

Standard Operating Procedure for Export of Pomegranate Arils to Australia



Government of India
Ministry of Agriculture & Farmers Welfare
(Department of Agriculture, Cooperation & Farmers Welfare)
Directorate of Plant Protection, Quarantine & Storage
N.H.IV., Faridabad-121001
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1. Document issue and revision:

The issue and revision of the document “Standard Operating Procedure (SOP) for Export of Pomegranate Arils to Australia ” is controlled by the Directorate of Plant Protection, Quarantine & Storage (DPPQS), National Plant Protection Organization (NPPO) of India, NH-IV, Faridabad-121001 (Tel: 0129-2413985; fax:0129-2412125; e-mail: ppa@nic.in). Subsequent revision of the SOP will be issued together with a revision number and issue date, and posted at <http://plantquarantineindia.nic.in> for use of all stakeholders.

2. Distribution of SOP:

The SOP shall be uploaded on public domains; <http://plantquarantineindia.nic.in> for use of all stakeholders.

3. Background:

This document provides guidance and prescribes the standard operating procedures for export of pomegranate Arils to Australia to comply the requirement as per agreed Work plan for export of fresh pomegranates from India to Australia. **(Enclosed as Appendix-I)**

4. Purpose:

This SOP is brought out to implement **agreed Work plan for export of fresh pomegranates arils from India to Australia** hereafter will refer as **agreed Work plan** and mainly deals procedure for registration of orchards, pack houses, risk mitigation measures, phytosanitary inspection & certification, responsibilities of different stake holders.

5. General Requirements:

- 5.1 The export of Pomegranate arils from India shall be from the pack house registered with the DPPQS and Agricultural and Processed Food Products Export Development Authority (APEDA).
- 5.2 Pomegranate arils exported to Australia should be free from Fruit flies {*Bactrocera carambolae* (Carambola fruit fly), *Bactrocera dorsalis* (Oriental fruit fly), *Bactrocera zonata* (Peach fruit fly)}
- 5.3 Orchards and farmers will be registered and monitored by State Agriculture/Horticulture Department and ensure risk mitigation measures for Quarantine pests concerned to Australia as per agreed Work plan.
- 5.4 Exporter shall source pomegranate from the farms orchards registered with State Agriculture/Horticulture Department
- 5.5 Pomegranate fruits shall undergo following risk migration measures for fruit flies as per clause 5.3 of Agreed Work plan
- 5.6 Phytosanitary status of the fruits will be secured during storage and transport.
- 5.7 Packaging must be sealed fully or if not sealed the opening must be covered by mesh/screen

that is no more than 1.6 mm pore size and not less than 0.16 mm strand thickness.

- 5.8 Each carton of pomegranate arils should be printed with a) Product of India for Australia, b) Fruit type (that is fresh pomegranate arils), c) Place of production/orchard code, d) Packing house/ processing facility name and / or registration number, e) Packing date, f) Treatment facility name and/or code (if a treatment is used as risk management measure)
- 5.9 Aril processing unit shall have HACCP based certification from internationally recognized accredited certification bodies
- 5.10 Aril processing unit shall meet standards developed by FSSAI for food hygiene, additives, contaminants, toxins and residues including Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011, Food Safety and Standards (Contaminants, Toxins and Regulations) Regulations, 2011
- 5.11 Pomegranate arils must comply with the Australian New Zealand Food Standards Code. Establishment must demonstrate they have knowledge of relevant Australian Standards such as MRL standards.

6. Procedures for Registration of Orchards:

- 6.1 Exporter/Farmer intended to export of Pomegranate arils to Australia will request State Department of Agriculture/ Horticulture for registration of orchard on prescribed proforma **Annexure-I**.
- 6.2 State Department of Agriculture/Horticulture will verify the facts as stated by the farmer/ exporter before registration. State Department of Agriculture/Horticulture will register farmers/ Orchard on the proforma given at **Annexure-II**.
- 6.3 State Department of Agriculture/Horticulture will enter the detail of registered farmers/ Orchard on HortiNet traceability system implemented by APEDA for maintaining National Register.
- 6.4 State Department of Agriculture/Horticulture will organize training for the registered growers on risk management of quarantine pests concerned to Australia.
- 6.5 State Department of Agriculture/Horticulture will monitor status of pests and diseases in the registered farms and ensure that their record is maintained at the registered farm along with the record of the control measures/ plant protection measures from sowing to harvesting for control of pests and diseases especially the pests of concerns to Australia as referred in Agreed Work plan. Data recorded on pest monitoring and control measures should be shared with concerned pack house at regular interval (**Annexure-III**).

7. Procedure for approval of pack house/ processing unit

7.1 Application and Fees for Registration:

- 7.1.1 The pack house/ processing unit intending to export pomegranate fruits shall apply to Regional Plant Quarantine Station (RPQS) of the concerned area for registration of their unit in the prescribed application form (**Annexure-IV**). The addresses of the Regional Plant Quarantine Stations and list of States/UTs are given in **Annexure-V**.
- 7.1.2 Each application shall be accompanied with a registration fee of Rs.5,000/- (Rupees Five

Thousand Only) . Fee shall be paid online in the <https://www.bharatkosh.gov.in>. Online generated receipt should be attached with the application.

7.2 Procedure for Registration:

7.2.1 Officer In charge of RPQS shall nominate officer for inspection/audit of pack house/ processing unit within 07 days from the receipt of complete application and intimate to APEDA through E-mail with a request for joint inspection.

7.2.2 Nominated officers of DPPQS & APEDA will conduct inspection/audit within 15 days from the date of nomination.

7.2.3 The Inspection team shall carry out detailed Physical Inspection/audit of the pack house and ascertain its Phytosanitary compliance as per SOP. The Inspection team shall furnish the Inspection Report (**Annexure-VI**) to the Officer-in-charge of concerned RPQS within two days from the date of inspection. The Officer-in-charge of RPQS will forward inspection report with his recommendations to the Plant Protection Adviser within three days. PPA will issue certificate within 07 days from the receipt of the inspection report in **Annexure-VII**. The registration will be valid for two years.

7.3 Monitoring (renewal) of registered Warehouses:

7.3.1 Registered pack house will apply to the respective RPQS. A fee of Rs.2,000/- in the form shall be payable online in the <https://www.bharatkosh.gov.in>.

7.3.2 Officer In charge of RPQS shall nominate officer for renewal inspection/ audit of pack house within 07 days from the receipt of complete application and intimate to APEDA through E-mail with a request for joint inspection.

7.3.3 Nominated officers of DPPQS & APEDA will conduct inspection/ audit within 15 days from the date of nomination.

7.3.4 The Inspection team shall carry out detailed Physical Inspection/ audit of the pack house/ processing unit and ascertain its Phytosanitary compliance as per SOP. The Inspection team shall furnish the Inspection Report (**Annexure-VI**) to the Officer-in-charge of concerned RPQS within two days from the date of inspection. The Officer-in-charge of RPQS will issue certificate within 07 days from the receipt of the inspection report in **Annexure-VII**. The registration will renew for two years.

7.3.5 A list of registered pack house/processing unit shall be maintained by DPPQS at National Level and updated from time to time

8. Minimum Requirement of pack house/ processing units

Unidirectional product flow, facility to sanitize fruits, Maintenance of list of registered farmers, sufficient primary inspection area, processing area, quarantine area, essential equipment (**Annexure-VIII**), general hygiene, trained man power, records/ documentation, display of technical material, essential reference material like copy of SOP, phytosanitary requirement of importing country, response to notification of non-compliances etc..

9. Phytosanitary inspection & Certification

The export inspection will be conducted at the approved pack house/ processing units where adequate facilities are available for inspection, examination etc. Inspection will carry out only by the officials authorized by NPPO, India. Phytosanitary inspection & Certification shall carry out as per point 7.6 & 7.7 of the Agreed Work plan.

10. Traceability:

The approved pack houses will be responsible to maintain the backward traceability information for the consignment. Each boxes of consignment will print with following details:-

- a) Product of India for Australia,
- b) Fruit type (that is fresh pomegranates),
- c) Place of production/ orchard code,
- d) Packing house registration number,
- e) Packing date,
- f) Treatment facility name and/or code (if a treatment is used as risk management measure)

Further, the exporters will file the application for PSC through the web based Plant Quarantine Information System (PQIS) where history of the case is retrievable. A unique registration number generated for each consignment and printed on the PSC will be source of document traceability for the consignment.

11. Responsibilities:

11.1 Management Responsibilities

11.1.1 The DPPQS (NPPO) will bear overall responsibility for implementation of the SOP. Accordingly, DPPQS will identify the duties and line of communication with all personnel authorized for phytosanitary certification for export of pomegranate fruits to Australia.

11.1.2 DPPQS (NPPO) in association of APEDA will be responsible for approval/ annual audit of pack house/ processing unit.

11.1.3 Supervisory visit of pack house and orchard as and when warranted.

11.1.4 Authorizing officials for phytosanitary inspection & certification.

11.2 APEDA

11.2.1 To establish a national system for registration of farmers/ farms intended to export Pomegranate fruits to Australia.

11.2.2 To maintain a national register of registered Farmers/ Orchards.

11.2.3 To liaise with State Governments for registration Farmers/ Orchards

11.2.3 To organize (in association with the NPPO and State Government) capacity building programmes

for exporters, farmers and other stakeholders towards establishment and strengthening of backward linkage.

11.3 State Department of Agriculture/ Horticulture

11.3.1 To register farmers/Orchards.

11.3.2 To monitor status of pests and diseases in the registered farms and ensure that their record is maintained at the registered farm along with the record of the control measures/ plant protection measures

11.3.3 To advise appropriate plant protection measures for control of pests and diseases specially the pests of concerns to Australia.

11.3.4 To ensure maintenance and monitor the records at farm level on the management practices.

11.3.5 To organize training of the approved farmers on production of pest mitigation measures at field level.

11.4 Responsibilities of pack house/ processing unit

11.4.1 Design of pack house to handle inflow to outflow of the commodities in a unidirectional manner with no chances of cross infestation/contamination. For example, absolute isolation is required between stacking/holding area; grading, sorting and packing area; PQ inspection area and post inspection storage area. Door should be of sliding type with strip curtain.

11.4.2 Will allow pomegranate fruits sourced from the Orchard registered with the State Government for Pomegranate fruits export and the list of such farmers will be maintained for records.

11.4.2 Shall maintain log book for general hygiene and cleanliness in Pack House / processing unit.

11.4.3 Shall keep Pack House/ processing unit free from cracks and crevices in floors and walls as cobwebs etc on walls to avoid shelter to harmful pests.

11.4.4 Shall apply prophylactic treatment in and around the pack house/ processing unit, periodically.

11.4.5 Shall maintain a copy of “SOP for Export of Pomegranate arils to Australia.”

11.4.6 Shall safeguard to prevent infestation/ re-infestation during all steps of the sorting/ Grading/processing/packing processes.

11.4.7 Shall provide exclusive area for plant quarantine inspection.

11.4.8 Shall provide proper inspection table with sufficient light and magnifier.

11.4.9 Possess required equipment's/items (as per **Annexure-VIII**).

11.4.10 Shall provide separate storage area for finally packed and inspected consignments.

11.4.11 Shall have insect proof net/wire mesh on the windows and other opening in the pack house.

11.4.12 Shall ensure packing boxes meet the requirement of SOP.

11.4.13 Packed boxes printed with details as specified in Agreed Work plan.

11.4.14 Ensure that all the requisite registers viz; Commodity inflow register containing details of source material, preliminary inspection register, insect monitoring/ trap register, general hygiene register, commodity rejection register, consignment sealing register, vehicle cleanliness/seal register, commodity outflow register are maintained.

11.4.15 Has all the signage/ display material particularly the commodities being handled in the pack house and related pests/ damage signs required for implementation of SOP.

11.4.16 Ensure cleanliness/ general hygiene of the vehicle used for transporting the certified material and maintains records.

11.4.17 Ensure the disposal of infested/infected/left over material after inspection of each consignment/ lot .and a record to be maintained in this regard.

11.4.18 Ensure that pack house is capable in addressing all issues pertaining to SOP.

11.4.19 All the personals are well informed/ trained about the activities of the pack house and their responsibilities along with maintenance of relevant documentation.

11.4.20 The semi-skilled labourers engaged by the pack house in sorting/ grading, processingand packing of the fruits will be trained on symptoms/ damage signs of Quarantine

pests concerned to Australia.

11.5 Responsibilities of exporter

11.5.1 Will source pomegranate fruits from the Orchards registered with State Agriculture/

11.5.2 Horticulture Department for export of Pomegranate fruits to Australia.

11.5.3 The exporter shall be responsible for organizing the phytosanitary inspection of consignment in the exclusive plant quarantine area at the approved pack house.

11.5.4 The exporter or his authorized representative shall produce the consignment for phytosanitary inspection at approved pack house/processing area sufficiently before its departure.

11.6 Farmers:

11.6.1 To request State Department of Agriculture/Horticulture for registration of the Orchard

11.6.2 To maintain status of pests and diseases in the registered farms on fortnightly basis along with the record of the control measures/ plant protection measures undertaken during the crops season.

11.6.3 To maintain the records of the management practices.

11.6.4 To follow the advice from State Department of Agriculture/Horticulture or technical support from exporter on pest management practices, waiting period for pesticides etc.

12. Noncompliance

Any notification of noncompliance due to interception of pests in the consignment or inadequate declaration on Phytosanitary Certificate will be investigated by the DPPQS within 15 days from the receipt of noncompliance and suitable action will be taken against the person/Pack house/processing unit/Orchard found responsible for such noncompliance.

Annexure-I

Application for Registration/Renewal of farm for the export of Pomegranate arils to Australia (To be submitted by the farmer/ exporter to State Deptt. of Agriculture/Horticulture)

To,

The Registration Authority & Agriculture/Horticulture Officer

Taluka----- District -----State -----

Sub: Registration/Renewal of farm for the export of Pomegranate arils to Australia –reg.-

Dear Sir,

You are requested to kindly register / renew my farm for export of **Pomegranate arils to Australia** as per details given below:

1.	Full name of the Farmer/ grower	
	Father's /Husband's name	
	Name of partners	
a	Correspondence address	
	Village	
	Taluka	
	District	
	State	
	Telephone No with STD code no.	
	Mobile No.	
	E-mail address	
b	Orchard/Plot location address (Survey No/Plot No.) along with map/layout of the plot with indication of all sides of crop grown.(please attach)	
2.	Farm registration No. (In case of renewal)	
3.	Total Farm area (in Ha)	
4.	Whether Orchard is the Global GAP certified if yes, attach a copy	
	Certificate No.	

	Date of issue						
	Date of validity						
	Name of certification agency						
5.	Number of plots in the Orchard with area of each plot No. of net houses/poly houses/green houses, if under protected cultivation.						
Sl. No.	Name of the crop	Area (in Ha)	Survey/plot No	Variety	Date of sowing/ plantation	Date (s) of Harvesting (expected)	Estimated production (MT)
6.	Name & address of Pack –houses associated with						
7.	Registration/Renewal fee (if applicable)						
8.	Details about previous year export (Produce wise)						
	Quantity in MT						
	Name of Exporter						
	Name of Pack house						
9.	Whether any Non-compliance notification has been received during previous year						

Date:
Place:

(Signature of theFarmer)
Name of theFarmer

Annexure-II

GOVERNMENT OF _____
DEPARTMENT OF _____

Certificate of Registration of Farm for Export of Pomegranate Arils to Australia

This is to certify that _____ is here by registered as Fruit Grower with the office of the Agriculture/ Horticulture officer, in accordance with the Export of Pomegranate arils to Australia for the year of

The detail of the registered farmer is as follows:

Name of the Farmer:

Full Address:

Village

Taluk/Mandal

District

Sr.No.	Name of the crop & variety	Survey/GAT No	Plot No.	Area of Plot(Ha.)	Estimated production (MT)	Farm Reg. No.
1						
2						
3						
4						
5						
6						

1. Map Layout enclosed.
2. This Certificate is valid up to_____.
3. Have verified the Survey/GAT No. with respect to the registration and to the best of my knowledge, above information is correct.

Place:

Registration Authority

Date:

(Dept. of Agriculture/Horticulture)

Annexure-III

PROFRMA FOR MAINTAINING THE RECORD (PLOT-WISE) FOR REGISTERED ORCHARD

(To be maintained by the farmer and monitored by State Department of Agriculture/ Horticulture)

- 1) Orchard Registration Number :
- 2) Date of Registration/Renewal of Orchard :
- 3) Name and address of the farmer :
- 4) Location of plot (layout/benchmark) :
- 5) Total area of the registered Orchard/plot (Ha):
- 6) Name of variety :
- 7) Date of planting :

A. Status of the pests:

Sl. No.	Date of observation (minimum fortnightly)	Crop stage	Name of pest observed	Intensity of the pest	Plant protection measures adopted	Any other information/ Remarks by State Deptt. of Agri./Hort.
1.			1.			
			2.			
			3.			
			4.			
			5.			
2.			1.			
			2.			
			3.			
			4.			
			5.			

B. Details of pesticide/chemical used:

Sl.No.	Date of application	Name of the pesticide/chemical	Dose (ml/lit of water)	Quantity of chemical used	Remark/ Any other information
1.					
2.					
3.					

C. Details of Harvesting:

Sl. No.	Date of Harvesting	Quantity (Kg)	Name of the exporter	Name of the Pack house	Remarks by State Deptt. of Agriculture/Horticulture with initials
1.					
2.					
3.					
	Total harvest				

D. Any other relevant information:

Note: Comply specific risk management measure for bacterial blight & fruit flies given in Annex 4, Annex 5 & Attachment of the Agreed Work plan.

APPLICATION FORM

FORM OF APPLICATION FOR REGISTRATION OF PACK HOUSE FOR EXPORT OF POMEGRANATE FRUITS TO AUSTRALIA

1. GENERAL INFORMATION

1.1 Name and address of the applicant (owner) along with complete contact details

Name:

Address:

Tel with STD Code:

Fax with STD Code:

E mail:

Mobile:

1.2 Name & Address of Manager and his contact details

Name & Address of warehouse:

Name of Manager:

Contact Tele/Mobile No:

1.4 License no. and date (enclose self-attested copy)

License No :

Issued for:

Issued by:

Issue Date:

Valid Up to:

1.5 If the Pack house is hired / leased, full address of the owner (attach copy of lease agreement)

Date of Issue:

Valid up to:

Leased to:

Name:

Address:

Tel No:

Mobile No.:

1.6 Processing & Storage capacity: (**Attach floor plan, image/pictures of processing areas**)

1.7 Quantity and Value of Pomegranate fruits exported during preceding years (applicable for renewal).

1.8 A list of machinery and equipment available to be attached. Give details of practices and procedures for their disinfestations

1.9 Is the pack house HACCP certified from internationally recognized accredited certification bodies; if so attach copy of the certificate

1.10 FSSAI certification for food hygiene additives, contaminants, toxin and residue:

1.11 Details of the laboratory facility (attach list)

2. INFORMATION ABOUT PERSONNEL

3. SANITARY AND PHYTOSANITARY FACILITIES

- 3.1. Is there adequate space for free movement in all the sections for workers?
- 3.2. Whether workers are provided with clean working cloth, apron, etc., to prevent contamination of consignment with sweat and dust/dirt.
- 3.3. Is there arrangement in all the sections for preventing entry of flying insects, rodents, birds and pigeons?
- 3.4. Are the doors of all sections fitted with fly proof net and self-closing device?
- 3.5. Is there adequate protection from entry of pest in the unit during loading and unloading of consignment?
- 3.6. Facilities of toilets / washing for workers with liquid soap or disinfectant.
- 3.7. Are the toilets having self-closing doors and kept in clean?
- 3.8. Whether the walls and floors of the premises are free from pits, crevice peeling off and whitewashed.
- 3.9. Is there separate storage facility for finished product?
- 3.10. Is there separate storage for packaging material?
- 3.11. Is there separate storage for export rejections & their disposal?
- 3.12. Is there any in-house inspection/ testing facility available?
- 3.13. Whether the surrounding kept clean. Whether the unit is maintained in good hygienic condition to prevent pest & rodent harbourage and other flying insects?
- 3.14. Does the pack house have cleaning schedule with disinfectants used?
- 3.15. Whether periodic prophylactic treatments are done in the storage area?
- 3.16. Is systematic record is maintained for the treatments applied?
- 3.17. Is the process flow unidirectional?
- 3.18. Is the Quality Control Chief aware of phytosanitary requirements for export of Pomegranate fruits to Australia.

4. DOCUMENTATION

Are essential records systematically maintained at all the above stage including the following

- a. Staff training schedule
- b. Quality system records, I (e.g., HACCP)
- c. Medical record / history sheet for each individual staff member
- d. Record of Inspection visits
- e. Record of product entry & exit
- f. Pack house cleaning records
- g. Disinfestation related records
- h. Trace back / product recall
- i. Complaint handling records
- j. Any other

DECLARATION

I/We declare that I/we have read and understood the procedure for grant of approval/registration of pack house/ processing unit for export of pomegranate airts to Australia. I/we understand that noncompliance at any stage may entail suspension.

Place: Signature-----

Date: Name-----

Designation

UNDERTAKING

I/We, -----, undertake to always maintain the pack house/processing unit as per the standards prescribed in this document, to abide by any instructions that may be issued by DPPQS from time to time and to get the above mentioned pack house/processing unit inspected whenever called upon to do so by DPPQS.

Place: Signature -----

Date: Name-----

Designation

VERIEICATION

I/We -----, hereby, declare that to the best of my knowledge and belief, the above information is complete and correct and that no facts have been concealed. I/We also agree to abide by the conditions laid down in the SOP.

Place: Signature -----

Date: Name-----

Designation

Annexure-V**Table Showing Names of States under Jurisdiction of RPQS**


Sl. No.	RPQS	Contact Details	Name of States	No. of States
1.	Regional Plant Quarantine Station New Delhi, Vasant Kunj Enclave, Near Kendriya Vidyalaya, Rangpuri, New Delhi-110 037	011-26899297 011-26138382 (Fax) 011-26363623 npqfsc@nic.in	Delhi & NCR, Haryana, Uttar Pradesh, Rajasthan and Uttarakhand	5
2.	Regional Plant Quarantine Station Ajnala Road, Near Air Force Station, Raja Sansi Airport, Amritsar 143001 (Punjab)	01858-233775 01858-233776 (Fax) rpqfsa@nic.in	Punjab, Himachal Pradesh, Chandigarh (UT), Jammu & Kashmir (UT) and Ladakh (UT)	5
3.	Regional Plant Quarantine Station GST Road (Near Trident Hotel) Meenambakkam, Chennai-600 027 (Tamil Nadu)	044-22323888 044-22347522 044-22342949 (Fax) rpqfsc@nic.in	Tamil Nadu, Andhra Pradesh, Puducherry (UT)	3
4.	Regional Plant Quarantine Station FB-Block, Sector III, (Opp Shrabani Abasan), Salt Lake City, Kolkata – 700 097 (West Bengal)	033-23597679 033-23213168 033-23580025 (F) 033-24697679 (F) rpqfsk@nic.in	West Bengal, Bihar, Orissa, Jharkhand, Assam, Meghalaya, Tripura, Manipur, Mizoram, Nagaland, Sikkim and Arunachal Pradesh & Andaman & Nicobar (UT),	13
5.	Regional Plant Quarantine Station Haji Bunder Road, Sewri (E), Mumbai-400 015 (Maharashtra)	022-23757459 022-283478476 022-23748548 (F) rpqfstm@nic.in	Maharashtra, Goa, Madhya Pradesh, Chhattisgarh and Dadra & Nagar Haveli and Daman & Diu (UT)	5
6.	Regional Plant Quarantine Station Hebbal-Boopasandra Road, HA Farm Post, Bengaluru 560 024 (Karnataka)	080-23515003 (O) dd-pqfsb-ka@nic.in	Telangana, Kerala, Karnataka and Lakshadweep (UT)	4
7.	Regional Plant Quarantine Station NU-10, B-80, Shakti Nagar, Gandhidham, Kandla 370201 (Gujarat)	02836-228286 (O) pqfsgj12@nic.in	Gujarat	1
Total				36

Annexure-VI**Checklist for conducting audit of pack house for export of pomegranate
arils to Australia**

Name & address of the pack house			
Contact details	Ph:	Email:	
Name of Manager		Mobile: Email:	
Date of Audit			
Audited by	1. 2.		
Sl. No.	Facility/ Activity	Yes	No
Related to Pack house			
1.	Does the pack house/processing unit is free from cracks and crevices and maintained on regular basis?		
2.	Does sanitation/ hygiene of pack house/processing unit maintain? (Check housekeeping register)		
3.	Is the pack house/ processing unit HACCP certified from internationally recognized accredited certification bodies		
4.	Have FSSAI certification for food hygiene additives, contaminants, toxin and residue		
5.	Does pack house/processing unit managers know his/her responsibilities?		
6.	Does pack house/processing unit have separate/ proper consignment holding area?		
7.	Does pack pack house/processing unit separate packing area with proper tables & light in sorting/grading/processing area?		
8.	Does pack house/processing unit have separate inspection area with proper inspection table with sufficient light & equipment's?		
9.	Does the pack house/processing unit possess isolated and safe stacking area for PQ inspected commodities?		
10.	Does the flow of consignment processing is unidirectional?		
11.	Does pack house/processing unit have compressed air facility for cleaning fruits?		
12.	Any possibility of getting entry of pest from sorting/ packing area to PQ inspection area?		
13.	List of registered farmers with other relevant details maintained at pack house.		
14.	Does the pack house/processing unit sought approval for quantum to process and present for PQ inspection?		
15.	Does the frequency of cleanliness matches with the frequency of consignment processed/certified.		
16.	Does the pack house/processing unit have effective arrangement to remove quickly the infested/infected lot of the commodity?		
17.	Effective arrangements for timely disposal of infested material from the premises of the pack house (verify with record)		

18.	Does the different areas in pack house/processing unit well define by display boards?		
19.	Is packing material/ its storage area free from pest contamination?		
20.	Does any hands on training to improve skill of workers to help sorting out of infected/ infested material give regularly? If yes, the skill level of workers associated with sorting/ packing is good (Check with their training record).		
21.	Does various responsibilities in the pack house/processing unit perform by skilled employees? (Ask questions to know if they are aware about their responsibilities and how they achieveit)		
22.	Does all persons enter pack house/processing unit with proper apron, shoe/ head cover, etc.?		
23.	Does all the inspected boxes label as per agreed Work plan?		
24.	Does cleanliness of vehicle verify before loading of inspected commodities?		
25.	Does the non-compliance properly documented and timely response submitted to the concerned authorities?		
26.	Whether appropriate action (timely) has taken on notification of non-compliance reported to the pack house and exporters?		
27.	Is the consignment holding area subject to preliminary inspection/observation by the PQ Official (verify with record)?		
28.	Is there record of rejection with suitable evidence? (see record)		
29.	Is there mechanism to transmit such rejection to the exporter / farmer? (see proof)		
30.	Display of suitable technical material for improving inspection, pest detection skill, certification, etc.?		
Name & Signature of pack house processing unit manager with date			
Name & Signature of Auditor(s) with date			

Annexure-VII

 सत्यमेव जयते	भारतसरकार / Govt. of India कृषि एवं किसान कल्याण मंत्रालय / Ministry of Agriculture & Farmer's Welfare कृषि, सहकारिता एवं किसान कल्याण विभाग / Dept. of Agriculture Cooperation & Farmer's Welfare वनस्पती संरक्षण, संगरोध एवं संग्रह निदेशालय / Directorate of Plant Protection, Quarantine & Storage एन .एच .- IV, फरीदाबाद / 001 121 – N. H. – IV, Faridabad –) 001 121 Haryana)	
	Certificate No. .../Year	Date of First Registration: . .2020 Valid up to : . .2022
Certificate of Approval of Pack House/ processing for export of Pomegranate Arils to Australia		
<p><i>This is to certify that the following Pack House/ processing unit has been verified and approved for export of Pomegranate Arils to Australia.</i></p> <p style="text-align: right;">Plant Protection Adviser</p>		
Description of Pack House		
Name of Pack House	M/s.	
Location/Address of Pack House/processing unit	
Validity:	
Terms & Conditions: 1. The Certificate should be displayed at prominent place and available for verification during inspections to the Pack House ; 2. Any changes or modifications to the Pack House shall be made with the written approval of the Plant Protection Adviser. 3. The validity of certificate is one year, subject to auditing of the facility by the joint inspection team for continued compliance. 4. The certified Pack House shall abide by the instructions and guidelines issued by the Plant Protection Adviser from time to time. For renewal of validity for continuation the applicant must apply 45 days in advance.		
Endorsements: Nil.		
Copy to: 1. The Director of Horticulture, Directorate of Horticulture, Krishi Bhavan, Shivaji Nagar, Pune - 411005, Maharashtra. 2. The Officer In-charge, RPQS, Mumbai. 3. The Chairman, APEDA, 3rd Floor, NCUI Building, Siri Institutional Area, August Kranti Marg, New Delhi -110016.		

LIST OF ITEMS/EQUIPMENTS REQUIRED WITH EACH

PLANT QUARANTINE UNIT OF PACK HOUSE

A. EQUIPMENTS

1. Illuminated magnifier (Magnoscope)20X	2No*
2. Stereo binocular microscope with cold light source with camera	1No
3. Inspection Table clear top (steelmake2.5'X6')	2No*
4. Desktop Computer with internet	1No
5. Printer (24 Pin dot matrix)	1No
6. UPS for computer with sufficient power backup	1No

B. INSPECTIONKIT

1. Kit bag	1No.
2. Knife(pointed)	2No.
3. Magnifier glass- 20 X with provision of light	2No.
4. Camel brush-(small/medium)	2No.
5. Scissor	2No.
6. Torch with cell	2No.
7. Forceps	2No.
8. Marker pen- (Red &Black)	2No.
9. Pencil &Sharpener	2No.
10. Stapler With pin	1No.
11. Cello tape-	1No.
12. Rexene sheet/ White paper / Black paper sheet	Need based
13. Marking slip-	Need based
14. Specimen vials -	20 Nos.
15. Poly bags-	20Nos.
16. Needle-	1No.
17. Calculator-	1No.
18. Hand Gloves-	Need based
19. White enameled Tray(solid type)	4Nos.
20. Apron	Need based
21. Tissue paper	Need based

* may vary with work load

Appendix

Work plan for the export of fresh pomegranates from India to Australia

28 August 2020

Version control:

Date	Version	Description
September 2020	V1.4	Work plan agreed

Work plan for the import requirements for fresh pomegranates from India to Australia

This document includes the joint understanding between India and Australia of the requirements for the export of fresh pomegranates from India to Australia. The document is based on the *Final report for the review of biosecurity import requirements for fresh pomegranate whole fruit and processed 'ready-to-eat' arils from India* (final report) issued by the Australian Government Department of Agriculture, Water and the Environment (DAWE) in June 2020.

1. Applicable goods

Fresh pomegranates (*Punica granatum*) commercially produced in India for export to Australia.

2. Definitions

Quarantine pest

A pest of potential economic importance to the area endangered thereby and not yet present there, or present but not widely distributed and being officially controlled [FAO, 2019a].

Regulated article

Any plant, plant product, storage place, packaging, conveyance, container, soil and any other organism, object or material capable of harbouring or spreading pests, deemed to require phytosanitary measures, particularly where international transportation is involved (FAO 2019a).

Whole fruit

The entire pomegranate fruit with the skin rind including calyx, mesocarp, arils (seeds) and a small portion of the stem.

Arils

Pomegranate arils are the fleshy and usually brightly coloured and edible covering that surrounds the seed, found inside the whole pomegranate.

Orchard

A plot of land with defined boundaries that grows pomegranates only and is managed by a single entity. Plants are contiguous (not separated by structures such as a building, public road or natural landforms such as a body of water). Orchards must be registered for the purpose of exporting pomegranates to Australia.

Consignment

Goods imported by one importer, on one conveyance at one time, and covered by one phytosanitary certificate.

3. Participating entities and key roles and responsibilities

I. The Indian National Plant Protection Organisation (NPPO), the Department of Agriculture Cooperation and Farmers Welfare(DACFW).

- a) Has overall responsibility for the implementation and compliance with this work plan. Activities to verify compliance with this work plan include (but are not limited to) audit of grower, packing house, processing facilities and treatment facilities against this work plan and monitoring outcomes of phytosanitary inspection.
- b) Inspecting goods for export and issuing phytosanitary certificates.
- c) To maintain and provide to the Australian NPPO, upon request, records of activities (including but not limited to) registration, inspection, training, audits, approved operating procedures, etc.
- d) To investigate non-compliance and implement corrective actions as required.

II. The Australian NPPO, DAWE:

- a) To undertake inspection of commodity shipments when they arrive in Australia to verify phytosanitary compliance and to provide guidance and/or instructions to regional staff at port of entry for clearance of consignments.
- b) To notify the Indian NPPO of any issues of non-compliance detected on-arrival for the Indian NPPO to investigate and implement corrective actions as required.
- c) To verify that the responsibilities of all participants with regard to the technical commitments in these work plans are properly executed. The Australian NPPO may request the Indian NPPO to conduct additional verification activities as necessary to verify program integrity or address program issues if they occur.

III. The Agricultural and Processed Food Products Export Development Authority(APEDA)

- a) To register exporters, packing houses and treatment facilities to ensure they meet requirements of this work plan.
- b) State Government
- c) To register orchards for the production of commodities for export and ensure growers meet requirements of this work plan.
- d) To undertaking licensing of food business operators (i.e. aril processing facility).

4. Quarantine pests

I. The following organisms have been determined by the Australian NPPO to be quarantine pests for Australia on the pathway:

I. Fruit flies

- *Bactrocera carambolae* (Carambola fruitfly)
- *Bactrocera dorsalis* (Oriental fruitfly)
- *Bactrocera zonata* (Peach fruitfly)

II. Scales insects

- *Drosicha dalbergiae* (Almond mealy bug)

III. Mites

- *Tenuipalpus granati* (Pomegranate mite)
- *Tenuipalpus punicae* (False spider mite)

IV. Thrips

- *Scirtothrips dorsalis* (Chilli thrips)
- *Scirtothrips oligochaetus* (Mangosteen thrips)
- *Frankliniella occidentalis* (Western flower thrips)(NT, RA)

V. Mealy bugs

- *Dysmicoccus neobrevipes* (Grey pineapple mealy bug)
- *Paracoccus marginatus* (Papaya mealy bug)
- *Planococcus ficus* (Vine mealy bug)

VI. Pathogens

- *Xanthomonas axonopodis* pv. *punicae* (Bacterial blight of pomegranate)
(NT: pest of quarantine concern for Northern Territory; RA: Regulated article)

5. Risk management measures for quarantine pests - Whole fruit

5.1 Risk management measures for fruitflies

- I. Fruit for export to Australia must be free from *Bactrocera carambolae*, *Bactrocera dorsalis* and *Bactrocera zonata*. Management options are listed below.

a) Option 1—Area freedom

Should India wish to use area freedom as a phytosanitary measure, the Indian NPPO will need to provide a submission to the Australian NPPO demonstrating area freedom from *Bactrocera carambolae*, *Bactrocera dorsalis* and *Bactrocera zonata* in accordance with relevant International Standards for Phytosanitary Measures (ISPM) 4 and/or ISPM10.

b) Option 2—Cold treatment

Goods must undergo cold treatment at the following schedule (in-transit or pre-shipment):

- fruit held at 1.67°C or below for 18 days or greater.

Should India wish to use pre-shipment cold treatment as a phytosanitary measure, the Indian NPPO will need to provide a submission to the Australian NPPO.

Requirements for application of cold treatment are provided at Annex 1.

c) Option 3—Irradiation

Should India wish to use irradiation as a phytosanitary measure, the Indian NPPO would need to provide a submission to the Australian NPPO.

If this option is used, all the requirements outlined in Annex 2 must be met.

5.2 Risk management measure for scales, mites, mealy bugs and thrips

- I. Fruit for export to Australia must be free from *Drosicha dalbergiae* (Almond mealybug), *Tenuipalpus granati* (Pomegranate mite), *Tenuipalpus punicae* (False spider mite), *Dysmicoccus neobrevipes* (Grey pineapple mealybug), *Paracoccus marginatus* (Papaya mealybug), *Planococcus ficus* (Vine mealybug), *Scirtothrips dorsalis* (Chilli thrips), *Scirtothrips oligochaetus* (Mangosteen thrips), *Frankliniella occidentalis* (Western flower thrips).
- II. Quarantine scales, mites, mealybugs and thrips are to be managed through packing house practices and phytosanitary inspection (Annex 3).

5.3 Risk management measures for bacterial blight

- I. *Xanthomonas axonopodis* pv. *punicae* (Bacterial blight of pomegranate) is to be managed by a systems approach approved by Australia (see [Annex4](#)).

6. Risk management measures for quarantine pests –Arils

- I. Arils for export to Australia must be free from *Bactrocera carambolae*, *Bactrocera dorsalis* and *Bactrocera zonata*. Fruit flies are to be managed by a systems approach approved by Australia ([Annex5](#)).

7. General requirements (whole fruit and arils)

7.1 Registration of places of production

- I. The registration of orchards is mandatory.
- II. Each orchard is to be assigned a unique identification code to enable trace-back.
- III. Registration must occur prior to export.

- IV. The exporting NPPO is responsible for ensuring that registered growers are aware of pests of quarantine concern to Australia and requirements for these quarantine pests. The registration list must be maintained as current by the exporting NPPO and be made available to the Australian NPPO if requested.

7.2 Registration of packing houses and treatment facilities

- I. Packing houses and treatment facilities (if applicable) involved in export of fresh pomegranates to Australia must be registered with NPPO of India before the commencement of harvest each season. The registration list must be maintained as current and be made available to the Australian NPPO if requested.
- II. The hygiene of registered packing houses and treatment facilities must be maintained. The packing houses and treatment facilities must be designed to prevent the entry of pests into areas where inspected and/or treated (if applicable) pomegranates are held. Appropriate quarantine security of the fruit should be maintained at all times including during transport between production sites and packing houses/treatment facilities and when pomegranates are on the premises.
- III. Packing houses and treatment facilities must have a system of record keeping enabling trace-back of the packed fresh pomegranates back to production sites, including the movement of fresh pomegranates from the time of arrival at the premises through to the time of export.
- IV. NPPO of India and APEDA is responsible for ensuring that registered packing houses (if applicable) personnel are aware of pests of quarantine concern to Australia and requirements for these quarantine pests.

7.3 Packing and labelling

- I. To prevent any potential contamination of fresh pomegranates destined for Australia by any plant produce destined for domestic or other export markets, processing equipment in packing houses must be suitably cleaned prior to the commencement of processing fresh pomegranates for export to Australia.
- II. All packages of fresh pomegranates for export to Australia must be free from contaminating pests and regulated articles. Regulated articles are any items other than fresh pomegranates. Fresh pomegranates is defined, in the final report, as fresh pomegranates, which include a small amount of peduncle, the calyx, fruit and achenes (seeds). Regulated articles include, for example, plant, plant product such as leaves, soil, any organism and object or material capable of harbouring or spreading pests.
- III. Secure packaging must be used during storage and transport of fresh pomegranates for export to Australia and must meet Australia's general import conditions for fresh fruits and vegetables. Packaging must be fully sealed or if not sealed the opening must be covered by mesh/screen that is no more than 1.6 mm pore size and not less than 0.16 mm strand thickness.
- IV. Packaging material must be synthetic or highly processed if of plant origin. No unprocessed packaging material of plant origin, such as straw, will be allowed.
- V. All wood material used in packaging of fresh pomegranates must comply with the Australian NPPO's conditions.

- VI. All cartons must be labelled with production site reference code and packing house and treatment facility reference code or name for the purpose of trace-back.
- VII. The phytosanitary status of fresh pomegranates must be maintained throughout the packing, treatment (if applicable), storage and transport.
- VIII. The following information should be printed on each carton of whole pomegranates:
 - a) Product of India for Australia
 - b) Fruit type (that is fresh pomegranates)
 - c) Place of production/orchard code
 - d) Packing house registration number
 - e) Packing date
 - f) Treatment facility name and/or code (if a treatment is used as risk management measure)
- IX. The following information should be printed on each carton of arils:
 - a) Product of India for Australia
 - b) Fruit type (that is fresh pomegranate arils)
 - c) Place of production/orchard code
 - d) Packing house/processing facility name and/or registration number
 - e) Packing date
 - f) Treatment facility name and/or code (if a treatment is used as risk management measure)

7.4 Storage

- I. Packed fresh pomegranates and packaging is to be protected from pest contamination during and after packing, during storage and during movement between locations, such as packing house to cold storage/depot, to inspection point, to export point.
- II. Fresh pomegranates for export to Australia that has been inspected and certified by the Indian NPPO or treated (if applicable) must be maintained in secure conditions that will prevent mixing with any plant produce for export to other destinations or the domestic market. This can be achieved through segregation of fresh pomegranates for export to Australia in separate storage facilities, through the use of tarpaulin and physical segregation (at least 1 metre in ambient temperature or 10 centimetres in cold storage) from any other plant produce, netting or shrink-wrapping pallets in plastic, or by placing sealed cartons in cold storage before loading into a shipping container.
- III. Alternatively, packed fresh pomegranates can be directly transferred at the packing house into a shipping container, which is to be sealed and not opened until the container reaches Australia.
- IV. Security of the consignment is to be maintained until release from quarantine in Australia.

7.5 Auditing procedures by the Indian NPPO

- I. The Indian NPPO must have a system in place for monitoring/auditing of registered

orchards, packing houses and treatment providers (if applicable) to ensure that all requirements are met.

- II. Records of the Indian NPPO audits must be kept and made available to the Australian NPPO, if requested.

7.6 Pre-export phytosanitary inspection by Indian NPPO

- I. The Indian NPPO, or delegate of the Indian NPPO, will inspect all consignments for any pests of quarantine concern to Australia and any other regulated article. Individual fruit are to be inspected carefully.
- II. Pre-export visual inspection must be undertaken by the Indian NPPO or delegate of the Indian NPPO in accordance with ISPM 23: Guidelines for inspection [FAO 2019b] and consistent with the principles of ISPM 31: Methodologies for sampling of consignments [FAO2016a].
- III. Goods must be sampled and inspected to provide 95% confidence that there is not more than 0.5% infestation in a consignment as per ISPM 31. For consignments equal to or greater than 1000 units (a unit being a piece of fruit), this is equivalent to a 600 unit sample randomly selected across the consignment, using an inspection technique that will detect all life stages of the quarantine pest.
- IV. If pests are found in the inspection sample, the Indian NPPO must identify the organism and take appropriate action:
 - a) Detections of pests will require their regulatory status to be determined, or application of an appropriate pest management measure. If required, the Indian NPPO can contact the Australian NPPO and request a determination of regulatory status.
 - b) If determined to be quarantine pest for Australia, an appropriate and effective pest management measure must be conducted prior to certification.
- V. Records of the interceptions made during the inspection (live or dead pests or regulated articles) are to be maintained by the Indian NPPO and made available if requested.
- VI. Consignments that do not comply with the requirements outlined above must be rejected by the Indian for export to Australia.

7.7 Phytosanitary certification by the Indian NPPO

- I. All consignments must be inspected in accordance with official procedures for all visually detectable quarantine pests at a standard sampling rate per the international phytosanitary certificate (PC).
- II. The Indian NPPO is required to issue a PC for each consignment after the pre-export phytosanitary inspection.
- III. Each PC is to include additional declarations as follows as described in Australia' import conditions database, BICON.

- IV. The place of production/orchard and packing house registration number or reference code, number of cartons per consignment and container and seal number (for sea freight) must be recorded on the PC.
- V. A consignment must be air freighted/shipped directly from one port or city in India to a designated port or city in Australia, or transhipped in sealed containers.

8. Audit and verification by the Australian NPPO

8.1 Audit

- I. The Australian NPPO may request to audit the implementation of the agreed import requirements, which could include, for example, registration, pest management, a system of monitoring/auditing and trace-back system. Audit may be via desk audit and/or site visit as required.

8.2 Phytosanitary inspection and quarantine clearance

- I. Each consignment will be inspected by the Australian NPPO on-arrival in Australia and the original PC and documentation examined for consignment verification purposes at the first port of entry in Australia prior to release from quarantine.
- II. Officers of the Australian NPPO will conduct an inspection for any quarantine pests and regulated articles.
- III. Where consignments are found to be non-compliant with Australia's requirements, the importer will be given the option to treat (if suitable treatments for the pests or regulated articles detected are available and can be applied), re-export or destroy the consignment.
- IV. If consignments continually fail inspection, the Australian NPPO reserves the right to suspend the imports of fresh pomegranates from India, pending an investigation by Indian NPPO and a review by the Australian NPPO. The imports will recommence when the Australian NPPO is satisfied with the outcomes of the investigation and that appropriate corrective action have been undertaken.
- V. If an organism is detected on fresh pomegranates from India that has not been assessed in the final report, it will require an assessment to determine its quarantine status and if phytosanitary action is required.
- VI. The detection of any pests of quarantine concern not already identified in the final report may result in a review of import requirements to ensure that trade for fresh pomegranates from India will meet Australia's appropriate level of phytosanitary protection.

9. Review of policy

- I. The Australian NPPO reserves the right to review the import policy at any time after trade commences or when there is reason to believe that the phytosanitary status of the exporting country has changed.
- II. Other phytosanitary measures which have been reviewed and deemed by the Australian NPPO to offer an equivalent level of Biosecurity protection may be adopted as additional measure options during the period of trade.

References

DAWR (2018). *Australian phytosanitary treatment application standard for irradiation treatment*. Department of Agriculture and water resources, Canberra.

DAWR (2018). *Australian phytosanitary treatment application standard for cold treatment*. Department of Agriculture and water resources, Canberra.

FAO (2016a), *International Standards for Phytosanitary Measures (ISPM) no. 31: Methodologies for sampling of consignments*. Food and Agriculture Organization of the United Nations, Rome.

FAO (2016b) *International Standards for Phytosanitary Measures (ISPM) no. 10: Requirements for the establishment of pest free places of production and pest free production sites*. Food and Agriculture Organization of the United Nations, Rome.

FAO (2017) *International Standards for Phytosanitary Measures (ISPM) no. 4: Requirements for the establishment of pest free areas*. Food and Agriculture Organization of the United Nations, Rome.

FAO (2019a) *International Standards for Phytosanitary Measures (ISPM) no. 5: Glossary of phytosanitary terms*, Food and Agriculture Organization of the United Nations, Rome.

FAO (2019b), *International Standards for Phytosanitary Measures (ISPM) no. 23: Guidelines for inspection*. Food and Agriculture Organization of the United Nations, Rome.

FAO (2019c), *International Standards for Phytosanitary Measures (ISPM) no. 18: Guidelines for the use of irradiation as a phytosanitary measure*. Food and Agriculture Organization of the United Nations, Rome.

International atomic energy agency (2015) *Manual of Good Practice in Food Irradiation, Technical Reports Series No. 481*, IAEA, Vienna.

NAPPO (1997), *Regional Phytosanitary Standard (RSPM) no. 9: Guidelines for the Use of Irradiation as a Phytosanitary Treatment*.

Requirements for the application of cold treatment

- I. Treatment must be applied in accordance with Australia's standard for application of cold treatment (the Australian phytosanitary treatment application standard for cold disinfestation treatment (2018).
- II. Treatment can be applied in-transit or pre-shipment.
- III. The following is required when using in-transit cold treatment:
 - a) In-transit cold treatment is only permitted in self refrigerated (integral) shipping containers capable of the treatment for the entire duration of the trip.
 - b) The details of each of the fruit sensor calibrations must be recorded in the treatment section of the phytosanitary certificate which accompanies the consignment. Alternatively, the calibration details can be included as an attachment to the phytosanitary certificate.
 - c) The probes must be calibrated and placed under the supervision of an officer authorised by the exporting NPPO.
 - d) Shipping containers must be sealed once loading of the fruit is completed and seals must remain intact until the cold treatment is assessed and approved by the Australian NPPO.
 - e) The shipping/transport company must download the electronic temperature logs from the container and forward to the Australian NPPO for treatment assessment and approval prior to container clearance.
 - f) Containers must be maintained at the required appropriate temperature until the treatment assessment is completed, as turning off power prematurely may lead to discontinuation of treatment.
- IV. Pre-shipment treatment facilities must be registered with NPPO of India. NPPO of India is required to ensure that the registered treatment providers are suitably equipped and have systems in place to carry out the treatment in accordance with the Australian phytosanitary treatment application standard for cold disinfestation treatment (2018).
- V. Approved pre-shipment treatment facilities are listed at Annex 6 [if and when approved] and will be identified on BICON.

Requirements for the application of irradiation

- I. Approval from the Food Standards Australia New Zealand (FSANZ) to use irradiation on pomegranates for consumption in Australia.
- II. Irradiation facilities must be registered with APEDA and national nuclear regulatory bodies. APEDA is required to ensure that the registered treatment providers are suitably equipped and have systems in place to carry out the treatment in accordance with:
 - a) ISPM 18: Guidelines for the use of irradiation as a phytosanitary measure [FAO2019c]
 - b) Regional Phytosanitary Standard (RSPM): Guidelines for the Use of Irradiation as a Phytosanitary Treatment [NAPPO,1997]
 - c) Manual of Good Practice in Food Irradiation [IAEA,2015]
 - d) Australian phytosanitary treatment application standard for irradiation treatment(Commonwealth of Australia, 2018)
- III. Should India wish to use irradiation as a phytosanitary measure, the Indian NPPO will need to provide a submission to the Australian NPPO. The submission must include
 - a) Dose mapping for pomegranates
 - b) Standard Operating Procedures (SOPs) used by the treatment facility that document operational procedures and practices at the facility for the application of irradiation for phytosanitary purposes.
- IV. Existing regulatory approval for use on other fruit for export to Australia will be taken in to account by the Australian NPPO when approving a facility for use in the export of pomegranates to Australia.\
- V. Treatment facilities approved for the export of pomegranates to Australia are listed at Annex 6 [if and when approved by the Australian NPPO] and listed on BICON.

Risk management measures for quarantine scales, mealybugs, mites and thrips

- I. The following packing house practices are required:
 - a) Cleaning individual fruit by application of compressed air on fruit calyces and washing with brush and disinfectant
- II. Pre-export phytosanitary inspection and, if found, remedial action. Remedial action (by the Indian NPPO) may include applying approved treatment to the consignment to ensure that the pest is no longer viable or withdrawing the consignment from export to Australia. Further details regarding the pre-export phytosanitary inspection are in Section 7.6.

Risk management measures for pathogens bacterial blight

I. India's NPPO has primary responsibility for ensuring that orchards implement the systems approach effectively.

II. The systems approach is supported by:

- a) Registration of pomegranate orchards and packing houses for export to Australia.
- b) India's NPPO, or personnel approved by India's NPPO, will conduct training at the beginning of each growing season for growers, sorting supervisors and packing house officials (for registered orchards and registered packing houses) to ensure that they are aware of bacterial blight and the requirements for this pathogen. Records of training will be maintained for reference/audit.
- c) Monitoring of plants in the orchards to detect symptoms of bacterial blight. Monitoring occurs every two weeks from flowering until the end of harvest.
- d) Monitoring is conducted by suitably trained people approved by India using the following.
 - Sampling size of five pomegranate plants each at 20 sites per hectare (total of 100 plants/Ha) are monitored for *Xanthomonas axonopodis* pv. *punicae* (Bacterial blight of pomegranate) in every export orchard. A zigzag route across the orchard is followed for site selection to represent entire orchard area.
 - All parts of the pomegranate plant such as leaves, stems and fruits are observed for any *Xanthomonas axonopodis* pv. *punicae* (Bacterial blight of pomegranate) symptom.
 - Monitoring and management is recorded using the Monitoring template for *Xanthomonas axonopodis* pv. *punicae* (Bacterial blight of pomegranate), provided in Attachment-I
 - Records of orchard monitoring must be kept by India's NPPO and provided to the department for audit on request
- e) If bacterial blight is detected management must be undertaken. Management options include application of effective pesticides and removal of affected plant material. Preventative measures are also acceptable. For example, if weather conditions are predicted to be suitable for bacterial blight infection, preventative sprays can be applied. Records of the chemical spraying will be maintained for reference/audit.
- f) If disease incidence is greater than 10% from two weeks prior to harvest, the orchard is suspended from export for season.
- g) Fruit must not be harvested from the ground.
- h) At the packing house, pomegranate fruit are washed with a sanitizer at an approved concentration (e.g. Tsunami or hypochlorite at 200ppm). Washing water is monitored or changed frequently to ensure appropriate concentration is maintained.
- i. Fruit are inspected at the packing house and symptomatic or damaged fruit are removed for export.
- ii. Farm and packing house hygiene will be maintained. Fallen leaves and fruit in the orchards are removed regularly to minimize sources of bacterial blight inoculum. Damaged and discarded pomegranate fruit will be removed from the packing house daily.

- III. Pre-export phytosanitary inspection and, if found, remedial action. Remedial action (by the Indian NPPO) will involve withdrawing the consignment from export to Australia and investigating the cause of the detection. The Indian NPPO may exclude the registered orchard and packing house from export to Australia for the rest of the season.
- IV. If bacterial blight is detected during the on-arrival inspection in Australia, the consignment will be re-exported or destroyed. India will be required to investigate the cause of any such detections and report their findings to the Australian NPPO. If bacterial blight is detected for a second time at on arrival inspection in Australia the registered orchard and packing house will be excluded from export to Australia for the rest of the season. Multiple detections may result in the suspension of the pathway.

Risk management measures for quarantine pests of arils

I. Fruit must be grown in orchards registered for export to Australia.

II. The following orchard management practices are required:

- a) monitoring (trapping) using effective lures for fruit flies.
- b) Traps are inspected fortnightly from flowering until eight weeks prior to harvest.
Traps are monitored weekly from eight weeks before harvest.
- c) A minimum of 2 traps per orchard with a minimum of an additional trap for every 2 hectares. See table for example trapping requirements.

Area (ha)	≤4	≤6	≤8	≤10	≤12
Traps	2	3	4	5	6

- d) If quarantine fruit flies are detected control measures must be applied such as insecticide cover sprays or baits sprays/traps. Preventative measures are also acceptable.
- e) From eight weeks prior to harvest, if flies are detected at a rate of 0.1 flies per trap per day (FTD) over 2 consecutive weeks, the affected orchard is excluded from exports until the rate of detection is below the FTD threshold.
- f) Fruit must not be harvested from the ground.

III. Fruit must be processed at facilities registered with the Indian NPPO & APEDA for export to Australia.

IV. The following processing facility practices are required (in addition to food safety requirements as identified in Annex7):

- a) Fruit are inspected and symptomatic or damaged fruit are removed.
- b) Pomegranate fruit are washed with a sanitizer at an approved concentration (e.g. Tsunami, hypochlorite at 200ppm). Washing water is monitored or changed frequently to ensure appropriate concentration is maintained.
- c) Washing and brushing using disinfectant
- d) Extraction of arils
- e) Visual screening of extracted arils for contaminants and quarantine pests using a white background. A white conveyor belt is appropriate.
- f) Waste generated from aril extraction is managed and is removed from the processing facility daily.
- g) Packing in sealed containers

V. Pre-export phytosanitary inspection. Further details regarding the pre-export phytosanitary inspection are in Section 7.6.

Registered entities

[Details to be added if and when facilities are approved]

Packing houses

Name of facility	Address	Registration number	Commodity	Treatment

Treatment facilities

Name of facility	Address	Registration number	Commodity	Treatment

**Food business operator – hygienic practices
(responsibility of FSSAI / EIC)**

- I. Export registered aril processing establishments must be a government registered food business operation. Aril processing establishments are encouraged to have HACCP based certification from internationally recognized accredited certification bodies; this will become a mandatory requirement in 2022.
- II. Food handling practices and food handlers must meet standards developed by FSSAI for food hygiene, additives, contaminants, toxins and residues including but not limited to:
 - a) Food Safety and Standards (Food Products Standards and Food Additives) Regulations, 2011.
 - b) Food Safety and Standards (Contaminants, Toxins and Residues) Regulations, 2011.
- III. All food imported into Australia must comply with the Australia New Zealand Food Standards code. Establishments must demonstrate they have knowledge of relevant Australian food standards such as MRL standards.

Monitoring methodology of *Xanthomonas axonopodis* pv. *Punicae* (Bacterial blight of pomegranate)

Attachment-I

- 1) Farm Registration No. _____ 2) Date of registration/Renewal of farm _____
 3) Name and address of the Farmer _____
 4) Total area of the registered farm _____

Monitoring methodology of <i>Xanthomonas axonopodis</i> pv. <i>Punicae</i> (Bacterial blight of pomegranate)									
Flowering stages	Date of observation (fortnightly)	Name of pest observed <i>Xanthomonas axonopodis</i> pv. <i>punicae</i>	Crop stage	Present (Y)	Absent (N)	If present, Confirmation Y/N	Intensity of the pest	Plant protection measures adopted	Any other information/Remarks by State Deptt. of Agri./Hort
Ambia bahar	Nov-Dec		Pruning stage						
	December		New flush emergence						
	Dec-Jan		Flower bud emergence						
	Feb-Mar		Flowering and fruit setting						
	April-May		Fruit enlargement						
	June-July		Fruit maturation						
Mrug bahar	April-May		Pruning stage						
	May-June		New flush emergence						
	June-July		Flower bud emergence						
	July-Aug		Flowering and fruit setting						
	Aug-Oct		Fruit enlargement						
	Nov-Dec		Fruit maturation						
Hast bahar	Aug-Sep		Pruning stage						
	Oct-Nov		New flush emergence						
	November		Flower bud emergence						
	Dec-Jan		Flowering and fruit setting						
	Feb-Mar		Fruit enlargement						
	March-April		Fruit maturation						