the Act; and

(b) the Board shall allocate all shipping space for perishable products in such manner as to ensure that each exporter of such perishable products receives a fair share of the shipping space available.

Appointment of Agents by Exporters

7 (1) An exporter registered with the Board in terms of regulation 5(3) may appoint an agent or agents, which may either be an exporter or a cold chain service provider, to perform one or more of the acts required of such exporter as set out in the Act and these regulations.

(2) Where any act to be performed by the agent appointed in terms of sub-regulation (1) falls within the definition of an exporter as set out in the Act, or within the definition of a cold chain service provider as set out in these regulations, such agent shall at the time of such appointment be registered with the Board as an exporter and/or a cold chain service provider (as the case may be) and hold a UCN, and be in good standing with the Board.

(3) Appointments envisaged in sub-regulation (1) to perform any functions shall be made by the exporter nominating such agent on an online electronic form that contains such information as required by the Board by way of using the Board's electronic service, specifying the nature and extent of such appointment, and by the agent accepting such nomination online by way of a form that contains such information as required by the Board, in the same manner.

(4) The provisions of the Act and the regulations, including but not limited to any penalty that may be imposed for any contravention thereof, shall at all times apply to any agent performing an act pursuant to an appointment in terms of sub-regulation (1) read with sub-regulation (3), in the same manner and to the same extent as if that act had been performed by the exporter that made the appointment.

(5) Any exporter appointing an agent shall, together with the agent so appointed, be jointly and severally liable with the agent as co-principal debtor *in solidum* to the Board for all fees, charges and expenses that may be incurred by such agent with the Board.

Registration of Cold Chain Service Providers

8 (1) Any cold chain service provider performing services in respect of the cold chain in respect of any perishable product intended to be exported to a destination outside the Republic shall, before performing any such service, apply online to the Board by way of an online electronic form that contains such information as required by the Board, for its registration by the Board as a cold chain service provider and for the allocation to it of a UCN and the issue of an electronic registration certificate.

(2) Every application addressed to the Board in terms of sub-regulation (1) shall contain such information as required by the Board, and the Board may call upon the Applicant to furnish any further information that the Board deems to be necessary.

(3) After consideration of an application in terms of sub-regulation (2), together with any further information that may be required by the Board, the Board may register such applicant as a cold chain service provider and allocate such cold chain service provider a UCN and issue it with an electronic registration certificate.

(4) The Board may, on an application by a cold chain service provider that has discharged its liabilities to the Board, cancel the registration of such cold chain service provider by issuing to the service provider an electronic notice of de-registration.

Appointment of Agents by Cold Chain Service Providers

9 (1) A cold chain service provider registered with the Board in terms of regulation 8(3) may appoint an agent or agents to perform one or more of the acts required of such cold chain service provider as set out in the Act and the regulations thereto.

(2) Where any act to be performed by the agent appointed in terms of sub-regulation (1) falls within the definition of cold chain service provider as set out in this regulation, such agent shall at the time of such appointment be registered with the Board as a cold chain service provider, hold a UCN and be in good standing with the Board.

(3) Appointments envisaged in sub-regulation (1) to perform any functions shall be made by the cold chain service provider nominating such agent online by way of an online electronic form that contains such information as required by the Board, using the Board's electronic service, specifying the nature and extent of such appointment, and by the agent accepting such nomination by way of a form that contains such information as required by the Board, in the same manner.

(4) The provisions of the Act and the regulations, including but not limited to any penalty that may be imposed for any contravention thereof, shall at all times apply to any agent performing an act pursuant to an appointment in terms of sub-regulation (1) read with sub-regulation (3), in the same manner and to the same extent as if that act had been performed by the cold chain service provider that made the appointment.

(5) Any cold chain service provider appointing an agent shall, together with the agent so appointed, be jointly and severally liable with the agent as co-principal debtor *in solidum* to the Board for all fees, charges and expenses that may be incurred by such agent with the Board.

***Application for trade facility by Exporters and Cold Chain Service Providers and* Agents appointed by them**

10 (1) Every exporter or cold chain service provider applying for registration as such with the Board, shall prior to transacting with the Board, simultaneously apply online to the Board for the opening of a trade facility and an allocation of a N-Code, that contains such information as required by the Board.

(2) Any exporter or cold chain service provider appointing an agent or agents to perform any function required of such exporter or cold chain service provider, shall indicate on the online electronic form, whether the fees, charges and expenses incurred with the Board by the agent so appointed in connection with the performance by the agent of such functions are to be debited to the trade facility held with the Board by the exporter or cold chain service provider making such appointment, alternatively to a trade facility held by the agent so appointed.

(3) Any agent accepting an appointment, in circumstances where the appointment, indicates that the fees, charges and expenses to be incurred with the Board by such agent are not to be debited to the trade facility held with the Board by the exporter or cold chain service provider making the appointment shall, if such agent does not already have a trade facility and N-code in its own name, simultaneously with the completion of any online electronic form determined by the Board, make application to the Board for the opening of a trade facility and the allocation to it of a N-code, by way of completion of an online electronic form that contains such information as required by the Board.

(4) Any request to the Board for the performance of any service shall be made by completing and submitting a form that contains such information as required by the Board.

Exporters and Cold Chain Service Providers to furnish updated particulars and information

11 Every exporter and cold chain service provider registered with the Board in terms of the Act and these regulations shall, in the event of there being a change in the particulars or information contained in any form submitted by such person to the Board, cause such new or changed particulars or information to be immediately updated online in the records of the Board.

CHAPTER 4
EXPORT INFORMATION AND DATA REQUIREMENTS

Export information to be furnished at the time of booking with the Board

12 Every exporter and cold chain service provider, or their nominated agent, shall furnish the Board electronically, not less than 24 hours prior to a perishable product being shipped or stuffed (whichever is the sooner), particulars of all perishable product intended for export by such exporter, cold chain service provider or their nominated agent, including an export notification with the following mandatory fields that shall be completed being: Exporter FBO registration number (if applicable); loading date and loading time; premises (loading points); perishable product type; destination/s (being discharge, trans-ship and final); temperature regime, ventilation requirement; load port, shipping line and vessel name (or other mode of transport); bill to party; Board UCN; and any special requirements (if applicable).

Export information to be furnished at the time of stuffing

13 (1) Every exporter and cold chain service provider of perishable products or their nominated agent, shall identify the perishable product so exported, and if applicable by reference to the –

(a) PUC;

(b) orchard or vineyard identification number.

(c) type of the perishable product;

(d) class;

(e) packing/packaging;

(f) vessel name and voyage number (or other mode of transport);

(g) ports/points of discharge including the final point of discharge;

(h) country (final destination) intended for selling (where known);

(i) volume and weights; and

(j) any other relevant information.

(2) Every exporter and cold chain service provider, or their nominated agent, shall furthermore furnish to the Board such further information as the Board may require in respect of the perishable product that an exporter intends to export or in respect of which a cold chain service provider has rendered services, which information shall be furnished within such period as the Board may determine for each export transaction.

(3) If the information referred to in sub-regulation (1) is furnished to the Board by an exporter or cold chain service provider, or their nominated agent, after the close of bookings for the vessel on which such exporter intends to export, the Board may refuse to accept such perishable product for export.

(4) The Board may, if it deems this necessary in the interest of exporters, at any time refuse to accept a particular perishable product for export.

(5) The Board shall not exercise the power of refusal in terms of sub-regulation (4) unless each exporter of the perishable product concerned has been given three days prior notice of the Board's decision and of the date on which such decision will come into effect: Provided that, if owing to a circumstance over which the Board has no control, such notice cannot be given, the Board may exercise such power without giving such notice.

Operational data requirements at the stuffing stage

14 Exporters and cold chain service providers or their agents shall furnish the Board, online, and not less than 24 hours prior to the perishable product being exported, with the following electronic information in such format as stipulated by the Board:

(a) **Intake data**: Perishable product type, date of intake, weight, passed for export status, perishable product totals, destination, perishable product temperature and specification, inspection date. The intake data supplied by the exporter or cold chain service provider to the Board shall always reconcile back to the export notification.

(b) **Storage data**: The position of the perishable product in the cold storage facility, the age of the perishable product, the period for which the perishable product has been subjected to pre-cooling, the temperature of the perishable product and the cold storage facility temperature, passed for export status (where applicable), perishable product type, consignment totals and any other information as may be required by the Board.

Loading data for all trans-shipments (local and export)

15 The exporter or cold chain service provider (as the case may be) or their agent shall electronically provide detail of all trans-shipment ports in the Republic and, where known, all places of trans-shipment in other countries.

Loading data for refrigerated container shipments

16 The following mandatory fields shall be completed by the exporter or cold chain service provider, or their agent in such format as stipulated by the Board: Total contents in weight and/or the number, (whichever is applicable), the container number (if applicable), the perishable product type, variety, class, the storage and loading temperature regime, loading time, container set point and ventilation setting (where applicable), temperature probe readings (where applicable), carrying temperature, exporter booking number and the shipping line reference number, vessel name, discharge ports, probe readings and seal number (where applicable), packaging type and inspection detail (including where applicable, any previous rejections and re-inspections), and any other information as may be required by the Board.

Loading data for specialised refrigerated vessels

17 The following mandatory fields shall be completed by the exporter, cold chain service provider, or their agent in such format as stipulated by the Board: Total contents in weight and/or number (whichever is applicable), vessel name, perishable product type, variety, class, hatch/deck positions, storage and loading temperature, carrying temperatures and specifications, deck set points and ventilation setting, loading times, discharge ports, temperature probe readings (where applicable), deck sealing numbers (where applicable), packaging type, status of inspection detail (including, where applicable any previous rejections and re-inspections) and any other information as may be required by the Board.

Loading data for RRMT

18 The following mandatory fields shall be completed by the exporter or cold chain service provider, or their agent, for the loading of RRMT in such format as stipulated by the Board: Loading totals indicating the number of cartons, the total weight in kilograms and the number of pallets, vehicle registration particulars, perishable product type, variety, class, discharge points, storage loading and carrying temperatures and specifications, set points, loading times, en route carrying temperatures and specifications, packing time, date and time of discharge, inspection detail (including, where applicable, any previous rejections and re-inspections) and any other information as may be required by the Board.

Loading data for airfreight

19 The following mandatory fields shall be completed by the exporter or cold chain service provider, or their agent in such format as stipulated by the Board: Loading totals indicating weight and/or number (whichever is applicable), flight number, perishable product type, variety, class, loading skid/container number (where applicable), storage and loading temperature, carrying temperature, ventilation, loading times, discharge ports, seal number (where applicable), packaging type, inspection detail (including, where applicable, any previous rejections and re-inspections) and any other information as may be required by the Board.

Data required at the transportation stage

20 (1) Where perishable product is exported by sea then in such an instance a Manifest of shipment is required to be provided by the exporter and /or cold chain service provider, or their agent, to the Board. Where perishable product is exported by air the exporter and/or cold chain service provider, or their agent, shall provide the Board with an air waybill. In the instance of RRMT a Manifest of shipment shall be provided by the exporter and/or cold chain service provider, or their agent, to the Board.

(2) Every exporter or cold chain service provider (as the case may be) shall furnish the Board electronically (in such format and manner as the Board may require) with en route management data, including trans-shipment data, and shall report to the Board electronically every 24 hours, before 12h00 GMT+2.

(3) The information required to be provided by the cold chain service provider shall be in accordance with such instruction as may be issued by the Board, which may include the set point (in degrees centigrade), ventilation setting, DAT (in degrees centigrade), temperature regime, RAT (in degrees centigrade), cold treatment probe readings (where applicable), date and time of loading, container number (if applicable), vessel name, hatch position (if applicable), gas readings (if applicable) and type of perishable product.

(4) An exporter or cold chain service provider or their agent shall, as soon as they become aware of any breach of security to the Board's ICT system, immediately report such security breach to the Chief Executive Officer, in writing.

(5) All information published by the Board as to the volumes of perishable product exported from the Republic in any particular period is issued without any warranty by the Board as to correctness thereof.

(6) Every shipping line, being a cold chain service provider accepting perishable product in its shipping space, shall without delay furnish to the Board electronically a non-negotiable copy of the bill of lading and/or Manifest for such perishable product and the bill of lading and/or the Manifest so furnished shall be deemed to be sufficient evidence that such shipment of a perishable product has taken place.

(7) Where perishable product is conveyed by a mode of transport other than a shipping line, the cold chain service provider or its agent, shall without delay electronically furnish the information provided for in sub-regulation (6), and the bill of lading and/or the Manifest so furnished in regulation 29(a) shall be deemed to be sufficient evidence that such shipment of a perishable product has taken place.

(8) Every exporter and cold chain service provider or their agent shall ensure that all perishable product has passed the required quality and/or phytosanitary inspections prior to proceeding for cold treatment.

CHAPTER 5

PORT (OPERATIONS AND DATA INTERCHANGE)

Part A

Refrigerated Containers

Role of the Port Terminal Operator

21 The Port Terminal Operator shall –

(a) ensure that the Board is afforded access to port terminals at all times;

(b) on arrival of a refrigerated container at the entrance to the port, ensure that the container is equipped with a power cable.

(c) immediately after arrival of a refrigerated container at the port terminal, connect the container to a power supply and confirm that same is in working order, and check that the set point temperature and ventilation setting is correct as set in the port notification and/or booking documents.

(d) conduct an inspection, every four hours, of the current stock of refrigerated containers, so as to ensure that all refrigerated containers are connected to functional electrical power points, and at the same time check the status of temperature settings, alarms, ventilation and the overall condition of all such containers, and report any deviation and/or non-compliance without delay to the Board and the applicable shipping line;

(e) at the time of loading of a refrigerated container onto a vessel, unplug the container from the power supply and move it to the vessel without delay; and

(f) ensure that, during any interruption in the loading of a vessel, refrigerated containers are at all times re-connected to a power supply.

Part B

Unrefrigerated Containers

Role of the Port Terminal Operator

22 Where general purpose containers have special requirements the port terminal operator must comply with such requirements.

Part C

Adequate operational infrastructure

Requirements of the Port Terminal Operator

23 The port terminal operator shall –

(a) ensure that there is sufficient road infrastructure to enable efficient and effective access to and from the port and for the performance of all required operations in the port and port terminal;

(b) make berths available for all vessels on which perishable product is to be conveyed;

(c) provide sufficient functional refrigerated container plug-in points to enable containers delivered to the port to be connected to a power supply, and also ensure that there are safe and secure walkways; and

(d) provide and maintain sufficient suitable loading equipment for the off-loading of containers at the port terminal, the storage and movement thereof, and for the loading of containers onto vessels.

Part D

Electronic Communication of Information

Information to be furnished by the Port Terminal Operator

24 (1) The port terminal operator shall electronically furnish the Board with the following information:

(a) The anticipated arrival at a port of any vessel intended for the conveyance of perishable product, which information must be furnished at such intervals and such time before the arrival of any vessel at a port as may be required by the Board in writing from time to time.

(b) The date and time that any perishable product enters a port, together with the particulars of the vessel upon which it is intended to load the perishable product, such information to be furnished on the same day that such perishable product enters the port.

(c) The address and position of all perishable product within the port or port terminals, to be furnished daily, together with any movements of the perishable product within the port or port terminal, for which purpose the port terminal operator shall ensure that it maintains a system enabling it at all times to track the movements of all perishable product into, out of, and within, the port or port terminal.

(d) A berthing schedule, to be updated daily.

(e) A schedule, to be furnished daily, of export container stack dates and times and in addition real time notifications of any changes or alterations thereto.

(f) A report, to be furnished daily, of perishable product within port terminals.

(g) A report, to be furnished daily, of the temperature settings, alarms, ventilation setting/s and overall condition of each refrigerated container in the port terminal.

(2) The port terminal operator shall immediately furnish a notification electronically to the Board and to the shipping line operating the vessel on which the effected perishable product is intended to be conveyed, of any temperature deviations, alarms, structural damages and incorrect ventilation settings.

CHAPTER 6

SHIPPING LINE

Part A

Equipment

Equipment to be supplied by the Shipping Line

25 A shipping line shall –

(a) ensure that containers supplied are registered, in a satisfactory condition and at all times are clean, dry, free from all odours, rust free and in all respects structurally and technically in a proper working order;

(b) maintain and keep in proper working order such computers, printers and other appropriate equipment, so as to ensure that all temperature recordings relating to all perishable product loaded and conveyed on any vessel are stored and capable of being printed, in such manner as may be required by the Board from time to time in writing; and

(c) ensure that all hand-held devices/equipment are compatible with containers so as to ensure that accurate data is capable of being recorded, stored and conveyed in such manner as may be required by the Board from time to time in writing.

Part B

Shipping Manifest

Shipping Line Requirements

26 Every shipping line operating a vessel upon which perishable product has been loaded or is being conveyed shall furnish to the Board, electronically –

(a) a shipping Manifest reflecting all perishable product loaded onto such vessel, such Manifest to include the name of the shipping line, shipment reference number, container number, temperature regime, set point, discharge port, cold treatment settings and controlled atmosphere settings, such information to be furnished to the Board within 24 hours of the departure of the vessel with the perishable product; and

(b) particulars of all perishable product off-loaded from any vessel at any port or foreign port, such information to include such particulars as may be required by the Board in writing from time to time, and which shall be furnished to the Board within such time of the perishable product having been off-loaded from any such vessel as the Board may require.

Part C

Downloads of temperature recordings

Shipping Line Requirements

27 Every shipping line operating a vessel upon which perishable product has been loaded or is being conveyed shall furnish to the Board electronically –

(a) downloads of all temperature recordings measured by recording devices with regard to the temperature of all perishable product, which obligation shall commence upon loading and end when the perishable product is off-loaded from the vessel, which downloads shall be furnished daily or at such other intervals as the Board may require from time to time in writing;

(b) a download of the temperature recordings for each container prior to loading onto a vessel and at any other times, or at such intervals as the Board may require from time to time in writing; and

(c) a report indicating the container number, set point, ventilation setting, temperature probes, (including USDA probes if applicable), the delivery and return air temperatures prior to loading of each container onto a vessel and at any other times, or at such intervals as the Board may require from time to time in writing.

CHAPTER 7

CERTIFICATION OF EQUIPMENT, HANDLING AND STORAGE FACILITIES AND MODES OF TRANSPORT

Part A

General

Certification by the Board

28 (1) All equipment, handling and storage facilities and modes of transport (including but not limited to packing facilities, cold storage facilities, container depots, ambient facilities, port terminal facilities, road and rail trucks, aircraft, containers and vessels) used for the handling, cooling, storage and transport of refrigerated (including pre-cooled) and non-refrigerated perishable products destined for export, shall be subject to approval thereof by the Board and, except in the case of rail trucks and aircraft, the issue of an electronic registration certificate by the Board.

(2) The Board shall maintain, on an electronic database, a register of all equipment, handling and storage facilities and modes of transport as envisaged in sub-regulation (1), and shall certify all facilities, equipment and modes of transport at determined intervals.

(3) In deciding whether or not to approve equipment, handling and storage facilities and modes of transport in terms of sub-regulation (1), the Board may take into consideration any certificate of authority issued by any third party relating to the reliability, insulation, circulation, refrigerating capacity and the cleanliness and suitability of such equipment, handling and storage facilities or mode of transport.

(4) If the Board is of the opinion that any certificate of authority issued by any third party for equipment approved and certified by the Board for a handling and storage facility, or a mode of transport, is no longer valid or reliable, the Board may at any time withdraw the Board's approval and registration certificate in respect of such equipment, handling and storage facility or mode of transport.

(5) If the Board considers that any requirement of the Board, or these regulations, in respect of the control or management of approved and certified equipment, a handling and storage facility, or a mode of transport, is not being complied with, the Board may at any time withdraw its approval and registration certificate in respect of such equipment, handling and storage facility or mode of transport.

(6) The responsibility to ensure that all equipment, handling and storage facilities and modes of transport are certified by the Board, and are at all times compliant with Board requirements, shall at all times remain with the exporter and/or cold chain service provider.

Good management practices

29 (1) All equipment, handling and storage facilities and modes of transport shall comply with good management practices, to ensure maintenance of perishable product condition, and –

(a) all temperature specifications, and the control, measurement, recording or logging of temperatures, shall be in degrees centigrade;

(b) all storage, transport and handling facilities to be used for the storage, handling and transport of perishable product shall (where applicable) be equipped with accurate automatic recording devices and sensors to record DAT, RAT and perishable product temperatures;

(c) all temperature control devices shall be set to control chilled perishable product in the delivery air stream and the DAT (excluding RRMT's) shall be between minus 0.5˚C to 0.5˚C from the temperature set point for the storage or transport of chilled perishable product;

(d) the RAT shall (where applicable) be at a temperature colder than the temperature set point in a storage, transport mode or handling facility used for the storage and transport of frozen perishable product;

(e) an accurate electronic logbook or mechanical record of temperatures and such other records as the Board may, in writing, require from time to time to be maintained, shall be so maintained in each cold storage facility approved and certified by the Board, and shall at all times be available for perusal by representatives of the Board and/or the Department; and

(f) the recording of temperatures shall take place under such conditions and at such times as the Board may from time to time require.

(2) The Board shall determine the quantity of a perishable product destined for export that may be stored in a given space in a cold storage facility and/or facility that has been approved and certified by the Board.

(3) No perishable product of any particular type or class shall, without the consent of the Board, be placed in a cold storage facility and/or handling facility that has not been approved and certified by the Board for that particular class or type of perishable product.

(4) The method of handling and storage of a perishable product, in and out of a Board approved and certified cold storage facility, shall be determined by the Board.

(5) A representative of the Board and/or the Department shall at all times have access to any premises, facility and/or equipment utilized in the storage of perishable product intended for export, and may request and inspect records relating to such premises, facility, equipment and/or such perishable product.

Part B

Cold Storage Facilities

Certification of cold storage facilities

30 (1) All cold storage facilities intended to be used for and/or in connection with the export of perishable product shall be inspected annually by the Board pursuant to a request submitted to the Board using an online electronic form that contains such information as required by the Board on such dates as may be required by the Board from time to time, taking into consideration the type of perishable product to be stored therein.

(2) If the Board deems that the cold storage facility has met the required minimum specifications and requirements for the storage of perishable products intended for export, then the Board shall certify the cold storage facility as being suitable for the storage of perishable product intended for export.

(3) The Board shall issue a cold storage facility registration certificate in respect of every cold storage facility that has been approved by the Board.

(4) The Board shall, in respect of all cold storage facilities, maintain an electronic database of approvals, rejections and registration certificates that have been issued by the Board.

(5) The Board shall, when considering the approval and certification of a cold storage facility used or intended to be used for or in connection with the export of a perishable product, take into consideration both South African and International Food Safety and Traceability Regulations and Requirements pertaining to storage, handling equipment and systems.

(6) If any material change or alteration has taken place in a cold storage facility subsequent to an inspection by the Board, but prior to the annual anniversary date of such inspection, the exporter or cold chain service provider (as the case may be) shall make a new application to the Board for the approval and registration of that cold storage facility, and such cold storage facility shall be re-inspected by the Board which shall, if the cold storage facility meets the required minimum specifications, approve such cold storage facility and issue a new registration certificate.

Requirements for cold storage facilities

31 (1) All spaces to be used for the storage or transport of perishable products intended for export shall –

(a) be clean and free from any foreign odours or taints or any material that may cause an odour or taint contamination of the perishable product;

(b) maintain the temperature applicable to the perishable product specification in the Schedule;

(c) maintain an average RH applicable to the perishable product specification in the Schedule; and

(d) be subject to verification of compliance at the request of a representative of the Board.

(2) The area surrounding the exterior of a cold storage facility shall be free from excessive dirt, dust and standing water, and easy access shall at all times be afforded to the facility.

(3) The doors of all cold storage facilities shall –

(a) open easily from the inside, even when the door is locked from the outside;

(b) be fitted with an appropriate safety device, so that if the door is locked from the outside, then the door shall be capable of being opened with ease from the inside by means of a handle, lever or other means;

(c) seal properly and operate without the need for the exertion of excessive force;

(d) not be warped, deformed or damaged in any way; and

(e) be fitted with a curtain (plastic strips or functional air curtain) to the inside and/or outside of the door openings, except that where the cold storage facility opens into an airlock area, in which instance such a curtain shall not be essential.

(4) All materials used to cover perishable product whilst in storage, during cooling and or pre-cooling, shall be clean, dry, odourless and undamaged.

(5) All cold storage facilities shall –

(a) at all times be clean, free from rust and in a hygienic state;

(b) when used for the storage of chilled perishable product, have a control thermostat sensor installed in the delivery air stream;

(c) when containing fruit that has passed phytosanitary inspection for a particular destination, ensure that such fruit is stored at least one meter away from any other fruit that has been passed for another destination;

(d) control temperature through the use of either a thermostat or a pressure switch or similar suitable device;

(e) when used for the storage of frozen perishable product, be equipped with a control thermostat sensor installed in the return air stream;

(f) be equipped with automatic tamper proof temperature recorders for recording DAT for chilled perishable product and RAT for deep frozen perishable product, and with product temperature monitoring sensors;

(g) be fitted with insulation that is appropriate for perishable product (of the correct thickness and type and which is dry, undamaged and properly sealed) in order to form an efficient temperature barrier, and such insulation shall be protected by a water vapour barrier (cladding);

(h) be fitted with evaporator coils with a drip tray, and drain pipes shall be fitted with water traps;

(i) ensure that evaporator drip trays and drainpipes are fitted with a heating system, to prevent defrost water from freezing;

(j) be equipped with sufficient lighting, which must also be sufficient to enable a Board representative to read devices and evaluate the perishable product;

(k) have an adequate pest control system in place;

(l) implement measures to prevent the entry of birds into the facility;

(m) not make use of diesel forklifts inside the cold storage facility or for the loading of containers;

(n) not make use of gas forklifts without scrubbers or purifiers inside a cold storage facility, airlock and/or for the loading of containers. The Board representative shall, on request, be provided with verification of scrubbers or purifiers;

(o) when storing perishable product for cold treatment consignments, maintain accurate records of DAT as well as product temperature readings;

(p) when storing perishable product other than cold treatment consignments, maintain accurate records of DAT; and

(q) when storing perishable product for deep frozen storage, maintain accurate records of DAT and RAT.

(6) All temperature sensors in cold storage facilities utilized for the storage or cold treatment of perishable product shall be calibrated annually by an accredited cold chain service provider acceptable to the Board, which calibration shall be undertaken on such dates as may be required by the Board from time to time.

(7) The following requirements are applicable to all cold storage facilities equipped with product temperature monitoring sensors:

(a) Every forced air cooling tunnel within a cold room shall be equipped with a minimum of two product temperature sensors on the inside of the tunnel.

(b) Every forced air cooling tunnel shall be equipped with at least one product temperature sensor on the outside of the tunnel.

(c) Where pallets are stacked three high, four product temperature sensors are required on the inside of each tunnel.

(d) Product temperature sensor cables shall be long enough to reach the furthest point of the tunnel.

(e) Where more than three forced air cooling tunnels are situated in a single cold room, there shall be at least one product temperature sensor inserted in the face/outer side for every three tunnels.

(f) Each cold room or force air cooling tunnel shall be equipped with a minimum of one air temperature sensor recoding DAT and one air sensor temperature recording RAT.

(g) All temperature sensors must be marked correctly and correspond to the electronic monitoring system. The recommended sensor specification probe shall be made from surgical steel with a sheath length of a maximum of 50mm and thickness of a maximum of 2.3mm.

(8) Every cold storage facility shall maintain temperature records that are automatically recorded hourly in either electronic or mechanical format.

(9) No operation shall result in an increase in the protocol temperature of a perishable product.

(10) Perishable product stored in any given space or any certified cold storage facility shall not exceed the total design refrigeration capacity of such space or cold storage facility.

Part C

Facilities for the Cleaning, Preparation and Storage of Empty Containers

Requirements for facilities utilized for the cleaning, preparation and/or storage of empty containers

32 (1) All facilities intended to be used for the cleaning, preparation and/or storage of cleaned and prepared empty containers to be utilized in connection with the export of perishable product may be inspected annually by the Board pursuant to a request submitted to the Board using a form that contains such information as required by the Board, on such dates as may be required by the Board from time to time.

(2) If the Board determines that the facility has met the required minimum specifications for the cleaning, preparation and/or storage of cleaned and prepared empty containers to be utilized for the conveyance of perishable products intended for export, then the Board shall certify the facility as being suitable for such purpose.

(3) The Board shall issue a registration certificate in respect of every such facility that has been approved by the Board.

(4) The Board shall, in respect of all such facilities, maintain an electronic database of approvals, rejections and the issue of registration certificates.

(5) The Board shall, when considering the approval and certification of a facility as envisaged in sub-regulation (1), take into consideration both South African and International Food Safety requirements.

(6) If any material change or alteration has taken place in such facility subsequent to an inspection by the Board, but prior to the annual anniversary date of such inspection, the operator of such facility or cold chain service provider (as the case may be) shall make a new application to the Board for the approval and registration of that the facility, and such facility shall be re-inspected by the Board, and if the facility meets the required minimum specifications, the Board shall approve such facility and issue a new registration certificate.

Part D

Refrigerated Road Motor Transport (RRMT)

Requirements for refrigerated road motor transport

33 (1) All RRMT used to transport perishable product intended for export shall be approved annually by the Board and shall, before the loading of any perishable product, be subjected to further selective inspections by a representative of the Board.

(2) The following requirements shall apply to all refrigerated road motor transport being that –

(a) vehicles shall not be externally or internally damaged and or delaminated in such a manner that the integrity of the insulation of the refrigerated perishable product is affected;

(b) insulation shall be appropriate for the transportation of perishable product (adequate thickness and type, dry, undamaged and properly sealed) in order to provide an efficient temperature barrier, and shall be protected by a water vapour barrier (cladding);

(c) the refrigeration unit shall have sufficient capacity to maintain the desired temperature of the perishable product;

(d) doors shall seal correctly and the closing mechanism shall be in a proper working order;

(e) the exterior and interior of the vehicle shall be clean, dry and free from any odours or taints;

(f) insulation protective plating shall be properly fitted and adequately sealed;

(g) the refrigeration unit shall be clean and there shall be no oil leaks;

(h) the cooling unit panels and doors shall be intact;

(i) the insulated trailer box shall be fitted with a false bulkhead at the cooling unit end;

(j) the vehicle shall be fitted with a permanently mounted temperature recorder;

(k) the insulation and refrigeration system shall be designed in such a manner that the desired humidity for the specific perishable product is maintained;

(l) the evaporator shall be fitted with drainage that leads the defrosted water to the outside of the RRMT; and

(m) the chassis of all motor transport shall bear a valid registration number (VIN/chassis identification number).

(3) The following requirements shall apply to temperatures and temperature recording in respect of all refrigerated road motor transport:

(a) DAT (in the case of chilled perishable product) and RAT (in the case of deep frozen perishable product) shall be recorded mechanically or electronically, either continuously or at a minimum interval of one temperature recording per hour.

(b) Temperature records shall be saved and retained for a period of at least 5 years and made available on request to a representative of the Board.

(c) The following requirements shall apply to all temperature recorder and temperature control devices being –

(i) an external permanently mounted thermo-couple box shall be fitted;

(ii) the lid shall indicate "*delivery air temp*" – Blue and "*return air temp*" - Red; and

(iii) with regard to the delivery air thermo-couple class type "*T*" male plug –

(aa) it shall be fitted to one end and the sensing part to the other end of the thermo-couple wire;

(bb) the sensing end of the wire is to be mounted internally in the evaporator "*delivery air*" stream;

(cc) the plug and sensing wire ends are both to be marked in blue; and

(dd) the thermo-couple wires shall extend a minimum length of 500mm out of the thermo-couple box; and

(iv) with regard to the return air thermo-couple class type "*T*" male plug –

(aa) it shall be fitted to one end and the sensing part to the other end of the thermo-couple wire;

(bb) the sensing end of the wire is to be mounted internally in the evaporator "*return air stream*";

(cc) the plug and sensing wire ends shall both be marked in red; and

(dd) the thermo-coupled wire with the type "*T*" male plug fitted to one end and at which the sensing end is mounted internally in the evaporator "return" air stream, the sensor wire to be marked or tagged in red at the plug end; and

(v) the temperature recorder and control sensor shall be positioned in the delivery air stream for chilled product.

(4) The accuracy of temperature recorder and temperature control devices shall be verified by way of inspections conducted by the Board, and the following procedure shall apply when a cooling unit is inspected:

(a) The set point shall be set at 0.0˚C.

(b) If the unit is fitted with the option of "*delivery*" and "*return*" air control, the system shall, for the purposes of the test, be set to control on DAT, either by way of a manual change-over switch or electronically.

(c) The change-over switch shall be clearly marked "*chilled*" and "*frozen*".

(d) The unit shall be operational during the inspection and shall have been continuously operational for at least three hours prior to the inspection process being commenced.

(e) The DAT shall be maintained between minus 1.0˚C and 2.0˚C for the test period.

(f) The RAT shall not exceed 5.0˚C.

(5) The following requirements shall apply to all temperature recorders:

(a) The temperature recorder shall be kept clean, in perfect working order and shall (where applicable) be supplied with paper at all times.

(b) The recorder shall record the temperature, date and time at least once every hour.

(c) All printouts from temperature recording apparatus shall be clearly legible.

(6) The Board may, unless specifically required to do so by agreement or by law, take international standards into consideration in determining the suitability of equipment and/or facilities.

Part E

Non-Refrigerated Road Motor Transport and Aircraft

Requirements for non-refrigerated road motor transport and aircraft

34 Non-refrigerated road motor transport or aircraft (including equipment) shall be up to such standards as required by the Board and may, during the loading of the perishable product, or while the perishable product is in process, be subject to a selective inspection and validation by a representative of the Board and must be such that –

(a) all loading surfaces are clean and dry;

(b) panels are not damaged;

(c) tarpaulins are clean and undamaged with sufficient measures in place so as to ensure that they are adequately secured;

(d) perishable product is completely and adequately covered to protect it against the elements, and so as to minimise temperature variations;

(e) the chassis of all motor transport shall bear a valid registration number (VIN/chassis identification number); and

(f) all cargo containers, unit load devices or skids shall, where applicable, bear the appropriate registration number.

Part F

Specialised Refrigerated Vessels

Requirements for specialised refrigerated vessels

35 (1) The Board shall ensure that all equipment and facilities used for the handling, storage and transport of perishable product on specialised refrigerated vessels, to all destinations, comply with South African Standards, so as to ensure that the condition of perishable product is maintained, and to support food safety, hygiene, traceability and phytosanitary requirements.

(2) The Board may, unless specifically required to do so by agreement or by law, for the purposes of sub-regulation (1), take international standards into consideration in determining the suitability of equipment and/or facilities.

(3) All equipment used shall be subject to registration, inspection, approval and certification by the Board, such certifications to be based on an inspection or validation procedure based on risk assessment, as determined by the Board from time to time.

(4) The following requirements shall apply to specialised refrigerated vessels on which perishable product is transported:

(a) All cold storage spaces shall be pre-cooled to a RAT of minus 0.5˚C for chilled perishable product and minus 18˚C for deep frozen perishable product, for a minimum period of 48 hours prior to the inspection of the vessel, of which the last 24 hours of the said 48 hours shall be on temperature.

(b) For chilled perishable produce the RAT of all spaces shall be maintained between minus 1.0ºC to 0.0ºC for the last 24 hours.

(c) The general condition of all holds shall be clean and dry with no traces of any fungal growth, flaking rust and paint, rodent infestation, droppings or any odour or taint.

(d) Deck covers shall seal properly and insulation shall be intact, dry and properly affixed to keep heat leakage into the refrigerated spaces to a minimum.

(e) All gaskets, seals and insulation shall be in good condition.

(f) Floor gratings shall be in good physical condition, fit properly, be of the correct construction to allow for the free movement of the loading and unloading of perishable product, efficiently carry the perishable product mass, and allow sufficient air circulation for effective cooling of the perishable product.

(g) Air ducting and return air entrances and spaces shall be clean and allow unobstructed air flow to and from the perishable product.

(h) Deck heights shall not be less than 2.2m, or alternatively with the consent of the cold chain service provider the top layer of pallets may be broken down so as to permit air circulation at the return air grid.

(i) All fans shall be operational with decks closed during the Board inspection.

(j) All pallet boards shall be sturdy and properly mounted.

(k) Lighting shall be adequate and all lights have undamaged protective covers.

(l) Air bags used during the loading and securing process of the perishable product shall be of sufficiently good quality so as to be able to withstand the voyage.

(m) Vessels carrying chilled perishable product shall be equipped to allow adequate fresh air supply to the perishable product when necessary.

(n) During inspections, the air temperature shall not deviate in the hatches in excess of a maximum of 1.0˚C when measured with a calibrated thermometer.

(5) Cooling shall only be switched off, and hatches opened, once approval therefore has been granted by the Board.

(6) Vessels to be utilized for in-transit cold treatment shall comply with the specified carrying requirements of the importing country or the Board.

(7) A specialised refrigerated vessel, or any particular hold or deck thereof, shall be approved by the Board, or by a certification authority acceptable to the Board, and the Board may require that vessels be registered with the Board.

(8) Decks to be used for cold treatment shall be equipped with the required type and number of air and product temperature sensors, in the positions as specified by the importing country or the Board.

(9) Temperature recorders, data loggers and printers as specified by the importing country or the Board, shall be fitted and shall at all times be in good condition and capable of recording or printing all the data required for the entire duration of the voyage.

(10) All temperature control measuring and recording devices shall comply with the accuracy requirements as specified by the importing country, or the Board, as the case may be.

(11) Where required by the importing country, an empty deck test may be conducted by the Board.

Part G

Containers

Requirements for containers

36 (1) All containers shall, prior to inspection, have doors closed for the time period stipulated by the Board and shall be cleaned to the satisfaction of the Board and shall, before stuffing, be subjected to an inspection by a representative of the Board.

(2) At the time of inspection, the Board shall be satisfied that the external condition of each container meets the following requirements:

(a) Container frames and external panels are in a state so as to effect proper temperature control.

(b) The doors of the container shall open and close easily and seal so as to be airtight, without the need for excessive force to be exerted to the locking handles. Rubber seals to doors shall not be loose or damaged.

(c) The seal toggle of each container shall be in proper working order.

(d) Pop-rivets shall not be permitted to protrude on contact surfaces, and no scored or damaged contact surface shall be permitted.

(e) Delaminated and/or bulging panels will only be permitted when they meet the specifications of the Board.

(3) At the time of inspection, the Board shall be satisfied that the internal condition of each container meets the following requirements:

(a) The inside of the container shall be clean, dry, have no flaking and transferable rust and are free of all odours.

(b) The T-bar floor sections of the container shall be in good condition so as not to present any ragged edges to the perishable product, or obstruct airflow at floor level.

(c) The air deflector panel shall be undamaged, attached securely and not protrude above the T-bar floor.

(d) The area behind the air deflector plate shall be undamaged, clean and clear of all obstructions.

(e) Insulation panels shall be undamaged.

(f) Delaminated, lose or bulging panels (on roof and/or sides) shall only be permitted when they meet the specifications of the Board. Floors may be loose provided that the seams and joints do not show signs of cracking or hinder the loading process.

(g) The container shall be fitted with suitable drainage plugs that are approved by the Board. The drainage holes shall be capable of being closed and opened by using such drainage plugs.

(4) Each refrigerated container shall be registered, carry a valid container number and shall have a classification certificate, issued by one of the recognised classification societies (including but not limited to Lloyds of London).

(5) Shipping lines (cold chain service providers) are responsible to ensure that refrigerated containers to ship perishable products are clean, dry, taint free and technically and structurally sound.

(6) Before any perishable product is loaded into any refrigerated container, a representative of the Board shall satisfy himself that such container is clean, dry, taint free and technically and structurally sound.

(7) The internal and external condition of the refrigerated container shall comply with the requirements provided in these regulations with regard the in condition of containers, and each approval by the Board is valid for 60 days from date of approval by the Board.

Pre-trip inspection of refrigerated containers

37 (1) Refrigerated containers that are used for in-transit cold treatment shipments, where on-board product temperature monitoring sensors are required, shall be calibrated in the presence of a representative of the Board and/or the Department and/or foreign inspector (whichever is applicable) and shall be undertaken according to the specifications of the importing country. A detailed recorded electronic and/or mechanical temperature log shall, after calibration is completed, be made available to the Board for inspection, and before a refrigerated container may be approved by the Board.

(2) In the case of refrigerated containers that do have an automatic electronic built-in pre-trip inspection ("PTI") system, the PTI shall be performed manually at the appropriate chilled or frozen temperature.

(3) The air exchange ventilation on each container shall be in proper working order and closed during the technical inspection by the Board.

(4) Where the importing country imposes specific requirements in respect of cold treatment, the Board shall perform such functions and issue special instructions accordingly.

Part H

Rail Carriages

Requirements for rail carriages

38 (1) Every rail carriage shall have a valid registration and identification number.

(2) All rail carriages and/or equipment to be utilised for the conveyance of any perishable product shall be cleaned to the satisfaction of the Board and may, during loading or process, be subject to a selective inspection and validation by a representative of the Board.

(3) The following requirements shall apply to all such rail carriages and equipment:

(a) All inside surfaces shall be clean, dry, free from flaking rust and paint, and taint free.

(b) No signs of any previous perishable product, or rodent droppings, may be present.

(c) All panels shall be in a good state of repair.

(d) The external panels shall not be damaged in such a manner that the integrity of the carriage is affected.

(e) All doors and loading hatches shall seal properly.

(f) All doors shall open with ease, and be capable of being locked.

(g) The rail generator shall, where applicable, have sufficient diesel and power supply and plugs to run all containers continuously.

CHAPTER 8
POST-HARVEST TREATMENT, LOADING AND CARRYING INSTRUCTIONS

Part A
Post-Harvest Treatment and Handling of Specific Perishable Products

Avocados

39 (1) Avocados must be conveyed to the packing facility within four hours after picking, shall not stand in the orchard or be exposed to warm temperatures or direct sunlight, and may only be stored unrefrigerated overnight in circumstances where there is no material increase in the temperature of the avocados.

(2) On arrival at the packing facility, orchard heat must be removed from the avocados by reducing the pulp temperature of the fruit to at least 16°C, and thereafter maintaining that temperature prior to packing.

(3) The correct packing date code must be clearly stamped and legible on the packaging material of all avocados.

(4) Avocados are to be pre-cooled prior to loading into a RRMT to a pulp temperature not exceeding 3.0°C above the initial carrying temperature.

(5) Containers of avocados must only be loaded at one loading point and no shared loading is permitted between different points.

(6) All consignments of avocados loaded inland and conveyed to a port must be fitted with gensets if the TTT is to be exceeded. Any consignments of avocados not fitted with a genset, and that exceed a TTT of three hours will be rejected by the Board.

(7) Deviations from the initial carrying temperature of avocados, as prescribed in the Schedule, are permitted at the time of loading in the following circumstances:

(a) Avocados with a pulp temperature, determined by a probe at no more than 3.0°C above such carrying temperature, may be containerised.

(b) Avocados with a pulp temperature, determined by a probe to be in excess of 3.0°C above such carrying temperature will be rejected by the Board and must be placed under pre-cooling prior to shipping.

(8) The pulp temperature of avocados shall not, at the time of loading for conventional shipping, exceed 3.0°C above the initial carrying temperature prescribed in the Schedule.

(9) Pulp temperatures in the centre of pallets, as measured with thermocouples and probes taken three layers from the top, may not during the loading process exceed 5.0°C above the prescribed carrying temperature. Should the thermocouple temperature or probe reading reach 5.0°C above the prescribed carrying temperature in the deck, the hatches shall be closed and re-cooling must commence until such time as the warmest pallet is once again at the prescribed carrying temperature, as measured with a thermocouple probe.

Chocolate shipped in refrigerated containers

40 (1) Chocolate must be kept dry at all times, and a constant temperature must be maintained without any sudden temperature variations.

(2) With the exception of the general handling and transport requirements for chocolates and chocolate containing products contained in sub-regulation (3), the exporter shall be responsible for the formulation of the detailed handling procedures for the chocolate products.

(3) Chocolate and chocolate containing products –

(a) must be stored within a temperature range of between 10°C and 18°C, with the optimum storage temperature being dependent upon the type of product;

(b) require that the exporter or cold chain service provider (as the case may be) shall, in consultation with the Board, specify the carrying temperature regime;

(c) must be subjected to such pre-cooling temperatures and procedures as may be approved by the Board;

(d) do not require to be pre-cooled where the product is stored in a warehouse in which the temperature does not exceed 15°C, in which instance only the air temperature surrounding the product or package will require to be maintained.

(e) require that the DAT of a road transport unit, a refrigerated container, or a vessel, shall be set at the specified carrying temperature. The transporter (being a cold chain service provider) shall ensure that air is delivered at the specified carrying temperature but shall not be required to control elevated RAT;

(f) require to be pre-cooled where the product is to be handled at a specified and constant carrying temperature, and such product shall be pre-cooled to the specified carrying temperature;

(g) require that the loading and transport of a container in which such product is conveyed shall be undertaken in such a manner that temperature and humidity changes are kept to a minimum;

(h) can be shipped together with other products at the same, or a compromised temperature, provided that the chocolate is not tainted by such other products.

Citrus fruit shipped under refrigerated conditions

41 Citrus fruit must be pre-cooled to a pulp temperature not exceeding 3.0°C above the prescribed carrying temperature. A pulp temperature increase (on the outside of pallets) not exceeding 5.0°C above the prescribed carrying temperature will be permitted during the handling, loading and transport of citrus fruit, and until re-cooling has recommenced.

Citrus fruit shipped at ambient temperatures to all destinations

42 (1) Certain citrus fruit varieties may, with the approval of the Board, be exported at ambient conditions, and shall be designated as a "*W-booking*" regime. Whenever un-cooled citrus fruit is carried on-board, the letter "W" must appear as a prefix to the carrying temperature regime.

(2) The Board may require the exporter of a consignment in sub-regulation (1) to furnish the Board with quality reports indicating the quality of the citrus fruit upon discharge at the importing country. The Board may require that ambient shipments be discontinued should decay or an increase in rejections due to phytosanitary organisms be noted by the Board.

(3) Un-cooled citrus fruit must be loaded into the container as soon as possible after packing. All pallet caps or tops and interlocking sheets must allow for proper ventilation, and cardboard bins and wooden crates must have ventilation openings at the base and caps at the top to promote convective cooling.

(4) Citrus fruit pulp temperatures shall not exceed 25°C at the time of loading.

(5) Only Super Vent, open top or similar type cartons and bulk bins shall be used for citrus fruit.

Citrus fruit shipped at ambient and pre-cooled temperatures to the European Union

43 (1) The procedure for loading ambient and pre-cooled citrus fruit to the EU shall be as follows:

(a) Citrus fruit pulp temperatures may not exceed 25°C in the case of any ambient loading.

(b) All cold storage facilities in a non-Citrus Black Spot (CBS) infected area that also handle citrus fruit originating from a CBS infected area must in addition to being registered with the Board also be registered with the Department.

(2) The following requirements shall apply to containers and specialised refrigerated vessels:

(a) Board approved shipping regime code conditions must be applied to each consignment of citrus fruit being exported to the EU.

(b) The selected shipping regime codes for each consignment of citrus fruit being exported to the EU must be verified against the loadout instruction provided by the cold chain service provider (usually the cold storage facility) by using a verification system which has been approved by the Board.

(c) The correct carton option must be selected, in accordance with Board approved shipping regime code options, and used for citrus fruit being exported to the EU.

(d) All shipping containers for citrus fruit destined to the EU must be fitted with a void plug at the door-end of the shipping container.

(e) A cellular air temperature logging device (portable logger) that has been approved by the Board must be installed in all shipping containers conveying citrus fruit to the EU.

Maximum TTT's for all citrus fruit

44 A total TTT of 16 hours shall apply to all citrus fruit, after which cooling shall be applied.

Citrus fruit loaded in containers at multiple loading points

45 (1) The loading of a container at multiple loading points shall only be undertaken with the approval of the Board. The exporter and, or cold chain service provider shall notify the Board of the loading points at the time of placing the booking and –

(a) no more than two loading points per container will be permitted;

(b) loading must always be commenced with at the furthest point from the respective port facility;

(c) the distance between the loading points must be such that the total cumulative TTT of 16 hours is not exceeded;

(d) should the TTT of 16 hours be exceeded, then a generator unit must be attached to the mode of transport;

(e) a maximum tolerance of 3.0°C will be permitted at both loading points for pre-cooled loads;

(f) part-loads shall be containerized in such a manner that the second loading point does not experience difficulty in completing the loading process. No shared loading is permitted between loading points;

(g) the citrus fruit must be secured and supported, so that the citrus fruit will not shift during transit between loading points.

Concentrates and juices

46 The Board will, in the case of concentrates and juices, permit the following temperature tolerances during the loading of containers:

(a) The concentrate or juice must be pre-cooled to the carrying temperature requested at the time of booking. A carrying temperature increase not exceeding 3.0°C will be permitted during the loading of the product from the deep-frozen cold storage facility into the container.

(b) Where the concentrate or juice is to be shipped at minus 18°C, it must be pre-cooled to between minus 18°C and minus 21°C prior to loading into the container. Should the temperature of the product increase to minus 15°C, loading must cease and the concentrate or juice must be re-cooled to minus 18°C or colder before loading may be recommenced.

(c) The standard carrying temperature for deep-frozen concentrates is minus 18°C. The concentrate and juice must be pre-cooled to between minus 18°C and minus 21°C. A maximum temperature increase of 3.0°C will be permitted during loading. Should the product be colder than minus 21°C, it must be booked for shipment at minus 20°C or colder. The temperature must be consistent throughout the perishable product.

(d) When loading drums of concentrate, a loose plate or strongly made spacer is to be used for the second tier, and then steel strapping or loose wooden gratings must be used to secure the perishable product at the door end. Free air circulation around the stowed load must be maintained.

Deep frozen products

47 (1) Dual loading points for loose fish are not permitted, and all loose fish consignments must be consolidated for loading at a single loading point. In the case of fish packed in cartons, the Board may permit dual loading points subject to the following:

(a) The exporter or cold chain service provider has consented to dual loading points.

(b) The fish has been pre-cooled to a uniform temperature of minus 23°C or colder.

(c) The loading of the fish must take place without any delays.

(d) The container must be loaded immediately on arrival at the second load point.

(e) The container must be plugged into the electrical supply immediately on arrival at the port terminal.

(2) Where loose fish is loaded from the quayside –

(a) the quay area must be hosed down with water prior to loading;

(b) no sorting may take place during the loading process;

(c) direct wind into the container must be avoided, and it is preferable that loading should take place through an open top container;

(d) the fish are to be discharged onto clean plastic sheeting, prior to loading the fish into a container;

(e) exposure of the fish to direct sunlight is to be avoided, and no loading is to take place during rainy conditions;

(f) the loading process must be uninterrupted, delays avoided and container doors closed immediately upon the completion of the loading process;

(g) at no stage may the temperature of the fish in the container be warmer than minus 20°C;

(h) loading must be completed within four hours;

(i) the exporter or service provider must arrange for the immediate removal of a full container upon the completion of the loading; and

(j) a maximum period of two hours is permitted for loading before re-cooling must be recommenced.

(3) When stowing frozen perishable product packed in cartons, the cartons must always be block stacked and protected from heat penetration from the outside.

(4) Frozen perishable product must be stored and transported at minus 18°C or colder at all times, or as otherwise specified in these regulations.

(5) Prior to the commencement of loading into the mode of transport, frozen perishable product must be at or colder than the specified carrying temperature, with a temperature not exceeding 6,0°C below the set point temperature. Where perishable product is booked at minus 18°C and the product temperature at the time of loading is colder than minus 24°C, the container set point shall be reset at the loading point to the actual temperature. All documentation must be amended to reflect the new temperature setting.

(6) A temperature increase of not exceeding 3.0°C (i.e. up to a maximum temperature of minus 15°C) is permitted for a short period during the loading and transfer of the product from the cold storage facility into the transport unit. The temperature must be reduced or re-cooled to minus 18°C or colder as quickly as is possible. A tolerance of not in excess of 3.0°C will be permitted during the loading process.

(7) The standard maximum cumulative TTT of 12 hours must be applied to ensure minimum quality loss and condensation.

(8) If marine products have been permitted to become warmer than minus 12°C during or after loading, then an authorized analytical laboratory (acceptable to the Board) shall be requested to carry out a re-inspection.

(9) Marine products that are to be shipped at a temperature of minus 20°C or colder are marine products, including but not limited to abalone, crayfish, crustaceans, lobster, shell fish and mussels, calamari and squid.

Fresh vegetables

48 (1) Sweet potatoes must be kept dry and handled with care to avoid skin injury or damage. Correct curing must take place to harden the skin.

(2) Sweet potatoes must be pre-cooled to 13°C and pulp temperatures must never drop below 10°C for a period in excess of 24 hours.

(3) Potatoes must be stored and transported under conditions of constant temperature and humidity, with high rates of active air circulation around all potatoes in every batch or consignment.

(4) Potatoes must be shipped refrigerated if the duration of the voyage exceeds 10 days.

(5) Seed potatoes may be stored at between 2.0°C and 4.0°C for extended periods of time provided that the seed potatoes have an initial good storage potential, there is adequate air circulation, and a 90% - 95% relative humidity (RH).

(6) The optimum temperature for table potatoes to be stored for extended periods is 6.0°C to 10°C.

(7) Processing potatoes to be used for deep-frying (french-fries or chips) or for other products must be stored at 9.0°C.

(8) Table potatoes must be shipped at between 6.0°C and 10°C, depending upon the destination.

(9) Exporters must consult with the Board should they wish to ship potatoes with any other product or perishable product, for the purpose of obtaining the special approval of the Board.

(10) When onion bulbs are shipped at low carrying temperatures a very high ventilation rate is required so as to rapidly remove any surface moisture that may develop on the bulbs and cause condensation. RH should be maintained below 70%.

(11) Onions must not, except as may be permitted by the Board pursuant to regulation 52(1), be shipped in the same container (or in the same deck of a conventional vessel) together with any other product other than garlic, as severe tainting will occur.

(12) Onions are to be shipped within a wide carrying temperature range, from 0.5°C to 20°C.

(13) The preferred shipping conditions for onions are at temperature of 0.0°C and with a 70% RH, with a high air circulation rate of 60 to 90 complete circulations per hour, and one complete air change every 12 hours, based on the empty volume of the shipping space.

(14) Onions being booked for shipment at below 14°C must be pre-cooled and a tolerance of 2.0°C will be applicable. All containers must be connected to a power source, with a total TTT of six hours.

(15) The packing of sweet corn must be completed and pre-cooling applied within six hours from picking.

(16) The core temperature of the sweet corn shall be maintained at between 0.0°C and 2.0°C. The RH in the storage atmosphere must be between 90% and 95%.

(17) The preferred carrying temperature of sweet corn is 2.0°C but an exporter may ship sweet corn at between minus 0.5°C and 0.5°C.

Litchis Mangoes, Pome Fruit, Stone Fruit and Plums

49 (1) Litchis are treated with sulphur dioxide (SO_2), and a consequence are not be stored together with other perishable product types.

(2) The TTT for litchis loaded into containers is three hours.

(3) Litchis that are at a temperature of minus 1.0°C or colder on arrival of the RRMT in the port will be rejected for by the Board for export.

(4) Mangoes must be placed under cooling within four hours of picking and cooled to a pulp temperature of 16°C, but not colder than 6.0°C, within 12 hours of picking.

(5) Mangoes will be rejected by the Board for export if the time period between picking and the ETA of the vessel for the specific voyage exceeds 12 days.

(6) The temperature of mangoes shipped in refrigerated containers must not exceed 3°C above the specified carrying temperature.

(7) All mangoes at a temperature of 6.0°C or colder will be rejected by the Board.

(8) The TTT for melons is four hours, after which cooling must be applied.

(9) Pulp temperatures of Pome Fruit must not exceed 1.5°C for summer pears, and 2.0°C for winter pears. The pulp temperature of apples, with the exception Granny Smith apples, shall not exceed 3.0°C. In the case of Granny Smith apples, in respect of container and specialised refrigerated vessels, the maximum pulp load-out temperature is 5.0°C.

(10) A TTT of six hours shall apply to all Pome Fruit, after which cooling shall be applied.

(11) The Board may reject stone fruit for export where the period of time calculated from the date of packing to the date of departure of the vessel exceeds 10 days.

(12) A maximum total TTT of six hours shall apply to all stone fruit, after which re-cooling must be commenced with.

(13) Plums must be cooled to minus 0.4°C immediately after packing and must be transported to the port in such a way so as to ensure that there is no temperature increase in the inside of the pallet. Immediate forced air-cooling must be applied on arrival in the port so as to ensure that all plums are on temperature at the time of loading into any shipping compartments.

(14) Plums shall be re-inspected by the Board within the 20 days following inspection.

Sub-tropical leaf ferns, plants and palms

50 (1) Ferns must be pre-cooled to the storage temperature within eight hours from being stored.

(2) Plants and palms loaded into containers should normally be transported at temperatures of between minus 0.5°C and 16°C, and a sufficient water supply must be provided to pot plants and palms during transportation.

(3) In the case of ferns, a maximum temperature tolerance of 2.0°C in excess of the specified carrying temperature shall apply during loading. The temperature of ferns must not drop in excess of 1.0°C below the specified carrying temperature or below 0.0°C for ferns that are sensitive to freezing.

(4) A maximum total TTT of three hours shall apply to Pot Plants, after which cooling must be applied.

Table Grapes

51 (1) The preferred storage temperature for table grapes is at a pulp temperature of minus 0.5°C with a RH of 90%-95%.

(2) Pre-cooling of table grapes shall be applied within six hours after harvest.

(3) Table grapes must be packed in polyethylene bags in cartons together with a slow-release sulphur dioxide sheet, or otherwise as may be approved by the Board.

(4) Table grapes should not be shipped together with other products, such as apples, that are sensitive to sulphur dioxide, in particular where perforated liners are used for grapes or if the apples are not packed in polyethylene bags.

(5) The Minimum and maximum table grape pulp temperatures are to be measured in the centre of the pallets at the time of loading into containers or shipping spaces (with thermocouples or with penetration probes).

(6) If the pulp temperature of table grapes is recorded at minus 1.5°C or colder at any time (including in the port), then the shipping process must be halted and all relevant information must be reported immediately to the responsible cold chain service provider. This also applies where freezing is suspected.

(7) A maximum TTT of six hours shall apply to table grape handling before re-cooling is to be commenced.

Compromise product mixes for voyages of less than ten days

52 (1) The Board may, in certain circumstances, permit compromise temperatures and mixed loads of perishable products, but accepts no liability for any quality loss occasioned thereby.

(2) Exporters must combine shipments in such a manner, in respect of volume and perishable product type, so that optimum shipping conditions are achieved.

(3) Perishable products must be stored prior to loading at the specified shipping temperature. All product must be within the permitted carrying temperature range, with a maximum tolerance of 2.0°C.

(4) The compromise temperature and product mixes that may be adopted with the approval of the Board are set out below. These shall only apply to consignments where the maximum time between stuffing perishable product into the container and discharging at the destination does not exceed a period of 8 days.

Symbols: ✔ = compromise possible, ✖ = no compromise possible)					
Product	Optimum. Temp. (°C)	Compromise Temperatures			
		0.0 to 1.0 ° C	0.0 to 4.5 ° C	4.5 to 8.5 ° C	Ambient
Apples	minus 0.5	✔	✔	✖	✖
apricots	minus 0.5	✔	✖	✖	✖
avocados	5.5	✖	✖	✔	✖
granadillas	8.5	✖	✖	✔	✖
Grapes	minus 0.5	✔	✖	✖	✖
grapefruit	8.5 to 11	✔	✔	✔	✔
Guavas	7.5	✖	✖	✔	✖
kiwi fruit	minus 0.5	✔	✖	✖	✖
Lemons	8.5 to 11	✔	✔	✔	✔
mangoes	8 to 13	✖	✖	✔ (min. 8.5)	✖
nectarines	minus 0.5	✔	✖	✖	✖
oranges	4.5 to 11	✔	✔	✔	✔
peaches	minus 0.5	✔	✖	✖	✖
Pears	minus 0.5	✔	✔	✖	✖
Plums	minus 0.5	✔	✖	✖	✖
soft citrus	4.5 to 11	✔	✔	✔	✖
VEGETABLES					
broccoli	0.5	✔	✔	✖	✖
brussels sprouts	0.5	✔	✔	✖	✖
cabbage	0.5	✔	✔	✖	✖
Carrots	0.5	✔	✔	✖	✖
cauliflower	0.5	✔	✔	✖	✖
Celery	0.5	✔	✔	✖	✖
cucumbers	8	✖	✖	✔	✖
Ginger	10	✖	✖	✔	✔
Garlic	0.5 to 20	✔ (avoid condensation)			
green beans	7	✖	✖	✔	✖
Leeks	0.5	✔	✔	✖	✖
Lettuce	0.5	✔	✔	✖	✖
Melons	14	✖	✖	✔ (min. 8.5)	✖
Onions	0.5 to 20	✔ (avoid condensation)			
peppers	8.5	✖	✖	✔	✖
potatoes	5.5 to 12	✖	✖	✔	✔
pumpkins	11	✖	✖	✔ (min. 8.5)	✔
sweet corn	2	✔	✖	✖	✖
sweet potatoes	14	✖	✖	✔ (min. 8.5)	✔
tomatoes	4.5 to 12.5	✖	✖	✔	✖
watermelons	4.5 to 10	✖	✖	✔	✖
Other					
chocolate (cooking)	0 to 4.5	✔	✔	✔	✖
chocolate (dessert)	16	✖	✖	✔ (min. 8.5)	✖
cold meats	0 to 4.5	✔	✔	✖	✖
dairy (vac. packed)	0 to 4.5	✔	✔	✖	✖
eggs	8	✖	✖	✔	✖
milk (long life)	0 to 4.5	✔	✔	✔	✖

Part B

Carrying Temperature Regimes for all Perishable Products

Specification of carrying temperatures

53 (1) Perishable product shall be conveyed at the carrying temperature regime as prescribed in the tables set out in the Schedule. The specified carrying temperature refers to DAT, and is also the set point of the thermostat control.

(2) Unless otherwise specified, the prescribed DAT shall be maintained and may not deviate by more than 0.5˚C in either direction.

(3) It shall be the responsibility of the exporter or cold chain service provider to select a carrying temperature regime as identified by way of the Regime Code applicable thereto as set out in the Schedule to these regulations, for a particular consignment of a perishable product.

(4) The exporter or cold chain service provider selecting an appropriate carrying temperature regime and Regime Code shall have regard, *inter alia,* to the identity of the perishable product, the quality thereof and the destination.

(5) The exporter or cold chain service provider (as the case may be) shall notify the Board electronically of the selected Regime Code.

(6) The final carrying temperature instruction letter issued by the Board to the Master of the vessel (representative of the cold chain service provider) shall be carefully checked by the Master against the reefer Manifest and/or stowage plan as specified in the Schedule to these regulations. Any deviations from the said temperatures shall be immediately brought to the notice of the Board by the exporter and/or cold chain service provider.

(7) The Board shall not be liable to any person for any loss and damage sustained to any perishable product whatsoever as a consequence of the selection by an exporter or cold chain service provider of an incorrect or inappropriate carrying temperature, recipe or Regime Code.

Maintenance of carrying temperatures

54 (1) Unless otherwise specified by the Board, the temperature in all decks or containers as prescribed in the Schedule shall be maintained until the time of discharge.

(2) The temperature control thermostat of refrigerated containers shall be set to ensure correct DAT prior to the loading of the container.

(3) Refrigerated containers shall be connected, and cooling be commenced with, immediately after completion of loading.

(4) In the event of perishable product, after departure from a South African port, and for the purpose of onward transshipment, being off-loaded, stored or transferred from one vessel to another, it shall be the responsibility of the cold chain service provider that takes such perishable product into its possession (including where applicable the Master of any such subsequent vessel) to –

(a) acquaint themselves with the temperature regime for such perishable product as provided in the applicable Manifest; and

(b) take such steps as may be necessary to ensure that the cold chain and temperature regime relating to such perishable product, as reflected in the Manifest, is maintained and continued without interruption, and that the instructions contained therein are adhered to.

(5) In the event of an exporter or shipping line requesting that, after the departure of a vessel from the first port of loading, perishable product loaded thereon be off-loaded, stored or transferred from one vessel to another, in a manner other than as provided for in the Manifest subject to which same was so loaded, it shall be the responsibility of such exporter or shipping, to –

(a) acquaint itself with the temperature regime for such perishable product as was provided for in the original Manifest;

(b) take such steps as may be necessary to ensure that any amended or replacement Manifest in respect of such perishable product, pursuant to which the perishable product is further conveyed, makes provision for the maintenance, without interruption, of the cold chain and temperature regime; and

(c) take such steps as may be necessary to ensure that the cold chain service provider that is in possession of such perishable product and/or receives possession thereof pursuant to such request by the exporter, is properly instructed with the cold chain and temperature regime applicable thereto.

(6) All cold chain service providers (including shipping lines) shall, as soon as being requested to do so by the Board, electronically forward specific/relevant temperature data to the Board, in the format as required by the Board, from time to time.

(7) Representatives of the Board shall at all reasonable times have access to the temperature data of vessels and their holds and/or containers, for the purpose of inspections and monitoring.

Reporting on temperature management

55 (1) Cold chain service providers operating vessels shall control the DAT and RAT in specialised refrigerated vessels and containers (whichever applicable) according to the Board's instructions, and the said cold chain service provider shall electronically report to the Board the temperature set-point, DAT, RAT, ventilation setting and probe sensor readings (where applicable) for all shipments, in the format as indicated by the Board from time to time.

(2) A first electronic report from the Master of the vessel shall be received by the Board within 24 hours after departure of the vessel from the port and thereafter temperature reports shall be received by the Board daily by no later than 12:00 GMT+2, until the completion of the voyage and the discharge by the vessel of the perishable product.

(3) In the event of perishable product, after departure from a port, being transferred from one vessel to another for onward shipment, the Master of each such subsequent vessel shall, within 24 hours after loading, electronically report to the Board as required by sub-regulation (2), at such intervals and in such manner as required by sub-regulation (2), until completion of the voyage and the discharge by the vessel of such perishable product.

(4) The voyage temperature data in sub-regulation (1) will be published electronically by the Board and may be accessed by the exporter or cold chain service provider.

Part C

Equipment and Devices for In-transit Temperature Monitoring and the Exporter and/or Cold Chain Service Provider Responsibility

Requirements for equipment and devices for in-transit temperature monitoring and the Exporter and/or Cold Chain Service Provider Responsibility

56 (1) It is the responsibility of the exporter and/or cold chain service provider (including but not limited to shipping lines or agents, as the case may be) and not the Board, to ensure that:

(a) the appropriate in-transit temperature protocol, for the relevant Cold Treatment Market, is identified and selected;

(b) all temperature monitoring devices utilised for a consignment of a perishable product are of a type certified for the purpose by the Board, are valid for the relevant in-transit period, and in good condition and working order;

(c) all temperature monitoring devices to be utilised for a consignment of a perishable product are appropriately calibrated/verified and bear an identification number and calibration certificate;

(d) all temperature monitoring devices to be utilised for a consignment of a perishable product are activated in the correct manner;

(e) the appropriate number of temperature monitoring devices, positioned in the required location/s for each consignment, are adhered to; and

(f) the set point and ventilation setting of the container has been verified.

(2) A representative of the exporter and/or cold chain service provider (as the case may be) shall be present when the representative of the Board performs the functions set out in paragraphs (d), (e) and (f) of sub-regulation (1), and shall make themselves available to countersign any documentation required for the verification thereof.

(3) The exporter and/or cold chain service provider (as the case may be) is solely responsible for any malfunction or failure of any temperature monitoring device, or the incorrect calibration, setting, activation or placing of any temperature monitoring device, or a failure to adhere in any respect to the applicable temperature protocol.

Part D

Temperature reporting and temperature deviations

Reporting by Cold Chain Service Providers (including Shipping Lines)

57 The cold chain service provider (including but not limited to the shipping line) shall, immediately upon there being a temperature deviation from the prescribed temperature of a perishable product, report such deviation to the Board electronically in such manner as may be required by the Board.

Reporting by Exporters

58 In the event of it coming to the attention of the exporter that there has been a temperature deviation in respect of a perishable product (and whether or not such knowledge arose from the electronic information published by the Board in terms of regulation 56, or otherwise), such exporter may bring such deviation to the attention of the Board in writing.

Role of the Board

59 (1) The Board, upon receiving temperature information relating to perishable product from cold chain service providers (including shipping lines) in terms of these regulations may cause such information to be made available electronically to such category of person as the Board may in its sole discretion deem appropriate.

(2) The Board shall have no obligation to analyse, review or report upon any temperature information or temperature deviation relating to a perishable product received by it from a cold chain service provider and it shall at all times remain the responsibility of the exporter or cold chain service provider (as the case may be) to ensure that all the temperature requirements for such perishable product are at all times strictly adhered to and the applicable protocols (if applicable) are applied correctly and the Board shall bear no liability whatsoever for any loss sustained by any person whom so ever arising from a failure to report any such deviation.

(3) Upon the Board being informed in writing by an exporter of a temperature deviation, in the manner envisaged in sub-regulation (1), the Board may take such steps as may appear to it to be reasonably necessary and appropriate. The Board shall however bear no liability whatsoever for any loss sustained by any person whom so ever as a consequence of any steps taken by the Board in good faith.

Part E

Cold Chain Validation

The Board may adopt and implement Cold Chain validation

60 (1) The Board may adopt and implement a validation process and procedure to evaluate whether any facility and/or any mode of transport utilized in connection with any perishable product complies with the specifications and requirements of these regulations.

(2) The Board may in its discretion, for the purposes of any such validation process envisaged in sub-regulation (1), conduct inspections in such manner and at such intervals as the Board considers are necessary to ensure compliance.

(3) The Board may adopt and implement a validation process and procedure to evaluate whether the cold chain, handling procedure and/or temperature regime in respect of any perishable product complies with the specifications and requirements of these regulations.

(4) The Board may in its discretion, for the purposes of any such validation process envisaged in sub-regulation (3), inspect all or a selected representative sample of any consignment of perishable product.

CHAPTER 9

LOADING

Part A

Requirements for loading of all Perishable Products

Obligations of the Exporter and Cold Chain Service Provider

61 (1) The exporter and cold chain service provider (including but not limited to shipping lines or agents as the case may be) shall, prior to the loading of any perishable product, inform the Board electronically thereof, in the format determined by the Board and at such time prior to loading as may be determined by the Board.

(2) Every exporter or cold chain service provider shall supply the Board electronically with the perishable product loading detail, in the format determined by the Board.

Obligations of the Board

62 (1) The Board may at any stage allocate a UPN to any consignment of perishable product.

(2) The Board shall take appropriate measures to ensure that all perishable product is optimally and correctly stowed, handled and loaded according to the Board's standards and requirements and in accordance with these regulations.

(3) The Board shall ensure that:

(a) Cold chain service providers at handling and loading points are registered with the Board, and the holder of a registration certificate, as provided in regulation 8(3);

(b) Only equipment and facilities certified by the Board shall be used to store and transport any perishable product;

(c) Perishable product is handled, loaded, and transported within minimum and maximum temperature ranges and is transported within applicable TTT's;

(d) Only approved packaging and pallets are used for the handling, storage and transport of perishable product;

(e) Documentation with regard to the notification and preparation of the loading process, equipment and subsequent monitoring, are accurately completed and timeously communicated and made available to relevant parties as required from time to time by the Board;

(f) All perishable product that is destined for export to an importing county that requires such perishable product to be subjected to a cold treatment regime, shall be subjected to such cold treatment regime and any further specifications or requirements as may be stipulated from time to time by the Board;

(g) All perishable product is protected from the elements, temperature increases and any contamination by odours, gasses, chemicals, dust, rain or any other material that may detrimentally affect the integrity of the perishable product; and

(h) Perishable products are optimally and correctly stowed in the mode of transport or cold storage facility so as to allow for optimal refrigeration and temperature control.

(4) Only perishable product that complies with the relevant requirements of these regulations and/or the APS Act, and/or any other certification or sanitary requirements, shall be loaded into transport spaces.

(5) The Board shall, except in the case of ambient shipments of a perishable product, ensure that only pre-cooled perishable product that has been approved by the Board is loaded into approved transport spaces.

(6) The Board shall notify the relevant exporter and/or cold chain service provider and identify the approved perishable product, and issue an approval certificate or relevant document on request.

(7) The following requirements shall apply to perishable products presented to the Board prior to loading:

(a) All perishable product shall be measured for compliance with temperature requirements before it can be loaded into approved transport spaces;

(b) Perishable product stored prior to loading shall be kept dry, pest and mould free;

(c) The condition of the packaging shall be clean, undamaged, ventilated and shall protect the integrity of the perishable product;

(d) Pallet bases shall be in a sound and sturdy condition, dry, and mould and bark free;

(e) All pallet bases and dunnage shall adhere to the ISPM 15 requirements;

(f) All cartons shall be correctly stowed and strapped to the pallet bases;

(g) Load stabilising material and methods used for the handling, storage, transport and discharge of perishable product shall not negatively affect the perishable product and/or packaging material and the safety of cold chain service providers;

(h) Floor spaces of partly loaded specialised refrigerated vessels or refrigerated containers shall be covered;

(i) Pallet height shall not restrict air flow, and shall not exceed the maximum load height line or fan spaces;

(j) Where pallets are double-stacked, racking or pallet irons shall be used; and

(k) External and internal dunnage shall be used where necessary in the support of perishable product, and such dunnage shall be suitable for the purpose intended, and at all times be clean, dry, pest, and mould and bark free.

(8) Loading equipment shall be well maintained, clean, and of such design that it does not damage perishable product and hamper the loading process.

(9) Diesel forklifts shall only be used outside storage facilities and transport spaces.

Part B

Packing and Strapping

Packing and strapping to be compliant

63 The Board may refuse to permit the export of any perishable product that is not packed, strapped and wrapped to the satisfaction of the Board.

Requirements for packing and strapping

64 (1) All packaging shall be clean, neat, dry, undamaged, and where applicable the perishable product shall be firmly packed in an upright position and strapped or wrapped, with no cartons protruding past the dimensions of the pallet base, which pallet base shall be of a kind and specification as determined by the Board from time to time as being suitable and appropriate for such purpose.

(2) Carton ventilation holes shall always be open, and there shall be sufficient ventilation between pallet slats for vertical airflow.

(3) Care shall be exercised in the use of plastic or shrink-wrap (pallet securing) materials, so as to allow for the horizontal penetration of air.

CHAPTER 10

STOWAGE AND TRANSIT

Part A

Specialised Refrigerated Vessels

Protection against dust, foreign substances, sun, wind and rain during shipping process

65 (1) Perishable product on the quayside that is not immediately shipped shall be placed under cooling or a cover.

(2) Perishable product being pre-cooled to the temperature prescribed by regulation shall at all times be protected against the elements and the direct rays of the sun, strong winds or rain and sea sprays, by the use of portable hatch screens, tarpaulin covers, or otherwise.

(3) Contamination by odours, gasses, chemicals, dust or any other material that may detrimentally affect the quality or food safety of the perishable product shall be avoided.

(4) The Board may direct that, during interruptions in loading, all vessel refrigerated spaces containing perishable product shall be closed and cooled, until such time as the Board may direct that loading may be recommenced.

(5) The temperature, as measured by the air delivery sensor and the return air sensor in a vessel space where chilled perishable product is stored, shall not be permitted to drop more than 1.0˚C below the carrying temperature prescribed by regulation; provided that no such limitation shall apply to deep-frozen perishable product.

Stowage of refrigerated perishable product in trunk decks

66 Perishable product shall not be exposed to high heat leakage areas, and care shall be taken to facilitate that dunnage and air bags are positioned in such a manner so as to ensure the proper refrigeration of the perishable product.

Walking boards and other protective material

67 Clean and sturdy walking and landing boards, side pallet boards and dunnage and air bags shall be used in all vessel spaces during and after loading.

Deodorisation in vessels' refrigerated spaces

68 (1) Every shipping space into which perishable product is to be stowed shall be clean and free of any odours before cooling commences, and such precautions as the Board may require in any particular case shall be taken where a vessels' refrigerated space is used for the stowage of perishable product.

(2) Fungal contamination of shipping spaces is not permitted, and if any trace of fungal growth is observed in the decks or permanent gratings or on the sides of deck heads, the affected areas shall be washed down and cleaned with a suitable cleaning agent.

(3) Taint contamination of shipping spaces is not permitted, and the origin and nature of the taint will dictate the method of deodorisation.

Stowage of odoriferous material

69 Odoriferous material such as antimony ore, ox hides, sheep skins, fish meal, tobacco or dried fish shall not be stowed in the same shipping space/hatch as other types of perishable product:

Stowage requirements during and after partly loaded spaces

70 (1) The cold chain service provider or exporter (as the case may be) shall forward to the Board a copy of the deck plan, for each loading port, and the balance of the loading plan.

(2) In order for the Board to validate the proposed stowage, the following shall apply:

(a) The jumping of a single deck is only permitted with the consent of the Board representative;

(b) Partly loaded wing areas, or areas around the square area, shall be covered during the loading of a bottom deck; and

(c) Only the Board may permit a partly loaded deck to be in an independent cooling deck or twin cooling common decks.

Time permitted for bringing the holds of loaded vessels to carrying temperature

71 The carrying temperature as measured by the control sensor shall, in all cases, be reached throughout the hold within 48 hours after the commencement of refrigeration and, when such temperature has been reached, air shall be delivered at 0.5˚C lower than such carrying temperature.

Operation of fans

72 Fans shall be run at the appropriate speed to ensure cooling to the prescribed carrying temperature. Thereafter the fan speed shall be adjusted so as to ensure that the maintenance of a temperature range is within 0.5˚C in all perishable product spaces throughout the voyage.

Operation of air change vents

73 (1) All spaces shall be ventilated as set out in the Schedule and the prescribed temperature shall be maintained throughout the voyage.

(2) The hours of operation of air change vents shall be recorded in the vessel's log book, together with the carbon dioxide percentage in the vessel's hold.

(3) By reason of the adverse effects on temperature and humidity, the excessive intake of fresh air should be avoided at all times.

(4) No ventilation shall be required for frozen perishable product.

Loading of sea freight containers

74 (1) The Board shall take appropriate measures to ensure that perishable product is optimally and correctly stowed, handled and loaded according to specified standards and requirements.

(2) Only perishable product that complies with the relevant requirements of the APS Act, or these regulations, may be loaded into transport spaces.

(3) The Board shall ensure that:

(a) whenever possible, every container has been inspected and approved prior to loading;

(b) temperature and/or ventilation settings are checked, and comply with the specifications of the exporter or cold chain service provider;

(c) load-stabilising material and methods used for the handling, storage and transport and discharge of perishable product do not detrimentally affect the perishable product and/or packaging material and safety of the cold chain service provider;

(d) the perishable product is stowed according to the export booking and storage plan;

(e) temperature recording sensors and cold storage facilities to be used for perishable product intended for Special Markets or Cold Treatment Markets, are of the specified quantity, and are located as required by the Board or the protocol of the importing country;

(f) perishable product temperature sensors are inserted in transport spaces and positions according to protocol requirements, and are marked accordingly; and

(g) no dual loading is permitted in shipments to Special Markets or Cold Treatment Markets.

(4) All perishable product shall at all times be on temperature with no deviation outside the specified carrying temperature tolerances.

(5) Each container shall be fitted with a generator suitable for the adherence to the prescribed TTT.

Acceptance temperatures

75 (1) A representative of the Board shall take the temperature of perishable product immediately before it is loaded into a container.

(2) The Board shall approve TTT's measured with approved and verified instruments.

Protection of perishable product during loading

76 (1) The Board shall ensure that perishable product is optimally and correctly stowed in the mode of transport or cold storage facility, so as to allow for optimal refrigeration and temperature control.

(2) Should an interruption occur during the loading –

(a) every attempt shall be made by the cold chain service provider or exporter (as the case may be) to ensure that the temperature of the perishable product is maintained in the container;

(b) perishable product waiting to be loaded into containers shall, if possible, be returned to cold storage; and

(c) cold storage facility doors and the doors of partially filled containers should be closed.

Intervals and operational delays

77 During intervals and operational delays, all spaces containing perishable product shall be closed, and cooling shall be continued at the carrying temperature prescribed by regulation.

Documentation and sealing

78 (1) Documentation with regard to the notification and preparation of the loading process, equipment and subsequent monitoring shall be accurately completed and timeously communicated and made available to the Board by the cold chain service provider or exporter (as the case may be).

(2) The cold chain service provider or exporter (as the case may be) shall supply the Board with the following supporting documentation to verify that perishable product to be loaded in containers or on specialised refrigerated vessels complies with the exporter or cold chain service provider booking request and perishable product and equipment specification:

(a) Load out instruction.

(b) Temperature records (pre-cooling).

(c) Container transport documentation and/or CTO.

(d) Stowage plan for shipment on the specialised refrigerated vessel.

(e) Technical details of special equipment for shipment on the specialised refrigerated vessel.

(3) Once a container has been stuffed, the necessary documents shall be completed and such container shall be sealed without delay, so that the time without refrigeration is kept to minimum.

(4) All amendments to the original booking shall be furnished electronically to the Board prior to the stuffing of the container.

(5) Cooling shall commence without delay within the specified maximum TTT on completion of loading, and all conditions in terms of temperature control, fresh air ventilation, controlled atmosphere and humidity control shall be checked and made available to the Board on request.

(6) The Board shall conduct selective inspections on containers while stacked in container terminals including –

(a) coupling to power source;

(b) container set point and ventilation settings;

(c) DAT and/or RAT readings; and

(d) general performance conditions and appearance.

Multiple perishable container loading points not recommended, but permitted in certain circumstances

79 (1) A maximum of two loading points per container is permitted and the perishable product should be secured between the two points.

(2) The exporter or cold chain service provider (as the case may be) shall notify the Board of both loading points at the time of placing bookings.

(3) The following provisions shall apply to perishable product multiple loading points:

(a) loading shall always commence at the furthest point first unless a generator is fitted;

(b) the distance between the points shall be such that the total cumulative TTT is not exceeded;

(c) should the loading exceed the TTT then a generator unit shall be attached; and

(d) part loads shall be containerised in such a manner that the second loading point does not experience difficulty in completing the loading process.

General procedures for loading of specialised refrigerated vessels

80 (1) The efficient uniform pre-cooling of vessel spaces, prior to loading into specialised refrigerated vessels, must be achieved.

(2) The following general procedures shall apply:

(a) Cold air shall be supplied to the bottom of the palletised perishable product (high pressure) and removed from the top of the pallets (low pressure), and shall therefore be circulated from the bottom vertically up through and around the pallets.

(b) Fan spaces and air passages shall remain unobstructed.

(3) Once the cold chain has commenced, increases in the temperature of perishable product shall be kept to an absolute minimum, as this is likely to lead to the packing material becoming moist and the stimulation of senescence and associated quality loss.

Fresh air intake ventilation requirements on specialised refrigerated vessels

81 (1) In the case of pre-cooled loaded decks, fresh air shall be introduced into the shipping spaces (decks) at such a rate so as to maintain the CO_2 level below 0.5% CO_2 at all times, or as otherwise consented to, or stipulated, by the Board.

(2) In the case of ambient loaded decks, in order to obtain the re-cooling of complete ambient decks, it is recommended not to have any ventilation for the 24 hours after completing a deck, and thereafter to reset ventilation to maintain a CO_2 level below 0.5%.

Ventilated and open-door container shipments

82 (1) Ventilated and open door container shipments are only permitted with the prior consent of the Board.

(2) The preferred system for ventilated shipments is through a fantainer or ventainer where an electrically operated fan continuously circulates ambient air through the perishable product.

(3) Flat racks are permitted to be used, provided effective protection is available to keep the perishable product in the shade, dry and at the same time allow maximum fresh air circulation.

(4) The use of open-side containers may be permitted, provided effective perishable product protection is available, and the container shall be constructed in such a way that it complies with ISO standards.

Shipments stowed under deck in ventilated perishable product spaces

83 (1) The Board may permit perishable product to be loaded under deck in ventilated spaces.

(2) The following requirements shall be met if perishable product is loaded under deck in ventilated spaces:

(a) the voyage shall be shorter than 10 days and the perishable product may not be in a container for a total of more than 14 days;

(b) decks shall be fitted with air circulation fans to maintain an air circulation rate of at least 90 complete air changes per hour, based on the empty volume of the shipping space;

(c) the air shall be continuously ventilated to prevent a build-up of CO_2 above 0.5%, or any other gas or any odour that may result in taint to the perishable product;

(d) a minimum of at least one complete fresh air change, based on the total empty volume of the shipping space, shall be applied every 12 hours; and

(e) the shipping space shall be clean, with no dust or potential harmful chemical, liquid or other product being present, such as cement, paints, solvents, detergents, petroleum products or hides.

Stowage under ventilated conditions: ventainers and fantainers

84 (1) Perishable products such as potatoes, onions, garlic and citrus fruit may, with the prior consent of the Board, be carried unrefrigerated in well-ventilated general perishable product spaces or in containers, for short voyages.

(2) Perishable product requirements may change in any particular season (including changes occasioned by climatic conditions), that may require that some perishable products are not shipped ventilated.

(3) Perishable product that may be shipped ventilated, with the approval of the Board include early season citrus fruit, onions, potatoes, certain pumpkin varieties, oiled eggs and dried fish, and such further perishable products as may be stipulated from time to time by the Board.

(4) The Board may permit certain combined shipments of different types of perishable products, but will decline approval where there is a risk of cross-taint.

(5) The Board may determine special procedures for combined shipping that may *inter alia* include –

(a) requiring a shipping line (cold chain service provider) accepting a booking for the stowage of ventilated containers containing onions, to adhere to the Board's special carrying instructions;

(b) onions shall be packed in woven (knitted) bags on pallets at the time of loading; and

(c) tarpaulins or awnings shall be employed to avoid exposure of the perishable product to the elements.

(6) The Board's procedures for the handling, loading, transport, and pre-shipment storage shall be adhered to at all times.

(7) Exporters and cold chain service providers shall consult with the Board prior to loading, in order to finalise the optimum procedure for the particular type of equipment to be used.

(8) The Board will only accept a booking for an open door container if the duration of the sea voyage does not exceed 10 days. The Board may consider an additional maximum period of three days for certain perishable product, taking into consideration the packing material, packaging methods, season and destination.

(9) The following procedures shall apply to the loading of ventilated containers:

(a) The containers shall be loaded so as to ensure adequate fresh air ventilation throughout the total load.

(b) All perishable product shall be inspected by the Board and shall meet the quality standards and requirements as prescribed under section 4(3)(a)(ii) of the APS Act.

(c) The perishable product shall be palletised or, if loaded break bulk, a layer of pallets shall be packed on the floor, and forklift openings are to run lengthways so as to ensure unobstructed air plenum to the bulkhead.

(d) Dunnage of at least 100mm may be used instead of pallets; unobstructed air passages shall be provided lengthwise (door to the bulkhead); and dunnage may also be used in openings between pallets on the floor.

(e) Wooden pallets (at least two) shall be stacked vertically against the bulkhead, so as to ensure vertical movement of air from the floor to the ceiling.

(f) A horizontal layer of wooden pallets more or less in the middle of the perishable product load is strongly recommended to ensure fresh air circulation and to avoid heat build-up in the centre of the load. The pallets must be placed in the same direction as the air flow.

(g) Onions and potatoes shall be loaded with flat dunnage between the different layers of bags, and potatoes shall be packed in woven bags or paper (and whichever is applicable) if the total time in the container exceeds 10 days.

(h) An opening of at least 200mm shall be left between the top of the perishable product and the ceiling, this air accumulation plenum being important in creating a chimney effect assisting with vertical air movement.

(i) The maximum load limit shall not be exceeded so as to avoid accidents or rejection at the point of crane handling.

(10) All containers packed prior to arrival of the vessel shall be kept under cover with doors open, and provision shall be made for maximum fresh air circulation in the storage space to minimise condensation on the perishable product.

(11) Perishable product must be well protected at all times and sufficient fresh air ventilation applied during the storage, handling, transport, and shipping of open door and flat rack containers.

(12) The Board may stipulate that certain perishable products, such as potatoes, shall not be stowed in the same place as onions, nor in a place containing tea, tobacco or similar tainting commodities.

(13) A daily record shall be kept by the cold chain service provider (shipping line) of temperatures in the hold of the vessel and of the times of fan operation.

(14) The Board shall provide carrying instructions to the cold chain service provider (shipping line) prior to sailing.

Part B

Loading and offloading of Refrigerated Road Motor Transport (RRMT)

Requirements for the loading and offloading of refrigerated road motor transport

85 (1) It is recommended that every RRMT shall be pre-cooled to the required carrying temperature prior to loading so as to minimise temperature increases during loading.

(2) Every exporter or cold chain service provider shall ensure that the temperature setting is correct and that air is actually delivered within 0.5°C of the selected set-point by taking air temperature readings by means of the permanently installed thermo couple plugs on the cooler.

(3) The cooling unit shall be switched off during loading in order to minimise condensation and wet panels in vehicles. The perishable product shall be pre-cooled to a pulp temperature to within 3°C of the initial carrying temperature.

(4) Pallets shall be stowed in RRMT with vent openings in the direction of the airflow and shall not be stowed against the sides of the vehicle.

(5) RRMT loading shall be completed within a maximum of one hour.

(6) The loading of split loads of perishable product intended for export and for the local market, in the same RRMT, must be avoided.

(7) Off-loading shall take place in such a way that temperature increase is reduced to a minimum.

(8) No foreign odour is permitted during loading or offloading.

(9) The general condition of the RRMT, the validity of the registration certificate, and the following temperature readings shall be checked prior to opening of the doors:

(a) the temperature set point;

(b) temperature registered on recorder chart or print out;

(c) DAT; and

(d) RAT.

(10) The following pulp temperatures shall be taken via thermocouples and thermometer probe with a calibrated electronic thermometer during offloading being –

(a) the pallet at the back (door end);

(b) the centre pallet;

(c) the pallet at the front; and

(d) inside a randomly selected pallet.

(11) The four temperature readings referred to in sub-regulation (10) shall be recorded by the Board if requested by the exporter or cold chain service provider.

(12) Quick direct transfer from the RRMT or cold storage facility into the container (or vessel, in the case of specialised refrigerated shipping) is essential to minimize temperature increase. The perishable product must be protected against the elements and shall not be subjected to extreme temperature and humidity conditions. Re-cooling shall be resumed as soon as possible to ensure compliance to the TTT as specified.

(13) Offloading of the RRMT should be completed within a maximum of 30 minutes.

CHAPTER 11

HANDLING OF NON-CONFORMING PERISHABLE PRODUCT

Rejections

86 (1) All perishable product, processes and equipment that is not approved by the Board, shall be rejected by the Board and thereafter marked and segregated as such.

(2) The Board may, if it considers that an approved perishable product, process, mode of transport, handling facility, cold storage facility and/or shipping equipment does not comply with the requirements prescribed in these regulations, at any time withdraw its approval or certification thereof.

(3) The Board shall provide the exporter or cold chain service provider with a rejection notification and such exporter or cold chain service provider shall, at the request of the Board, countersign a copy of the rejection notification.

(4) The exporter or cold chain service provider may request a re-inspection by the Board once any non-compliances have been corrected.

CHAPTER 12

FOREIGN PERISHABLE PRODUCTS

Foreign perishable products

87 Any foreign perishable product from a country outside the Republic that, owing to the nature and structure of the vessel in which it was stowed, or that is stowed in the same space, or receives refrigeration from the same source, as any perishable product originating from the Republic, shall be deemed to be a perishable product in terms of the Act.

CHAPTER 13

POST VOYAGE EVALUATION

The Board's role in post voyage evaluation

88 (1) The carrying temperature regime specified in these regulations shall be maintained until the final port of discharge or, in the case of containers, until the final destination.

(2) All cold chain service providers transporting perishable product from the Republic shall retain all logs and recorded data, and shall make these available to the Board within four weeks of being requested by the Board to do so.

(3) All logs and recorded data shall be retained by all cold chain service providers for a minimum period of five years.

(4) Representatives of the Board shall, at all reasonable times, have access to the temperature data, vessel logbooks, aircraft logbooks, vessels and refrigerated spaces that are carrying or have carried perishable product originating from the Republic for the purpose of conducting inspections, making observations, performing calibrations, taking temperature and other readings and to take samples during loading and discharge.

CHAPTER 14

MAINTENANCE OF STATISTICS AND DISCLOSURE OF INFORMATION

Information and statistics

89 (1) The Board may utilize the information that it receives in the performance of its functions and carrying out of its duties in terms of the Act to compile statistics, and which statistics shall be maintained by the Board.

(2) The Board may publish statistics, or generic information as to volumes of perishable products exported from the Republic, in such manner and at such intervals as the Board considers necessary.

(3) The Board may provide statistics, or generic information to any person as to volumes of perishable products exported from the Republic, as may from time to time be in the possession of the Board.

(4) The Board may make information available to an exporter or cold chain service provider relating to the volumes of perishable product exported by that exporter or cold chain service provider, and to any third party with the written consent of the exporter or cold chain service provider that exported such perishable product.

(5) The Board may, on request by the holder of a valid PBR Right, which request shall be accompanied by proof to the satisfaction of the Board of that persons title to such PBR Right, provide information in the Board's possession as to the identity of any exporter that has exported from the Republic any variety to which that PBR Right relates, and the quantity so exported by each such exporter.

(6) The Board may provide statistics, information or generic information to any person entitled thereto in terms of the MAP Act or any other law.

(7) Any person making a request to the Board in terms of sub-regulations (3), (4), (5) and (6) for statistics, information or generic information shall do so in such manner and in such form as may be required by the Board or the Chief Executive Officer from time to time.

(8) A person requesting statistics, information or generic information in terms of these regulations shall be required to pay such fee or charge as may be determined by the Chief Executive Officer, which fee shall be determined having regard to the form in which such statistics, information or generic information is required to be provided by the Board and the reasonable time required for the Board to locate and prepare or compile the requested statistics, information or generic information. The Chief Executive Officer may further require that up to fifty percent of such fee or charge be paid to the Board in the form of a deposit, and the full amount of the fee or charge shall in any event be payable to the Board prior to the statistics, information or generic information being provided to the requester.

(9) The Chief Executive Officer shall, within 30 days of a request being made for statistics, information or generic information, respond in writing to the requester and provide a response to the request, at the same time indicating the fee or charge that will be required to be paid prior to such statistics, information or generic information being made available, and the estimated time within which such statistics, information or generic information can be provided. In the event of the Chief Executive Officer refusing to furnish the whole or any part of the requested statistics, information or generic information, the reason/s for such refusal shall be furnished in writing.

(10) The Board shall not, in response to any request for statistics in terms of these regulations, be required to create any statistics or to present any statistics in any format other than that which is already in the possession of and maintained by the Board.

(11) The Board shall in no circumstances be liable for any loss or damage occasioned to, or suffered by any person/s whatsoever, as a consequence of the Board making available to any person any statistics, information or generic information, or arising from the reliance by any person on the correctness or accuracy of any such statistics, information or generic information furnished by the Board.

CHAPTER 15

RETENTION OF INFORMATION

Retention period

90 Any information received or generated by the Board pursuant to any provision of the Act and, or these regulations shall be retained by the Board in accessible form for a period of not less than 5 years, unless the Board is required by the provisions of another act or regulation to retain same for a longer period.

CHAPTER 16

LEVIES

Levies

91 The levy payable in terms of section 17 of the Act by an exporter in respect of a perishable product shall be made by payment to such banking account of the Board as the Board may designate in writing from time to time, such payment to be made at such time and subject to such conditions as the Board may direct.

CHAPTER 17

APPEALS

Appeal procedures

92 (1) An appeal in terms of Section 15(1) of the Act shall be lodged by:

(a) Submitting a notice of appeal in writing, in triplicate, to the Chief Executive Officer of the Perishable Produce Products Export Control Board, at 45 Silwerboom Avenue, Plattekloof, 7500, Western Cape, South Africa, setting out the act or decision being appealed against; and

(b) Setting out fully in such notice the grounds of appeal and enclosing any documents relating the matter.

(2) The Minister may request further information in writing from either the applicant or the Board prior to making a decision.

(3) The Appellant shall be notified in writing of the decision of the Minister at the address stated in the Notice of Appeal.

CHAPTER 18

PENALTIES

Penalties

93 Any person –

(a) using equipment, storage facilities or modes of transport for perishable product intended for export that has not been approved and certified by the Board, or in respect of which the Board has withdrawn its approval or certification; or

(b) contravening any provision of these regulations,

shall be guilty of an offence and liable on conviction to a fine as determined by a court taking into account all the relevant facts and circumstances, or to imprisonment for a period not exceeding three years or to both such fine and imprisonment.

CHAPTER 19

REPEAL

Repeal of existing regulations

94 The regulations promulgated by Government Notice R917 of 4 May 1984 are hereby repealed.

COMMENCEMENT

95 These regulations shall come into operation six months after date of publication.

CARRYING TEMPERATURE REGIMES OF PERISHABLE PRODUCTS FOR EXPORT SCHEDULE

CHILLED MIX PRODUCTS: ("X"), ("Q"), ("H") and ("U") + temperature (specified by the exporter) **Take note – in the case of plums being mixed with any other perishable product the vents must always be open**		
REGIME CODE	**CARRYING TEMPERATURE**	**DESCRIPTION**
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h (X and H codes only)**
		Specialised Refrigerated Vessel – maintain CO_2 concentration below 0.5%
X + TEMPERATURE **Q + TEMPERATURE** **H + TEMPETATURE** **U + TEMPERATURE**	**Various plus temperature** **Various plus temperature** **Various minus temperature** **Various minus temperature**	**Chilled products carried at any plus temperature - Vents Open** **Chilled products carried at any plus temperature - Vents Closed** **Chilled products carried at any minus temperature - Vents Open** **Chilled products carried at any minus temperature - Vents Closed**
Chilled products carried at any plus temperature – Vents Open		
X0	0.0°C	Carry at 0.0°C for the full duration of the voyage
X0.5	0.5°C	Carry at 0.5°Cfor the full duration of the voyage
X1	1.0°C	Carry at 1.0°C for the full duration of the voyage
X1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
X2	2.0°C	Carry at 2.0°C for the full duration of the voyage
X2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
X3	3.0°C	Carry at 3.0°C for the full duration of the voyage
X3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
X4	4.0°C	Carry at 4.0°C for the full duration of the voyage
X4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
X5	5.0°C	Carry at 5.0°C for the full duration of the voyage
X5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
X6	6.0°C	Carry at 6.0°C for the full duration of the voyage
X6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage

X7	7.0°C	Carry at 7.0°C for the full duration of the voyage
X7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
X8	8.0°C	Carry at 8.0°C for the full duration of the voyage
X8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
X9	9.0°C	Carry at 9.0°C for the full duration of the voyage
X9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
X10	10°C	Carry at 10°C for the full duration of the voyage
X10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
X11	11°C	Carry at 11°C for the full duration of the voyage
X11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
X12	12°C	Carry at 12°C for the full duration of the voyage
X12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
X13	13°C	Carry at 13°C for the full duration of the voyage
X13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
X14	14°C	Carry at 14°C for the full duration of the voyage
X14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
X15	15°C	Carry at 15°C for the full duration of the voyage
X15.5.	15.5°C	Carry at 15.5°C for the full duration of the voyage
X16	16°C	Carry at 16°C for the full duration of the voyage
X16.5	16.5°C	Carry at 16.5°C for the full duration of the voyage
X17	17°C	Carry at 17°C for the full duration of the voyage
X17.5	17.5°C	Carry at 17.5°C for the full duration of the voyage
X18	18°C	Carry at 18°C for the full duration of the voyage
X18.5	18.5°C	Carry at 18.5°C for the full duration of the voyage
X19	19°C	Carry at 19°C for the full duration of the voyage
X19.5	19.5°C	Carry at 19.5°C for the full duration of the voyage
X20	20°C	Carry at 20°C for the full duration of the voyage
X21	21°C	Carry at 21°C for the full duration of the voyage
X22	22°C	Carry at 22°C for the full duration of the voyage
X23	23°C	Carry at 23°C for the full duration of the voyage
Chilled products carried at any plus temperature – Vents Closed		
Q0	0.0°C	Carry at 0.0°C for the full duration of the voyage

Q0.5	0.5°C	Carry at 0.5°Cfor the full duration of the voyage
Q1	1.0°C	Carry at 1.0°C for the full duration of the voyage
Q1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
Q2	2.0°C	Carry at 2.0°C for the full duration of the voyage
Q2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
Q3	3.0°C	Carry at 3.0°C for the full duration of the voyage
Q3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
Q4	4.0°C	Carry at 4.0°C for the full duration of the voyage
Q4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
Q5	5.0°C	Carry at 5.0°C for the full duration of the voyage
Q5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
Q6	6.0°C	Carry at 6.0°C for the full duration of the voyage
Q6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
Q7	7.0°C	Carry at 7.0°C for the full duration of the voyage
Q7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
Q8	8.0°C	Carry at 8.0°C for the full duration of the voyage
Q8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
Q9	9.0°C	Carry at 9.0°C for the full duration of the voyage
Q9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
Q10	10°C	Carry at 10°C for the full duration of the voyage
Q10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
Q11	11°C	Carry at 11°C for the full duration of the voyage
Q11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
Q12	12°C	Carry at 12°C for the full duration of the voyage
Q12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
Q13	13°C	Carry at 13°C for the full duration of the voyage
Q13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
Q14	14°C	Carry at 14°C for the full duration of the voyage
Q14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
Q15	15°C	Carry at 15°C for the full duration of the voyage
Q15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
Q16	16°C	Carry at 16°C for the full duration of the voyage

Q16.5	16.5°C	Carry at 16.5°C for the full duration of the voyage
Q17	17°C	Carry at 17°C for the full duration of the voyage
Q17.5	17.5°C	Carry at 17.5°C for the full duration of the voyage
Q18	18°C	Carry at 18°C for the full duration of the voyage
Q18.5	18.5°C	Carry at 18.5°C for the full duration of the voyage
Q19	19°C	Carry at 19°C for the full duration of the voyage
Q19.5	19.5°C	Carry at 19.5°C for the full duration of the voyage
Q20	20°C	Carry at 20°C for the full duration of the voyage
Q21	21°C	Carry at 21°C for the full duration of the voyage
Q22	22°C	Carry at 22°C for the full duration of the voyage
Q23	23°C	Carry at 23°C for the full duration of the voyage
Chilled products carried at any minus temperature – Vents Open		
H-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
H-1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
H-1.5	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
H-2	minus 2.0°C	Carry at minus 2.0°C for the full duration of the voyage
H-2.5	minus 2.5°C	Carry at minus 2.5°C for the full duration of the voyage
H-3	minus 3.0°C	Carry at minus 3.0°C for the full duration of the voyage
H-3.5	minus 3.5°C	Carry at minus 3.5°C for the full duration of the voyage
H-4	minus 4.0°C	Carry at minus 4.0°C for the full duration of the voyage
H-4.5	minus 4.5°C	Carry at minus 4.5°C for the full duration of the voyage
H-5	minus 5.0°C	Carry at minus 5.0°C for the full duration of the voyage
Chilled products carried at any minus temperature – Vents Closed		
U-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
U-1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
U-1.5	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
U-2	minus 2.0°C	Carry at minus 2.0°C for the full duration of the voyage
U-2.5	minus 2.5°C	Carry at minus 2.5°C for the full duration of the voyage
U-3	minus 3.0°C	Carry at minus 3.0°C for the full duration of the voyage
U-3.5	minus 3.5°C	Carry at minus 3.5°C for the full duration of the voyage
U-4	minus 4.0°C	Carry at minus 4.0°C for the full duration of the voyage
U-4.5	minus 4.5°C	Carry at minus 4.5°C for the full duration of the voyage

U-5	minus 5.0°C	Carry at minus 5.0°C for the full duration of the voyage
CITRUS FRUIT		
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h**
		Specialised Refrigerated Vessel – maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
EU/IOI SHIPMENTS containers ONLY **All Soft Citrus, Grapefruit and Limes (Bearss/Persian/Tahiti), *(Citrus latifolia*) *except oranges* are to be shipped according to the regimes below:**		
EC0	0.0°C/30d 4.0°C	0.0°C (Pulp temperature at time of loading not exceeding 1.0°C); Carry at 0.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
ECW0	0.0°C/30d 4.0°C	0.0°C (Pulp temperature at time of loading not exceeding 10°C); Carry at 0.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EC01	minus 1.0°C/30d 4.0°C	minus 1.0°C (Pulp temperature at time of loading not exceeding 0.0°C); Carry at minus 1.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
ECW01	minus 1.0°C/30d 4.0°C	minus 1.0°C (Pulp temperature at time of loading not exceeding 10.0°C); Carry at minus 1.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EW0	0.0°C/30d 4.0°C	0.0°C (Pulp temperature at time of loading not exceeding 25°C); Carry at 0.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EW01	minus 1.0°C/30d 4.0°C	minus 1.0°C (Pulp temperature at time of loading not exceeding 25°C); Carry at minus 1.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.

EC2	2.0°C/30d 4.0°C	2.0°C (Pulp temperature at time of loading not exceeding 5.0°C); Carry at 2.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EC1	1.0°C/30d 4.0°C	1.0°C (Pulp temperature at time of loading not exceeding 4.0°C); Carry at 1.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EC3	3.0°C/30d 4.0°C	3.0°C (Pulp temperature at time of loading not exceeding 5.0°C); Carry at 3.0°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EC35	3.5°C/30d 4.0°C	3.5°C (Pulp temperature at time of loading not exceeding 5.5°C); Carry at 3.5°C for 30 days, calculated from time of gate in check at the terminal, (gate in time must be obtained from the Shipping line) thereafter raise the temperature to 4.0°C and maintain until discharge.
EC4	4.0°C	4.0°C (Pulp temperature at time of loading not exceeding 6.0°C); Carry at 4.0°C for the full duration of the voyage
All citrus fruit, including oranges (navels and Valencia's) are to be shipped according to the regimes below:		
EOY2	2.0°C/20d, 4.0°C	2.0°C (Pulp temperature at time of loading 2.0°C or colder); Carry at 2.0°C for 20 days, calculated from time of loading (loading date must be obtained from the Shipping line), thereafter, if the voyage extends beyond 30 days from time of loading, raise the temperature to 4.0°C and maintain until discharge.
EOY1	1.0°C/20d, 4.0°C	1.0°C (Pulp temperature at time of loading 2.0°C or colder); Carry at 1.0°C for 20 days, calculated from time of loading (loading date must be obtained from the Shipping line), thereafter, if the voyage extends beyond 30 days from time of loading, raise the temperature to 4.0°C and maintain until discharge.
EOY0	0.0°C/20d, 4.0°C	0.0°C (Pulp temperature at time of loading 0.0°C or colder); Carry at 0.0°C for 20 days, calculated from time of loading (loading date must be obtained from the Shipping line), thereafter, if the voyage extends beyond 30 days from time of loading, raise the temperature to 4.0°C and maintain until discharge.
EOY01	minus 1.0°C/20d, 4.0°C	Minus 1.0°C (Pulp temperature at time of loading minus 1.0°C or colder); Carry at minus 1.0°C for 20 days, calculated from

		time of loading (loading date must be obtained from the Shipping line), thereafter, if the voyage extends beyond 30 days from time of loading, raise the temperature to 4.0°C and maintain until discharge.
SC1	minus 1.5°C/16d, 4.0°C	Minus 1.5°C (Pulp temperature at time of loading 0.0°C or colder); Carry at minus 1.5°C for a minimum of 16 voyage days thereafter, raise the temperature to 4.0°C and maintain until discharge.
EUN/IOI SHIPMENTS SPECIALISED REFRIGERATED VESSELS (SRV) ONLY **All citrus fruit, except oranges, are to be shipped according to the regimes below:**		
EOVX2	2.0°C	2.0°C (Pulp temperature at time of shipping 3.0°C or colder); Carry at 2.0°C for a minimum of 25 voyage days and maintain until discharged.
EOVX1	1.0°C	1.0°C (Pulp temperature at time of shipping 3.0°C or colder); Carry at 1.0°C for a minimum of 25 voyage days and maintain until discharged.
EOVX0	0.0°C	0.0°C (Pulp temperature at time of shipping 3.0°C or colder); Carry at 0.0°C for a minimum of 25 voyage days and maintain until discharged.
EOVX01	minus 1.0°C	Minus 1.0°C (Pulp temperature at time of shipping 3.0°C or colder); Carry at minus 1.0°C for a minimum of 25 voyage days and maintain until discharged.
All citrus fruit, including oranges are to be shipped according to the regimes below:		
EOVY2	2.0°C	2.0°C (Pulp temperature at time of shipping 2.0°C or colder); Carry at 2.0°C for a minimum of 20 voyage days and maintain until discharged.
EOVY1	1.0°C	1.0°C (Pulp temperature at time of shipping 2.0°C or colder); Carry at 1.0°C for a minimum of 20 voyage days and maintain until discharged.
EOVY0	0.0°C	0.0°C (Pulp temperature at time of shipping 2.0°C or colder); Carry at 0.0°C for a minimum of 20 voyage days and maintain until discharged.
EOVY01	minus 1.0°C	Minus 1.0°C (Pulp temperature at time of shipping minus 1.0°C or colder); Carry at minus 1.0°C for a minimum of 25 voyage days and maintain until discharged.
SC1	minus 1.5°C	Minus 1.5°C (Pulp temperature at time of shipping 0.0°C or colder); Carry at minus 1.5°C for a minimum of 16 voyage days and maintain until discharged.
FOR NON-EU DESTINATIONS **• All Lemons (Key West Indian- and Mexican lime) (Citrus aurantifolia) and kumquats to EU destinations are to be shipped using the "C" or "W" regime codes as follows:**		
C0	0.0°C	Carry at 0.0°C for the full duration of the voyage
C0.5	0.5°C	Carry at 0.5°Cfor the full duration of the voyage
C1	1.0°C	Carry at 1.0°C for the full duration of the voyage

C1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
C2	2.0°C	Carry at 2.0°C for the full duration of the voyage
C2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
C3	3.0°C	Carry at 3.0°C for the full duration of the voyage
C3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
C4	4.0°C	Carry at 4.0°C for the full duration of the voyage
C4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
C5	5.0°C	Carry at 5.0°C for the full duration of the voyage
C5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
C6	6.0°C	Carry at 6.0°C for the full duration of the voyage
C6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
C7	7.0°C	Carry at 7.0°C for the full duration of the voyage
C7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
C8	8.0°C	Carry at 8.0°C for the full duration of the voyage
C8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
C9	9.0°C	Carry at 9.0°C for the full duration of the voyage
C9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
C10	10°C	Carry at 10°C for the full duration of the voyage
C10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
C11	11°C	Carry at 11°C for the full duration of the voyage
C11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
C12	12°C	Carry at 12°C for the full duration of the voyage
C12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
C13	13°C	Carry at 13°C for the full duration of the voyage
C13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
C14	14°C	Carry at 14°C for the full duration of the voyage
C14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
C15	15°C	Carry at 15°C for the full duration of the voyage
C15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
C16	16°C	Carry at 16°C for the full duration of the voyage
CD1	10°C/5d 3.5°C - (Only to NON -EU Destinations)	Carry at 10°C; 5 days after departure, lower the temperature to 3.5°C, and maintain until discharge
CD2	10°C/10d 3.5°C - (Only to NON -EU Destination)	Carry at 10°C; 10 days after departure, lower the temperature to 3.5°C, and maintain until discharge

W – Warm (ambient) – Citrus fruit	**CARRYING TEMPERATURES**	
W0	0.0°C	Carry at 0.0°C for the full duration of the voyage
W0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
W1	1.0°C	Carry at 1.0°C for the full duration of the voyage
W1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
W2	2.0°C	Carry at 2.0°C for the full duration of the voyage
W2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
W3	3.0°C	Carry at 3.0°C for the full duration of the voyage
W3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
W4	4.0°C	Carry at 4.0°C for the full duration of the voyage
W4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
W5	5.0°C	Carry at 5.0°C for the full duration of the voyage
W5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
W6	6.0°C	Carry at 6.0°C for the full duration of the voyage
W6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
W7	7.0°C	Carry at 7.0°C for the full duration of the voyage
W7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
W8	8.0°C	Carry at 8.0°C for the full duration of the voyage
W8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
W9	9.0°C	Carry at 9.0°C for the full duration of the voyage
W9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
W10	10°C	Carry at 10°Cfor the full duration of the voyage
W10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
W11	11°C	Carry at 11°C for the full duration of the voyage
W11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
W12	12°C	Carry at 12°C for the full duration of the voyage
W12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
W13	13°C	Carry at 13°C for the full duration of the voyage
W13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
W14	14°C	Carry at 14°C for the full duration of the voyage
W14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage

W15	15°C	Carry at 15°C for the full duration of the voyage
W15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
W16	16°C	Carry at 16°C for the full duration of the voyage
REUNION SHIPMENT ONLY – (NO TOLERANCE ALLOWED)		
FRESH AIR VENTILATION Integral Containers – 15 cbm/h		
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
RC-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
RC0.5	0.5'C	Carry at 0.5°C for the full duration of the voyage
RC1	1.0°C	Carry at 1.0°C for the full duration of the voyage
COLD TREATMENT CITRUS FRUIT		
FRESH AIR VENTILATION Integral Containers – 15 cbm/h		
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
SC0	0.0°C	Carry at 0.0°C for the full duration of the voyage
SC1	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
SC2	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
SC3	1.0°C	Carry at 1.0°C for the full duration of the voyage
SC4	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
SC5	0.5°C	Carry at 0.5°C for the full duration of the voyage
SC6	1.5°C	Carry at 1.5°C for the full duration of the voyage
SL2	2.0°C	Carry at plus 2.0°C; 2 days after departure raise the temperature to plus 3.0°C and maintain until discharge
SL3	2.0°C	Carry at plus 2.0°C; 2 days after departure raise the temperature to plus 4.0°C and maintain until discharge
SL4	2.0°C	Carry at plus 2.0°C; 2 days after departure raise the temperature to plus 5.0°C and maintain until discharge.
SL5	2.0°C	Carry at plus 2.0°C; 2 days after departure raise the temperature to plus 7.0°C and maintain until discharge

DECIDUOUS FRUIT		
REUNION SHIPMENT (NO TOLLARENCE ALLOWED)		
NON-VENTILATED DECIDUOUS FRUIT AND TABLE GRAPES (NO TOLERANCE ALLOWED)		
FRESH AIR VENTILATION		**Integral Containers – closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**

RD-1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
RD-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
RD0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
RD1	1.0°C	Carry at 1.0°C for the full duration of the voyage
REUNION SHIPMENTS: DECIDUOUS MIXED WITH VENTILATED PRODUCE (NO TOLERANCE ALLOWED)		
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
RP-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
RP0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
RP1	1.0°C	Carry at 1.0°C for the full duration of the voyage
APPLES:		
FRESH AIR VENTILATION		**Integral Containers – Closed**
		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
D-1.5	minus 1.5°C (apples in bags)	Carry at minus 1.5°C for the full duration of the voyage
D-1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
D-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
D0	0.0°C	Carry at 0.0°C for the full duration of the voyage
D0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
D1	1.0°C	Carry at 1.0°C for the full duration of the voyage
APPLES:		
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h** **Fuji, Pink Lady, Cripps Pink, Sci. Fresh (Jazz), Sci. (Late (Envy) and Nicoter (Kanzi) only)**
		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
DAV-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
DAV0	0.0°C	Carry at 0.0°C for the full duration of the voyage
DAV0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
DAV1	1.0°C	Carry at 1.0°C for the full duration of the voyage
APRICOTS, PEACHES, NECTARINES and CHERRIES		
FRESH AIR VENTILATION		**Integral Containers – Closed**

		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
D-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
TABLE GRAPES:		
FRESH AIR VENTILATION		**Integral Containers – Closed**
		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
GT02	minus 1.0°C (maximum pulp temp of 0.2°C)	Carry at minus 1.0°C for the full duration of the voyage
GT08	minus 0.5°C (maximum pulp temp of 0.8°C)	Carry at minus 0.5°C for the full duration of the voyage
GT15	minus 0.5°C (maximum pulp temp of 1.5°C)	Carry at minus 0.5°C for the full duration of the voyage
GRT1	minus 1.0°C (maximum pulp temp of 0.6°C)	Carry at minus 1.0°C for the full duration of the voyage
GRT2	minus 1.0°C (maximum pulp temp of 1.5°C)	Carry at minus 1.0°C for the full duration of the voyage
GRT5	minus 1.0°C (maximum pulp temp of 0.5°C)	Carry at minus 1.0°C for the full duration of the voyage
GRT9	minus 1.0°C (maximum pulp temp of 0.8°C)	Carry at minus 1.0°C for the full duration of the voyage
GRT12	minus 1.0°C (maximum pulp temp of 1.2°C)	Carry at minus 1.0°C for the full duration of the voyage
GRT15	minus 1.5°C (maximum pulp temp of 1.5°C)	Carry at minus 1.5°C for the full duration of the voyage
PEARS:		
FRESH AIR VENTILATION		**Integral Containers – Closed**
		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
D-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
D0	0.0°C	Carry at 0.0°C for the full duration of the voyage
D0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
D1	1.0°C	Carry at 1.0°C for the full duration of the voyage
SUMMER PEARS – (in plastic bags)		**Early BC, Bon Chretien, Bon Rouge, Rosemarie, Flamingo, Beurre Hardy, Doyenne**

		du Comice, Sempré, Victoria Blush, Harrow Delight
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
DP1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
DP2	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
PEARS:		
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h** **Abate, Forelle and Celina only**
		Specialised Refrigerated Vessel – Maintain CO_2 concentration below 0.5%
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
DPV-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
PLUMS:		
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h**
		Conventional decks - 4 hours per 24 hours
		Songold plums, only to be carried at single temperature if under Smartfresh (S) conditions
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PD1	minus 0.4°C	Carry at minus 0.4°C for the full duration of the voyage
PS1	minus 0.4°C	Carry at minus 0.4°C for the full duration of the voyage
PU1	0.4°C	Carry at 0.4°C for the full duration of the voyage
PU2	2.0°C	Carry at 2.0°C for the full duration of the voyage
PLUMS – DUAL TEMPERATURES: THE BOARD TO BE INFORMED OF THE DATES WHEN STEP UP AND STEP DOWN TEMPERATURE SET POINT CHANGES MUST OCCUR. EXPORTERS OR AGENTS TO USE THE OFFICIAL BOARD ADVICE SHEET FOR DUAL TEMPERATURE PLUM SHIPMENTS, WHICH MUST BE PROVIDED TO THE BOARD AT LEAST 6 BUSINESS HOURS PRIOR TO THE DEPARTURE OF THE VESSEL.		
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PD4	minus 0.4°C/6d 7.5°C/4d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 4 days at 7.5°C lower the the temperature to minus 0.4°C, and maintain until discharge
PD5	minus 0.4°C/6d 7.5°C/5d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 5 days at 7.5°C lower the

		temperature to minus 0.4°C, and maintain until discharge
PD6	minus 0.4°C/6d 7.5°C/6d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 6 days at 7.5°C lower the temperature to minus 0.4°C, and maintain until discharge
PD7	minus 0.4°C/6d 7.5°C/7d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 7 days at 7.5°C lower the temperature to minus 0.4°C, and maintain until discharge
PD8	minus 0.4°C/6d 7.5°C/8d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 8 days at 7.5°C lower the temperature to minus 0.4°C, and maintain until discharge
PD9	minus 0.4°C/6d 7.5°C/9d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of the container raise the temperature to 7.5°C; after 9 days at 7.5°C lower the temperature to minus 0.4°C, and maintain until discharge
PD10	minus 0.4°C/6d 7.5°C/10d minus 0.4°C	Carry at minus 0.4°C; 6 days after the stuffing date of container raise the temperature to 7.5°C; after 10 days at 7.5°C lower the temperature to minus 0.4°C, and maintain until discharge
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PDY7.5	7.5°C	Carry at 7.5°C; after a specified total of days at 7.5°C (exporter to provide total days) lower the temperature to minus 0.4°C, and maintain until discharge
COLD TREATMENT – DECIDUOUS		
FRESH AIR VENTILATION		**Integral Containers – closed (SD – regime), 15 cbm/h (SDV – regime)**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
SD1/SDV1	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
SD2/SDV2	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
SD3/SDV3	minus 1.3°C	Carry at minus 1.3°C for the full duration of the voyage
SD4/SDV4	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
SD5/SDV5	0.5°C	Carry at 0.5°C for the full duration of the voyage

SD6/SDV6	1.0°C	Carry at 1.0°C for the full duration of the voyage
SL1/SLV1	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
SL6/SLV6	0.5˚C	Carry at 0.5˚C for the full duration of the voyage
COLD TREATMENT – DECIDUOUS and CITRUS FRUIT – (SX/SXV - Mixed Fresh Fruit)		
FRESH AIR VENTILATION		**Integral Containers: SX - regime - CLOSED, SXV - regime – 15cbm/h**
SX1/SXV1	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
SX2/SXV2	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
SX3/SXV3	minus 1.3°C	Carry at minus 1.3°C for the full duration of the voyage
SX4/SXV4	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
SX5/SXV5	0.0°C	Carry at 0.0°C for the full duration of the voyage
SX6/SXV6	0.5°C	Carry at 0.5°C for the full duration of the voyage
SX7/SXV7	1.0°C	Carry at 1.0°C for the full duration of the voyage
SX8/SXV8	1.5°C	Carry at 1.5°C for the full duration of the voyage
EXOTIC and SUBTROPICAL FRUIT		
PERSIMMONS:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PM-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
KIWI FRUIT:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
K-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
COLD TREATMENT – AVOCADOS:		
FRESH AIR VENTILATION		**Integral Containers: SS1 - CA (Vents closed) SSV1 - 15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
SS1/SSV1	0.5°C	Carry at 0.5°C for the full duration of the voyage
AVOCADOS:		
FRESH AIR VENTILATION		**All regular atmosphere (RA) and Smartfresh (S) Integral containers – 15 cbm/h**

		Controlled Atmosphere (CA) Vents closed at all times
		Modified Atmosphere (MA) fitted with a "MAX tend" unit, the vent cover must be in the "OPEN" position at all times to allow the installed valve to regulate the air flow.
		Specialised Refrigerated Vessel decks - 4 hours per 24 hours
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
AVP/AVSP	4.0°C	Carry at 4.0°C for the full duration of the voyage
AVG/AVSG	4.5°C	Carry at 4.5°C for the full duration of the voyage
AVF/AVSF	5.0°C	Carry at 5.0°C for the full duration of the voyage
AVA/AVSA	5.5°C	Carry at 5.5°C for the full duration of the voyage
AVB/AVSB	6.0°C	Carry at 6.0°C for the full duration of the voyage
AVJ/AVSJ	6.5°C	Carry at 6.5°C for the full duration of the voyage
AVC/AVSC	7.0°C	Carry at 7.0°C for the full duration of the voyage
AVD/AVSD	8.0°C	Carry at 8.0°C for the full duration of the voyage
AVE/AVSE	9.0°C	Carry at 9.0°C for the full duration of the voyage
AVOCADO – DUAL TEMPERATURES		
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
AV8/AVS8	4.5°C/8d 3.5°C	Carry at 4.5°C, 8 days after departure lower the temperature to 3.5°C, and maintain until discharge
AVO/AVSO	4.5°C/8d 4.0°C	Carry at 4.5°C, 8 days after departure lower the temperature to 4.0°C, and maintain until discharge
AVM/AVSM	5.0°C/8d 4.5°C	Carry at 5.0°C, 8 days after departure lower the temperature to 4.5°C, and maintain until discharge
AVN/AVSN	5.5°C/8d 5.0°C	Carry at 5.5°C, 8 days after departure lower the temperature to 5.0°C, and maintain until discharge
AVR/AVSR	6.0°C/8d 5.5°C	Carry at 6.0°C, 8 days after departure lower the temperature to 5.5°C, and maintain until discharge
AVK/AVSK	7.5°C/8d 6.0°C	Carry at 7.5°C, 8 days after departure lower the temperature to 6.0°C, and maintain until discharge
AVI/AVSI	8.0°C/8d 7.5°C	Carry at 8.0°C, 8 days after departure lower the temperature to 7.5°C, and maintain until discharge

AV7/AVS7	5.0°C/2d 4.5°C/6d 3.5°C	Carry at 5.0°C, 2 days after departure lower the temperature to 4.5°C; after 6 days at 4.5°C lower to 3.5°C, and maintain until discharge
AVY/AVSY	5.5°C/2d 5.0°C/6d 4.0°C	Carry at 5.5°C, 2 days after departure lower the temperature to 5.0°C; after 6 days at 5.0°C lower to 4.0°C, and maintain until discharge
AVQ/AVSQ	4.0°C/2d 3.0°C/6d 2.0°C	Carry at 4.0°C, 2 days after departure lower the temperature to 3.0°C; after 6 days at 3.0°C lower to 2.0°C, and maintain until discharge
AV6/AVS6	5.5°C/2d 5.0°C/6d 4.5°C	Carry at 5.5°C, 2 days after departure lower the temperature to 5.0°C; after 6 days at 5.0°C lower to 4.5°C, and maintain until discharge
AVH/AVSH	6.0°C/2d 5.0°C/6d 4.5°C	Carry at 6.0°C, 2 days after departure lower the temperature to 5.0°C; after 6 days at 5.0°C lower to 4.5°C, and maintain until discharge
AV5/AVS5	6.0°C/2d 5.5°C/6d 5.0°C	Carry at 6.0°C, 2 days after departure lower the temperature to 5.5°C; after 6 days at 5.5°C lower to 5.0°C, and maintain until discharge
AV4/AVS4	6.5°C/2d 4.0°C/6d 3.5°C	Carry at 6.5°C, 2 days after departure lower the temperature to 4.0°C; after 6 days at 4.0°C lower to 3.5°C, and maintain until discharge
AV3/AVS3	6.5°C/2d 6.0°C/6d 5.5°C	Carry at 6.5°C, 2 days after departure lower the temperature to 6.0°C; after 6 days at 6.0°C lower to 5.5°C, and maintain until discharge
AV2/AVS2	7.0°C/2d 6.5°C/6d 6.0°C	Carry at 7.0°C, 2 days after departure lower the temperature to 6.5°C; after 6 days at 6.5°C lower to 6.0°C, and maintain until discharge
AV1/AVS1	8.0°C/2d 7.5°C/6d 7.0°C	Carry at 8.0°C, 2 days after departure lower the temperature to 7.5°C; after 6 days at 7.5°C lower to 7.0°C, and maintain until discharge
AV9/AVS9	9.0°C/2d 8.5°C/6d 8.0°C	Carry at 9.0°C, 2 days after departure lower the temperature to 8.5°C; after 6 days at 8.5°C lower to 8.0°C, and maintain until discharge
AVL/AVSL	9.5°C/2d 9.0°C/6d 8.5°C	Carry at 9.5°C, 2 days after departure lower the temperature to 9.0°C; after 6 days at 9.0°C lower to 8.5°C, and maintain until discharge
BANANAS:		
FRESH AIR VENTILATION		**Integral Containers –30 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
BN10	10°C	Carry at 10°C for the full duration of the voyage
BN11	11°C	Carry at 11°C for the full duration of the voyage
BN12	12°C	Carry at 12°C for the full duration of the voyage
GUAVAS:		

FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
G5	5.0°C	Carry at 5.0°C for the full duration of the voyage
G5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
G6	6.0°C	Carry at 6.0°C for the full duration of the voyage
G6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
G7	7.0°C	Carry at 7.0°C for the full duration of the voyage
G7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
LITCHIS:		
FRESH AIR VENTILATION		**Integral Containers – 15 cbm/h or CA or MA (exporter to select)** **Code LP1 - Purfresh conditions indicate where the fresh air ventilation setting is 25 m3 per hour and maintained for the full duration of the voyage**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
L-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
L0	0.0°C	Carry at 0.0°C for the full duration of the voyage
L1	1.0°C	Carry at 1.0°C for the full duration of the voyage
LP1	1.0°C	Carry at 1.0°C for the full duration of the voyage
L2	2.0°C	Carry at 2.0°C for the full duration of the voyage
MANGOES:		
FRESH AIR VENTILATION		**Integral Containers – 15, 40 cbm/h or CA or MA (exporter to select)**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
M8	8.0°C	Carry at 8.0°C for the full duration of the voyage
M9	9.0°C	Carry at 9.0°C for the full duration of the voyage
M10	10°C	Carry at 10°C for the full duration of the voyage
M11	11°C	Carry at 11°C for the full duration of the voyage
M12	12°C	Carry at 12°C for the full duration of the voyage
M13	13°C	Carry at 13°C for the full duration of the voyage
MANGOES: DUAL TEMPERATURES		
MOX	12°C/7d 10°C	Carry at 12°C, 7 days after departure lower the temperature to 10°C and maintain until discharge (***Voyage not exceeding 16 days***)
MAOX	12°C/7d 10°C	Carry at 12°C, 7 days after departure lower the temperature to 10°C and maintain until discharge (***Voyage not exceeding 16 days***)

MOZ	10°C/7d 8.0°C	Carry at 10°C, 7 days after departure lower the temperature to 8.0°C and maintain until discharge
MAOZ	10°C/7d 8.0°C	Carry at 10°C, 7 days after departure lower the temperature to 8.0°C and maintain until discharge
NUTS:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
N0	0.0°C	Carry at 0.0°C for the full duration of the voyage
N1	1.0°C	Carry at 1.0°C for the full duration of the voyage
N2	2.0°C	Carry at 2.0°C for the full duration of the voyage
N3	3.0°C	Carry at 3.0°C for the full duration of the voyage
N4	4.0°C	Carry at 4.0°C for the full duration of the voyage
N5	5.0°C	Carry at 5.0°C for the full duration of the voyage
N6	6.0°C	Carry at 6.0°C for the full duration of the voyage
N7	7.0°C	Carry at 7.0°C for the full duration of the voyage
N8	8.0°C	Carry at 8.0°C for the full duration of the voyage
N9	9.0°C	Carry at 9.0°C for the full duration of the voyage
N10	10°C	Carry at 10°C for the full duration of the voyage
N11	11°C	Carry at 11°C for the full duration of the voyage
N12	12°C	Carry at 12°C for the full duration of the voyage
N13	13°C	Carry at 13°C for the full duration of the voyage
N14	14°C	Carry at 14°C for the full duration of the voyage
N15	15°C	Carry at 15°C for the full duration of the voyage
N16	16°C	Carry at 16°C for the full duration of the voyage
N17	17°C	Carry at 17°C for the full duration of the voyage
N18	18°C	Carry at 18°C for the full duration of the voyage
N19	19°C	Carry at 19°C for the full duration of the voyage
N20	20°C	Carry at 20°C for the full duration of the voyage
PAPAYA (PAW-PAWS):		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
P10	10°C	Carry at 10°C for the full duration of the voyage
P11	11°C	Carry at 11°C for the full duration of the voyage
P12	12°C	Carry at 12°C for the full duration of the voyage
P13	13°C	Carry at 13°C for the full duration of the voyage

P14	14°C	Carry at 14°C for the full duration of the voyage
P15	15°C	Carry at 15°C for the full duration of the voyage
PASSION FRUIT:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PA5	5.0°C	Carry at 5.0°C for the full duration of the voyage
PA5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
PA6	6.0°C	Carry at 6.0°C for the full duration of the voyage
PA6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
PA7	7.0°C	Carry at 7.0°C for the full duration of the voyage
PA7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
PA8	8.0°C	Carry at 8.0°C for the full duration of the voyage
PA8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
PINEAPPLES:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
A8	8.0°C	Carry at 8.0°C for the full duration of the voyage
A9	9.0°C	Carry at 9.0°C for the full duration of the voyage
A10	10°C	Carry at 10°C for the full duration of the voyage
A11	11°C	Carry at 11°C for the full duration of the voyage
A12	12°C	Carry at 12°C for the full duration of the voyage
PRICKLY PEARS:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PR2	2.0°C	Carry at 2.0°C for the full duration of the voyage
PR3	3.0°C	Carry at 3.0°C for the full duration of the voyage
PR4	4.0°C	Carry at 4.0°C for the full duration of the voyage
PR5	5.0°C	Carry at 5.0°C for the full duration of the voyage
PR6	6.0°C	Carry at 6.0°C for the full duration of the voyage
PR7	7.0°C	Carry at 7.0°C for the full duration of the voyage
PR8	8.0°C	Carry at 8.0°C for the full duration of the voyage
POMEGRANATE:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
PG4	4.0°C	Carry at 4.0°C for the full duration of the voyage

PG5	5.0°C	Carry at 5.0°C for the full duration of the voyage
PG6	6.0°C	Carry at 6.0°C for the full duration of the voyage
PG7	7.0°C	Carry at 7.0°C for the full duration of the voyage
PG8	8.0°C	Carry at 8.0°C for the full duration of the voyage
PG9	9.0°C	Carry at 9.0°C for the full duration of the voyage
PG10	10°C	Carry at 10°C for the full duration of the voyage
PG11	11°C	Carry at 11°C for the full duration of the voyage
PG12	12°C	Carry at 12°C for the full duration of the voyage
WATERMELONS and MELONS:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
E4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
E5	5.0°C	Carry at 5.0°C for the full duration of the voyage
E5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
E6	6.0°C	Carry at 6.0°C for the full duration of the voyage
E6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
E7	7.0°C	Carry at 7.0°C for the full duration of the voyage
E7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
E8	8.0°C	Carry at 8.0°C for the full duration of the voyage
E8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
E9	9.0°C	Carry at 9.0°C for the full duration of the voyage
E9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
E10	10°C	Carry at 10°C for the full duration of the voyage
E10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
E11	11°C	Carry at 11°C for the full duration of the voyage
E11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
E12	12°C	Carry at 12°C for the full duration of the voyage
E12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
E13	13°C	Carry at 13°C for the full duration of the voyage
E13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
E14	14°C	Carry at 14°C for the full duration of the voyage
E14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
E15	15°C	Carry at 15°C for the full duration of the voyage
E15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
E16	16°C	Carry at 16°C for the full duration of the voyage
OTHER PRODUCT		
VEGETABLES:		

FRESH AIR VENTILATION		**Integral Containers – 15, 20 25, 30, 40, 50 cbm/h (ONIONS and GARLIC maximum ventilation) exporter to select**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
V0	0.0°C	Carry at 0.0°C for the full duration of the voyage
V0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
V1	1.0°C	Carry at 1.0°C for the full duration of the voyage
V1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
V2	2.0°C	Carry at 2.0°C for the full duration of the voyage
V2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
V3	3.0°C	Carry at 3.0°C for the full duration of the voyage
V3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
V4	4.0°C	Carry at 4.0°C for the full duration of the voyage
V4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
V5	5.0°C	Carry at 5.0°C for the full duration of the voyage
V5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
V6	6.0°C	Carry at 6.0°C for the full duration of the voyage
V6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
V7	7.0°C	Carry at 7.0°C for the full duration of the voyage
V7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
V8	8.0°C	Carry at 8.0°C for the full duration of the voyage
V8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
V9	9.0°C	Carry at 9.0°C for the full duration of the voyage
V9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
V10	10°C	Carry at 10°C for the full duration of the voyage
V10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
V11	11°C	Carry at 11°C for the full duration of the voyage
V11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
V12	12°C	Carry at 12°C for the full duration of the voyage
V12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage

V13	13°C	Carry at 13°C for the full duration of the voyage
V13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
V14	14°C	Carry at 14°C for the full duration of the voyage
V14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
V15	15°C	Carry at 15°C for the full duration of the voyage
V15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
V16	16°C	Carry at 16°C for the full duration of the voyage
V16.5	16.5°C	Carry at 16.5°C for the full duration of the voyage
V17	17°C	Carry at 17°C for the full duration of the voyage
V17.5	17.5°C	Carry at 17.5°C for the full duration of the voyage
V18	18°C	Carry at 18°C for the full duration of the voyage
V18.5	18.5°C	Carry at 18.5°C for the full duration of the voyage
V19	19°C	Carry at 19°C for the full duration of the voyage
V19.5	19.5°C	Carry at 19.5°C for the full duration of the voyage
V20	20°C	Carry at 20°C for the full duration of the voyage
PLANT MATERIAL, CUTTINGS, WHOLE PLANTS, POTTED AND BULBS:		
FRESH AIR VENTILATION		**Integral Containers –15, 20, 25, 28 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
T-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
T0	0.0°C	Carry at 0.0°C for the full duration of the voyage
T0.5	0.5°C	Carry at 0.5°C for the full duration of the voyage
T1	1.0°C	Carry at 1.0°C for the full duration of the voyage
T1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
T2	2.0°C	Carry at 2.0°C for the full duration of the voyage
T2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
T3	3.0°C	Carry at 3.0°C for the full duration of the voyage
T3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
T4	4.0°C	Carry at 4.0°C for the full duration of the voyage
T4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
T5	5.0°C	Carry at 5.0°C for the full duration of the voyage
T5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
T6	6.0°C	Carry at 6.0°C for the full duration of the voyage
T6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage

T7	7.0°C	Carry at 7.0°C for the full duration of the voyage
T7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
T8	8.0°C	Carry at 8.0°C for the full duration of the voyage
T8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
T9	9.0°C	Carry at 9.0°C for the full duration of the voyage
T9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
T10	10°C	Carry at 10°C for the full duration of the voyage
T10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
T11	11°C	Carry at 11°C for the full duration of the voyage
T11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
T12	12°C	Carry at 12°C for the full duration of the voyage
T12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
T13	13°C	Carry at 13°C for the full duration of the voyage
T13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
T14	14°C	Carry at 14°C for the full duration of the voyage
T14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
T15	15°C	Carry at 15°C for the full duration of the voyage
T15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
T16	16°C	Carry at 16°C for the full duration of the voyage
BLUEBERRIES:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h** **No ventilation for transport under Controlled Atmosphere (CA) conditions**
REGIME CODE	**REGIME CODE**	**DESCRIPTION**
BR0	0.0°C	Carry at 0.0°C for the full duration of the voyage
FROZEN PRODUCTS: **Set point temperature to be controlled in the Return Air Temperature (RAT)**		
FRESH AIR VENTILATION		**Integral Containers – Closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
F-10	minus 10°C	To be carried at a set point of minus 10°C
F-11	minus 11°C	To be carried at a set point of minus 11°C
F-12	minus 12°C	To be carried at a set point of minus 12°C
F-13	minus 13°C	To be carried at a set point of minus 13°C
F-14	minus 14°C	To be carried at a set point of minus 14°C
F-15	minus 15°C	To be carried at a set point of minus 15°C
F-16	minus 16°C	To be carried at a set point of minus 16°C
F-17	minus 17°C	To be carried at a set point of minus 17°C
F-18	minus 18°C	To be carried at a set point of minus 18°C
F-19	minus 19°C	To be carried at a set point of minus 19°C

F-20	minus 20°C	To be carried at a set point of minus 20°C
F-21	minus 21°C	To be carried at a set point of minus 21°C
F-22	minus 22°C	To be carried at a set point of minus 22°C
F-23	minus 23°C	To be carried at a set point of minus 23°C
F-24	minus 24°C	To be carried at a set point of minus 24°C
F-25	minus 25°C	To be carried at a set point of minus 25°C
F-26	minus 26°C	To be carried at a set point of minus 26°C
F-27	minus 27°C	To be carried at a set point of minus 27°C
F-28	minus 28°C	To be carried at a set point of minus 28°C
F-29	minus 29°C	To be carried at a set point of minus 29°C
F-30	minus 30°C	To be carried at a set point of minus 30°C
F-35	Minus 35°C	To be carried at a set point of minus 35°C
F-60	minus 60°C	To be carried at a set point of minus 60°C
MEAT PRODUCTS:		
FRESH AIR VENTILATION		**Integral Containers - Closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
B-1.5	minus 1.5°C	Carry at minus 1.5°C for the full duration of the voyage
B-1	minus 1.0°C	Carry at minus 1.0°C for the full duration of the voyage
B-0.5	minus 0.5°C	Carry at minus 0.5°C for the full duration of the voyage
B0	0.0°C	Carry at 0.0°C for the full duration of the voyage
B1	1.0°C	Carry at 1.0°C for the full duration of the voyage
DAIRY PRODUCTS:		
FRESH AIR VENTILATION		**Integral Containers - closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
S0 - (Butter)	0.0°C	Carry at 0.0°C for the full duration of the voyage
S1 - (Butter)	1.0°C	Carry at 1.0°C for the full duration of the voyage
S12 - (Long Life Milk)	12°C	Carry at 12°C for the full duration of the voyage
SM2 - (Margarine)	2.0°C	Carry at 2.0°C for the full duration of the voyage
SM3 - (Margarine)	3.0°C	Carry at 3.0°C for the full duration of the voyage
SM4 - (Margarine)	4.0°C	Carry at 4.0°C for the full duration of the voyage
SM5 - (Margarine)	5.0°C	Carry at 5.0°C for the full duration of the voyage
CHEESE:		
FRESH AIR VENTILATION		**Integral Containers - closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
Z2	2.0°C	Carry at 2.0°C for the full duration of the voyage
Z3	3.0°C	Carry at 3.0°C for the full duration of the voyage

Z4	4.0°C	Carry at 4.0°C for the full duration of the voyage
Z5	5.0°C	Carry at 5.0°C for the full duration of the voyage
Z6	6.0°C	Carry at 6.0°C for the full duration of the voyage
Z7	7.0°C	Carry at 7.0°C for the full duration of the voyage
EGGS:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
SE4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
SE5	5.0°C	Carry at 5.0°C for the full duration of the voyage
SE5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
SE6	6.0°C	Carry at 6.0°C for the full duration of the voyage
SE6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
SE7	7.0°C	Carry at 7.0°C for the full duration of the voyage
SE7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
SE8	8.0°C	Carry at 8.0°C for the full duration of the voyage
SE8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
DRIED FRUIT:		
FRESH AIR VENTILATION		**Integral Containers –15 cbm/h**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
R0	0.0°C	Carry at 0.0°C for the full duration of the voyage
R0.5	0.5°C	Carry at 0.5°Cfor the full duration of the voyage
R1	1.0°C	Carry at 1.0°C for the full duration of the voyage
R1.5	1.5°C	Carry at 1.5°C for the full duration of the voyage
R2	2.0°C	Carry at 2.0°C for the full duration of the voyage
R2.5	2.5°C	Carry at 2.5°C for the full duration of the voyage
R3	3.0°C	Carry at 3.0°C for the full duration of the voyage
R3.5	3.5°C	Carry at 3.5°C for the full duration of the voyage
R4	4.0°C	Carry at 4.0°C for the full duration of the voyage
R4.5	4.5°C	Carry at 4.5°C for the full duration of the voyage
R5	5.0°C	Carry at 5.0°C for the full duration of the voyage
R5.5	5.5°C	Carry at 5.5°C for the full duration of the voyage
R6	6.0°C	Carry at 6.0°C for the full duration of the voyage
R6.5	6.5°C	Carry at 6.5°C for the full duration of the voyage
R7	7.0°C	Carry at 7.0°C for the full duration of the voyage
R7.5	7.5°C	Carry at 7.5°C for the full duration of the voyage
R8	8.0°C	Carry at 8.0°C for the full duration of the voyage
R8.5	8.5°C	Carry at 8.5°C for the full duration of the voyage
R9	9.0°C	Carry at 9.0°C for the full duration of the voyage
R9.5	9.5°C	Carry at 9.5°C for the full duration of the voyage
R10	10°C	Carry at 10°C for the full duration of the voyage

R10.5	10.5°C	Carry at 10.5°C for the full duration of the voyage
R11	11°C	Carry at 11°C for the full duration of the voyage
R11.5	11.5°C	Carry at 11.5°C for the full duration of the voyage
R12	12°C	Carry at 12°C for the full duration of the voyage
R12.5	12.5°C	Carry at 12.5°C for the full duration of the voyage
R13	13°C	Carry at 13°C for the full duration of the voyage
R13.5	13.5°C	Carry at 13.5°C for the full duration of the voyage
R14	14°C	Carry at 14°C for the full duration of the voyage
R14.5	14.5°C	Carry at 14.5°C for the full duration of the voyage
R15	15°C	Carry at 15°C for the full duration of the voyage
R15.5	15.5°C	Carry at 15.5°C for the full duration of the voyage
R16	16°C	Carry at 16°C for the full duration of the voyage
R16.5	16.5°C	Carry at 16.5°C for the full duration of the voyage
R17	17°C	Carry at 17°C for the full duration of the voyage
R17.5	17.5°C	Carry at 17.5°C for the full duration of the voyage
R18	18°C	Carry at 18°C for the full duration of the voyage
R18.5	18.5°C	Carry at 18.5°C for the full duration of the voyage
R19	19°C	Carry at 19°C for the full duration of the voyage
R19.5	19.5°C	Carry at 19.5°C for the full duration of the voyage
R20	20°C	Carry at 20°C for the full duration of the voyage
CHOCOLATES/CONFECTIONARY:		
FRESH AIR VENTILATION		**Integral Containers – Closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
O16	16°C	Carry at 16°C for the full duration of the voyage (Chocolates wrapped)
O17	17°C	Carry at 17°C for the full duration of the voyage (Chocolates wrapped)
O18	18°C	Carry at 18°C for the full duration of the voyage (Chocolates wrapped)
O19	19°C	Carry at 19°C for the full duration of the voyage (Chocolates wrapped)
020	20°C	Carry at 20°C for the full duration of the voyage (Chocolates wrapped)
O21	21°C	Carry at 21°C for the full duration of the voyage (Chocolates wrapped)
WINE:		
FRESH AIR VENTILATION		**Integral Containers – Closed**
REGIME CODE	**CARRYING TEMPERATURES**	**DESCRIPTION**
Y10	10°C	Carry at 10°C for the full duration of the voyage
Y11	11°C	Carry at 11°C for the full duration of the voyage
Y12	12°C	Carry at 12°C for the full duration of the voyage

Y13	13°C	Carry at 13°C for the full duration of the voyage
Y14	14°C	Carry at 14°C for the full duration of the voyage
Y15	15°C	Carry at 15°C for the full duration of the voyage
Y16	16°C	Carry at 16°C for the full duration of the voyage
Y17	17°C	Carry at 17°C for the full duration of the voyage
Y18	18°C	Carry at 18°C for the full duration of the voyage
Y19	19°C	Carry at 19°C for the full duration of the voyage
Y20	20°C	Carry at 20°C for the full duration of the voyage
Y21	21°C	Carry at 21°C for the full duration of the voyage
TRIAL SHIPMENTS		
PRODUCTS:		
CIT - CITRUS FRUIT **GRT – TABLE GRAPES** **SFT - STONE FRUIT** **PFT - POME FRUIT** **STT - SUBTROPIC and EXOTIC** **OPT - OTHER PRODUCTS**	Various	Please be advised that the Board will allocate the booking codes e.g., CIT/GRT/SFT1, 2, 3 etc. at the time of any trial shipment sign off, and the exporter must then use this allocated code when a booking is made with the Board and the Shipping Line. The CIT/GRT/SFT 1, 2, 3 etc. code will be used for all trial shipments.
FOREIGN CARGO		
PRODUCTS:		
FSA + temp	Intended for loading in RSA	Precooled, handled and shipped under RSA conditions, Board supervision
FOR + temp	In-transit in bond shipments	Precooled and handled in a foreign country or RSA, no Board involvement
FSW + temp	Intended for loading in RSA	Citrus fruit can be stored and shipped in the same common cooling space as RSA cargo, Swaziland fruit ONLY, not allowed to EU

Optimum RH

For most fresh perishable product the optimum RH in the atmosphere is in the range of 90% to 95% with a fluctuation of not greater than plus/minus 5%.

- Perishable product requiring a RH of close to 100% are leafy vegetables (for instance lettuce and cabbage), and flowers.

- Perishable product requiring a low RH in the order of 70% are onions, garlic and certain flower bulbs.

The optimum RH for fresh perishable product exported from the Republic are given under the different perishable product headings.