



Government of India
Ministry of Agriculture
(Department of Agriculture & Cooperation)
Directorate of Plant Protection, Quarantine & Storage
N.H.IV., Faridabad-121001

**Standard Operating Procedures for
Export Inspection and Phytosanitary Certification
of Plants/ Plant Products & other Regulated
Articles**

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Control of Document

1. Document issue and revision

This document issue and revision is controlled by the Directorate of Plant Protection, Quarantine & Storage (NPPO), N.H.IV., Faridabad-121001 (Tel: 0129-2413985; fax:2412125; e-mail: ppa@nic.in). As and when a section of this document is revised, the revised section is issued in its entirety together with a revision number, identifying the new issue status and the issue date of each section. The revised sections are automatically issued to each of this document copy holders listed in Section 2 of 'Control of Document':

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1.1. Scope/Purpose:

This document provides guidance and prescribes the standard operating procedures for a national system for export inspection and phytosanitary certification of plants/plant products and other regulated articles.

The purpose of this document is to provide guidance for an operation of a national export certification system and prescribe standard operating procedures to ensure valid and credible phytosanitary certification for export of consignments of plants/plant products and other regulated articles in meeting the phytosanitary requirements of importing country and thereby fulfilling the international obligations enshrined under the International Protection Convention (1997) and WTO-SPS Agreement.

1.2. Definitions & Terms:

Additional declaration	A statement that is required by an importing country to be entered in Phytosanitary Certificate and which provides specific additional information pertinent to the phytosanitary condition of a consignment.
Authorised Officer	A technical officer of state/central government organisation authorised to issue phytosanitary certificate
Biological control agent	A natural enemy, antagonist, competitor or other organism used for pest control
Bulbs & Tubers	A commodity class for dormant underground parts of plant intended for planting (includes corms and rhizomes).
Certificate	An official document which attests to the phytosanitary status of any consignment affected by phytosanitary regulations.
Commodity	A type of plant, plant product, or other article being moved for trade or other purpose.
Compliance procedure	Official procedure used to verify that a consignment complies with stated phytosanitary requirements.
Consignment	A quantity of plants, plant products and/or other regulated articles being moved from one country to another and covered by a single phytosanitary certificate (a consignment may be composed of one or more lots).
Consignment in transit	A consignment that is not imported into a country but passes through it to another country, subject to official procedures which ensure that it remains enclosed, and is not split up, not combined with other consignments nor has its packaging changed.
Country of origin (of a consignment of plant products)	Country where the plants from which the plant products are derived were grown.
Country of origin (of a consignment of plants)	Country where the plants were grown.
Country of origin (of regulated articles other than plants and plant products)	Country where the regulated articles were first exposed to contamination by pests.

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Country of re-export	Country into which a consignment of plants, plant products, or other regulated articles have been imported and was stored, split up, had its packaging changed or was otherwise exposed to contamination by pests, prior to a third country.
Cut flowers and branches	A commodity class for fresh parts of plants intended for decorative use and not for planting.
Devitalization	A procedure rendering plants or plant products incapable of germination, growth or further reproduction
Dunnage	Wood packaging material used to secure or support a commodity but which does not remain associated with the commodity.
Field	A plot of land with defined boundaries within a place of production on which a commodity was grown.
Fruits and vegetables	A commodity class for fresh parts of plants intended for consumption or processing and not for planting.
Fumigation	Treatment with a chemical agent that reaches the commodity wholly or primarily in gaseous stage.
Germplasm	Plants and plant material intended for use in breeding or conservation programmes
Grain	A commodity class for seeds intended for processing or consumption and not for planting.
Import Permit	Official document authorizing importation of a commodity or of a biological control agent in accordance with specified phytosanitary requirements.
Inspection	Official visual examination of plants, plant products or other regulated articles to determine if pests are present and/ or to determine compliance with phytosanitary regulations.
Inspector	A trained technical staff assigned with the responsibility of inspection/sampling of consignments of plants/plant products and other regulated articles for phytosanitary certification or a person authorised by the Dte of PPQS (NPPO) to discharge its functions.
IPPC	International Plant Protection Convention, as deposited in 1951 with FAO in Rome and as subsequently amended.
International Standard for Phytosanitary Measures (ISPM)	An international standard adopted by the conference of FAO, the interim commission on phytosanitary measures or the commission on phytosanitary measures established under IPPC.
Issuing authority	Any officer notified by the Government of India in the Gazette, for the purpose of issuance of phytosanitary certificate.
Lot	A number of units of a single commodity, identifiable by its homogeneity of composition, origin etc., forming part of a consignment.

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National Plant Protection Organization (NPPO)	Official service established by a government to discharge the functions specified by the IPPC.
NSPM	National standard for phytosanitary measures established by Dte of PPQS
Official	Established, authorized or performed by a National Plant Protection Organisation.
Pest	Any species, strain or biotype of plant, or pathogenic agent, injurious to plants or plant products.
Phytosanitary Certificate	Certificate patterned after the model certificates of IPPC.
Phytosanitary certification	Use of phytosanitary procedures leading to the issue of a Phytosanitary Certificate.
Phytosanitary regulation	Official rule to prevent the introduction and/ or spread of quarantine pests or to limit the economic impact of regulated non-quarantine pests including establishment of procedures for phytosanitary certification.
Plant products	Unmanufactured material of plant origin (including grain) and those manufactured products that, by their nature or that of their processing, may create a risk for the spread of pests.
Plants	Living plants and parts thereof, including seeds and germplasm.
Quarantine Pest	A pest of potential economic importance to the area endangered and not yet present there, or present but not widely distributed and being officially controlled.
Regulated article	Any plant, plant product, storage place, packaging, conveyance container, soil and any other organism, object or material capable of harbouring or spread of pests deemed to require phytosanitary measures, particularly, where international transportation is involved
Regulated non quarantine pest	A non quarantine pest whose presence in plants for planting affects the intended use of those plants with an economically unacceptable impact and which is therefore regulated within the territory of the importing contracting party.
Seeds	Seeds for planting or intended for planting and not for consumption or processing
Stored product	Un-manufactured plant product intended for consumption or processing stored in a dried form.

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Treatment	Official procedure for the killing, inactivation, or removal of pests or for rendering pests infertile or for devitalization.
Visual Examination	The physical examination of plants, plant products, or other regulated articles using the unaided eye, lens, stereoscope or microscope to detect pests or contaminants without testing or processing

1.3. References:

Export Inspection Manual, PQ-15 (1999), Dte of PPQS, Faridabad
Export Certification System, ISPM 7 (1997), FAO, Rome
Glossary of Phytosanitary Terms, ISPM 5 (2006), FAO, Rome.
Guidelines for Phytosanitary Certificates, ISPM 12 (2001), FAO, Rome.
Guidelines for Inspection, ISPM 23 (2005), FAO, Rome.
International Plant Protection Convention, 1997, FAO, Rome.
Phytosanitary Accreditation Manual for Seed (2005), Dte of PPQS, Faridabad.

1.4 Requirements:

1.4.1. Legal Authority:

The Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will have legal mandate and administrative authority for control and issuance of phytosanitary certificates by the offices of PQS and various other central/state government agencies notified by the Ministry of Agriculture (Department of Agriculture & Cooperation) from time to time. The Export Inspection & Phytosanitary Certification Unit will bear the legal power for its actions and implement safeguards against conflicts of interest and fraudulent use/issue of certificates. The Export Inspection & Phytosanitary Certification Unit will also have the statutory power to prevent the export of consignments, which do not meet the phytosanitary requirements of the importing country and to take appropriate action in case of communication of nonconformities by the importing country and to fulfill the international obligations under the IPPC and WTO-SPS Agreement.

1.4.2. Management Responsibility:

The Dte of PPQS (NPPO) will be overall responsible for:

- management of national phytosanitary certification system that ensures that all the requirements including certification specifications, legislative and administrative requirements are met with;

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- will designate a senior level technical officer to head the Export Inspection & Phytosanitary Certification Unit;
- identify the duties and line of communication of all personnel authorized to issue phytosanitary certificates and treatment supervision responsibilities;
- ensure that adequate trained and skillful personnel and resources are available both with the offices of PQS and or the other notified central and state government agencies entrusted with the responsibility of phytosanitary certification for undertaking following functions:
 - maintenance of information on current phytosanitary requirements of importing country;
 - production of operational guidelines/procedures/instructions to ensure the importing country phytosanitary requirements are satisfied;
 - inspection and testing of consignments and other regulated articles;
 - identification of organisms found during inspection of consignments and other regulated articles;
 - verification of the authenticity and integrity of phytosanitary procedures;
 - completion and issuance of phytosanitary certificates;
 - document storage and retrieval;
 - training;
 - dissemination of certification related information;
 - providing technical information for gaining market access and developing bilateral phytosanitary protocols, if necessary.

1.5. Resources:

1.5.1 Trained & Qualified Staff:

The National Export Certification system will have adequate skilled and trained manpower to efficiently handle the volume of consignments being processed for export inspection and phytosanitary certification. The Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO) will decide the number of technically trained/qualified manpower to be required at each place, and periodically review the requirements of human resources, refresher courses for the inspectors and also specialized trainings for technical experts managing laboratories of Entomology, Plant Pathology, Nematology & Seed-health testing and Weed Science in consultation with the notified State/Central Government phytosanitary certification agencies.

The Dte of PPQS will undertake immediate review of existing notified state/central government phytosanitary certification agencies to evaluate their technical capacities and capabilities and infrastructure facilities for undertaking phytosanitary certification and make appropriate recommendations to the Ministry of Agriculture (Department of Agriculture & Cooperation) for their strengthening for effective implementation of these SOPs.

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Further any notification of additional State/ Central Government agencies for the purpose of phytosanitary certification will be based on assessment of technical capacities and capabilities and infrastructure facilities for undertaking export inspection and phytosanitary certification by a team of experts nominated by Dte of PPQS (NPPO) as per procedures outlined under Section-17.

Besides this phytosanitary accreditation of seed companies for seed sampling, crop inspection and seed-health testing will be carried out as per procedures prescribed under '*Phytosanitary Accreditation Manual for Seed*' developed by the Dte of PPQS (NPPO) and approved by the Ministry of Agriculture (Department of Agriculture & Cooperation).

1.5.2. General Facilities:

The general facilities for the Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO) will include office space for the head of the unit and the administrative secretariat with telephone, fax, computer with internet facility and a dedicated server for management of national phytosanitary database.

The general facilities for the notified State/Central Government phytosanitary certification agencies include an exclusive office space for authorized officer, which is provided with dedicated telephone, fax, computer with internet facility for phytosanitary certification activity, an inspection area with well lighted inspection table with white surface, a sample storage room for keeping the samples, a record room and an adequate laboratory space for carrying out laboratory testing for diagnosing pests, depending on level of phytosanitary certification of commodities and optional fumigation/treatment facility for carrying out phytosanitary treatments, if required.

Besides these, incubation/growth room facilities with automatic lighting/humidity/temperature controls are required for seed-health testing/grow-out tests for phytosanitary certification of seed consignments and molecular diagnostic facilities for phytosanitary certification of tissue cultured plants.

1.5.3. National Phytosanitary Database

The Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will provide all the office of the notified State/Central Government phytosanitary certification agencies with the requisite software for the computerized issuance of phytosanitary certificate and establish network links with National Phytosanitary Database for reporting activities related to export inspection & phytosanitary certification work All the inspectors of both Central and State Government phytosanitary certification agencies will be trained to familiarize with the software application and its use and computerized issuance of phytosanitary certificates and generation and

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submission of reports to the Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO).

The National Phytosanitary Data base will contain effective communication links with all the notified Central/State Government phytosanitary certification agencies and up-to-date data on name, designation, contact address and signature of all authorized officer for issue of phytosanitary certificate for reference and verification in case of conflicts. The National Phytosanitary Data Base will also contain the information on regulated pests of concern to the importing country along with their phytosanitary regulatory requirements apart from the other pest details like their presence and distribution within India, the biology surveillance, detection and identification of the pest and pest management,.

1.5.4. Equipments:

1.5.4.1. Office Equipments:

The offices of PQS and or the other notified Central/State Government phytosanitary certification agencies will have the following essential equipments for office work

- Telephone (dedicated)
- Fax
- Computer with Internet Facility (broadband connectivity/leased line)
- UPS (Inverter)
- Printer
- Scanner
- Pen Drive
- Digital Web Camera

1.5.4.2. Inspection/Sampling Equipments:

The essential inspection/sampling equipments include:

- Illuminating magnifiers (hand-held/table mounted)
- Dissection kit (knives, forceps, needles, camel hair brush, razor blade)
- Steriobinocular microscope
- Compound binocular microscope
- Microscopic slides & Cover slips
- Sampling triers (Slotted tube sampler/Nobbe sampler/Deep bin probes)

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- Sieves and white enamel plate/or tray
- Specimen vials/markers/labels/plastic bags (self-sealing type)/paper bags/seals
- Safety helmets, Aprons & Gloves (disposable)
- Weighing balance
- Moisture meter
- Refrigerator

1.5.4.3. Equipments for Laboratory Testing:

In addition the following equipment is required for laboratory testing for pest diagnosis.

Entomology

- Insect storage cabinets/mounting boards
- Soft X-ray Scanner & Film Developer
- Steriobinocular microscope fitted with Image grabber

Nematology

- Nematode Extraction Unit
- Fenwick can
- Baerman funnel
- Sieve set
- Steriobinocular microscope
- Compound Binocular Microscope

Plant Pathology:

- Laminar flow
- BOD Incubator
- Autoclave
- Hot air oven
- Digital top pan balance
- Analytical Balance
- Hot Plate with Magnetic Stirrer
- Table top centrifuge
- Wrist action shaker
- pH meter
- Blender
- Thermometer/Temperature Probes
- Haemocytometer

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- Inoculation loop or needle
- UV fluorescent lamp
- Distilled Water Unit
- Deep freezer (-20C)
- Compound trinocular microscope fitted with Photomicrographic Equipment
- Digital camera
- Vacuum cleaner
- A set of laboratory chemicals (for preparation of media/stains/reagents etc.)
- A set of laboratory glassware (beakers, conical flasks, measuring cylinders, pipettes, Petri dishes, test tubes, etc.)

Special Equipments for Molecular Diagnosis of Bacteria/Viruses

- Micropipettes (varying volumes)
- Micro plates (for ELISA Test)
- ELISA kit (reader, washer, reagents)
- Immuno-diagnostic reagents (Specific Antisera/Enzymes/substrate/buffers)
- Nitrocellulose membrane (for DIBA)
- PCR
- PCR Tubes
- Horizontal Gel Electrophoresis Unit with power pack
- Hybridization Oven
- Gel Documentation Unit with printer
- Microcentrifuge with Eppendorf tubes
- Nucleic Acid Chemicals (Specific Primers/TAQ DNA Polymerase/C-DNA probes/buffers/stains etc)
- Rnase Kit

1.5.4.4. Treatment Equipments:

In addition the following essential equipments are required for undertaking fumigation/disinfestations/disinfection treatment and supervision of fumigation treatments, where appropriate.

- Atmospheric/vacuum fumigation chambers
- Gas monitoring equipment
- Gas leak detector
- Gas proof covers/sand snakes
- Gas Storage cylinders/cans
- Respirator with canister
- Spraying Equipments

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2.1. Receipt of Application

- 2.1.1. The technical staff assigned with duty at the registration counter will receive the prescribed application (Annexure-2A) for export inspection and phytosanitary certification of plants and plant products and other regulated articles and attached documents as specified there under from the exporter or his authorized agent either in person, courier or through mail or on-line registration.
- 2.1.2. He will issue an acknowledgement slip for the receipt of application at the office in person.
- 2.1.3. He will attach a separate checklist (Annexure-2B) to the application to keep a track of the processing application for phytosanitary certification.

2.2. Verification of Application

- 2.2.1. He will verify the correct and completeness of application and the attached documents viz., import permit, where applicable; export license, where applicable; letter of credit/trade agreement; invoice/packing list; shipping/air way bill; fumigation/treatment certificate and any other relevant documents.
- 2.2.2. He will communicate with the exporter or his authorized agent if there are any deficiencies in the application and ensure that appropriate corrections are incorporated in the application or deficient documents are produced prior to registration of application or issue of phytosanitary certificate, as the case may be.
- 2.2.3. If the application is made in respect of commodities, whose export is banned under the export regulations of Ministry of Commerce & Industry or prohibited by the phytosanitary regulations of the importing country or covered under the Convention on International Trade in Endangered Species (CITES), the same will be withheld for registration and brought to the notice of the concerned authorized officer. Dte of PPQS (NPPO) will provide technical information on list of plants/plant products and other regulated articles, whose export is banned/restricted under the export regulations of Ministry of Commerce & Industry; phytosanitary regulations and list of regulated pests of importing country; and the list of plant species covered under CITES to all authorized officers for guidance and compliance.
- 2.2.4. Also if the application is made in respect of processed products, such as juices/pulp/concentrates/ pickles/jams/jellies and other preserved/frozen/vacuum packed food products will be cancelled as the same does not come under the purview of phytosanitary certification unless otherwise its requirement is technically justified. A list of all such products will be compiled by Dte of PPQS (NPPO) and circulated from time to time to all authorized officers for guidance and compliance.

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- 2.2.5. The authorized officer will issue a memorandum of cancellation of application (Annexure-2C) for registration giving grounds of cancellation and also the incomplete applications received by him after giving reasonable time to the exporter.
- 2.2.6. The cancelled applications will be separately filed and maintained under the custody of the authorized officer

2.3. Registration of Application & Realization of fees

- 2.3.1. The technical staff assigned with registration work will allot a unique registration number for the correct and complete application in the order of their receipt and assess the inspection fees, as prescribed by Department of Agriculture & Cooperation, Ministry of Agriculture.
- 2.3.2. He will advise the exporter or his authorised agent to tender the exact amount of fees by a bank draft/pay order or cash (up to Rs. 100/-) at the cash counter.
- 2.3.3. He will verify the payment of prescribed fees by the exporter and appropriate entries in the application.

2.4. Entry of Application in National Phytosanitary Data Base/Export Inspection Register.

- 2.4.1. He will either enter the particulars of application in the National Phytosanitary Database using pre-installed software programme on export inspection and phytosanitary certification or record the particulars of application in the calico-bounded and serially numbered export inspection register (Annexure-2D) maintained at the office duly certified by the authorised officer.
- 2.4.2. The authorised officer will issue a quarantine order directing the exporter or his agent to present the consignment of plants and plant products and or other regulated articles located at specified place for inspection/sampling by a specified inspector

2.5. On-line Registration:

- 2.5.1. Dte of PPQS (NPPO) will develop suitable software for on-line registration of application for export inspection and phytosanitary certification get it installed in the national phytosanitary data base and place it in public domain (Note that a separate e-application format will be designed in line with the application prescribed in this SOPs, by the soft ware specialist to make it user friendly. No signature will be required for e-application).

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- 2.5.2. The exporter will have to first register user name and password to enter the e-application site and ‘click’ on the ‘e-application’ and follow the instructions on how to fill the application. He will fill the columns in the application appropriately and ‘attach’ the electronic copies of relevant documents (export license and import permit, where applicable, invoice/packing list; air way/shipping bill, letter of credit/trade agreement etc.), after scanning the relevant documents, and enter ‘submit’.
- 2.5.3. The inspector will ‘receive’ e-application and ‘attach’ e-checklist and verify application and attached documents to ensure complete and correct and order to ‘resubmit’ application if any deficiencies or corrections to be incorporated in the application and /or deficient documents required to be submitted.
- 2.5.4. He will ‘reject’ the e-application made in respect of consignments banned by export regulations or prohibited by the importing country or covered under the Convention on International Trade in Endangered Species (CITES) or due to any other reasons specified in SOPs. A ‘cancellation’ memo appears on the screen, which he fills and ‘send’ it to the exporter and a copy of ‘rejected’ application along with memo will be automatically saved in ‘rejected’ folder
- 2.5.5. The inspector will ‘accept’ the correct and complete application and the computer will ‘generate’ a unique registration number for accepted application. He will order ‘assess’ inspection fees and ‘debit’ to the account of the exporter. He will enter ‘register’ to record the relevant application information in e-register and ‘issue’ an e-order for inspection/sampling of consignment to the exporter specifying scheduled date/time and place of inspection of consignment and the inspector for further action.

Annexure-2A

Application for Export Inspection and Phytosanitary Certification of Plants/Plant Products and other Regulated Articles.

To	For PQ Office use: Receipt No. : Date of Receipt:	Registration No.: Date of Registration. :
I/We, the exporter/the authorised agent of the exporter, herewith submit an application for inspection/disinfection/disinfestation and issue of Phytosanitary Certificate for export of the goods described hereunder:		
Name & address of Exporter:	Name & address of Importer:	<div style="border: 1px solid black; padding: 2px; background-color: #f0f0f0; margin-bottom: 5px;">For PQ Office use</div> Export status: <input type="checkbox"/> Prohibited <input type="checkbox"/> Restricted <input type="checkbox"/> Canalised <input type="checkbox"/> Unrestricted Documents verified: <input type="checkbox"/> Import Permit <input type="checkbox"/> Export License <input type="checkbox"/> Letter of Credit/ Contract/ Agreement <input type="checkbox"/> Invoice <input type="checkbox"/> Fumigation Certificate <input type="checkbox"/> Shipping/Airway Bill <input type="checkbox"/> Others _____ (specify) N.B.: Tick out appropriate entry Date: _____ _____ *Sign. of Staff
Commodity Name (Common/Botanical name)/HS Code:	Quantity (Wt. /Vol.):	
No. of pieces/packages/Container particulars:	Distinguishing marks:	
Nature of package material:	Means of conveyance:	
Place of origin:	Port of loading:	
Country to which exported:	Foreign Port:	
Date & Place of inspection of goods:	Invoice/Shipping/Airway Bill No. & date:	
Value of commodity (Rs.):	Purpose of Export: Propagation/Consumption (N.B: Strike out, which is not applicable).	
Declaration		
(1) I/We the exporter/ the authorised agent of the exporter, on behalf of M/s. _____ declare that the information furnished on this form, to the best of knowledge and belief is true, correct and complete in every respect. (2) I/We shall pay any fees prescribed for inspection/fumigation/treatment of the consignment and any other charges towards issue of Phytosanitary/fumigation/treatment certificate. (3) I/We shall carry out the instructions given by the Plant Protection Adviser to the Govt. of India or any Officer duly authorised by him in this behalf in connection with inspection/fumigation/treatment of the consignment and issue of Phytosanitary Certificate. (4) I/We shall provide any relevant information and related documents connected with export of consignment and issue of Phytosanitary Certificate.		
Date: _____	Seal	(_____) *Sign. of Exporter/Authorised Agent
N.B. (1) Application should be submitted by the Exporter/his authorised agent in duplicate duly filled and complete. (2) Duplicate copy to be returned to the exporter/his authorised agent after endorsing the quarantine order and receipt of payment. These conditions will not be applicable for on-line registration.		

FOR PLANT QUARANTINE USE:

Assessment of fees:				Receipt of payment:
Commodity	Wt.(Kg)/No. of pieces	Particulars of fees	Amount (Rs)	Received from M/s. _____ _____ an amount of Rs. _____ (Rs. _____) (in words) by cash /DD /BC /PO /T.R.No. _____ dt: _____ drawn on _____ (Name of the bank & branch) towards inspection fees/outside inspection fees/other charges.
		1. Inspection fees _____ 2. Outside Inspection charges _____ 3. Others (TA/DA) : _____ Total _____	_____ _____ _____	
(Rupees _____ _) _____ (In words) Date: _____ Assessed by _____ Checked by _____ _____ *Name/Sign. of tech staff * Name/Sign. of authorized officer				Date: _____ Received by _____ Verified by _____ _____ *Name/Sign. of Cashier *Name/Sign. of AO
QUARANTINE ORDER NO. : _____				
(1) The exporter/authorised agent of the exporter are directed to present the consignment/containers/vessel lying at _____ for inspection/sampling on _____ at _____ by _____. (2) The exporter/authorised agent will provide necessary facilities to undertake inspection/sampling of consignment/container/vessel (3) The exporter/authorised agent of exporter is advised to produce the following documents viz., Permit to Import/ Letter of Credit/ Trade Contract/ PQ specifications, if any, of the country of export, for necessary securitization and issue of Phytosanitary Certificate. Date: _____ Station: _____				
				_____ *(Name/Sign. Authorised officer)
*Signature is not required in case of on-line registration but name is required to be printed.				

Annexure-2B
Check list of Export Inspection & Phytosanitary Certification

Sl. No.	Activity	Tick Yes (✓) or No (x) or NA	Signed by/date
1.	Application by exporter received, acknowledgement slip issued and OP check list enclosed.		
2.	Verification of application & attached documents		
2.1.	Export license, where applicable or export regulations		
2.2.	Import Permit, where applicable and or phytosanitary regulation of importing country		
2.3.	Letter of Credit/Memorandum of Agreement (MOU)		
2.4	Invoice/Packing list		
2.5.	Fumigation/Treatment certificates		
2.6.	Any other relevant documents (_____).		
3.1	Communication of deficiencies, if any & Corrections in application incorporated and/or deficient documents produced		
3.2.	Issued memorandum of cancellation of application in respect of banned commodities for export or prohibited import by specified country.		
4.	Registration of correct & complete application in the order of their receipt and payment of inspection fees		
5.	Entry of application in National Phytosanitary Data Base (Quarantina) and /or record in export inspection register		
6.	Issued Quarantine order for inspection/sampling		
7.	Inspection & Sampling of Consignment and affixing of quarantine seals on packages sampled, where required.		
8.	Entry in Sample Register		
9.	Sample Issued for laboratory testing		
9.1.	Visual Examination		
9.2	X-ray		
9.3.	Microscopic Examination		
9.4.	Washing Test		
9.5.	Incubation		
9.6.	Grow-out test		
9.7.	Any other special tests (_____)		
10.	Inspection/Testing Report received		
11.	Rejection letter issued for export banned/prohibited import by specified country.		
12.	Undertaking for supervision of fumigation/treatment, payment of fees and issued fumigation order		
13.	Fumigation and /or other treatments carried out/supervised and treatment verified		
14.	Consignment re-inspected after degassing and /or sealing of containers, if required		
15.	Preparation, verification and issue of PSC		
16.	Entries completed in the export inspection register/Reporting Data		

Annexure- 2C

Memorandum No: _____ Dated: _____

Cancellation of Application for Export Inspection & issue of Phytosanitary Certification.

It is hereby informed that the application of M/s _____
_____ for export inspection and issue of phytosanitary certificate
received on _____ at this office has been examined and the same could not be considered
and cancelled on account of following reasons*:

The application is made in respect of _____, which is:
(Name of Commodity)

- Banned export under the Import-Export Policy of Ministry of Commerce & Industry.
- Prohibited import under phytosanitary regulations of the importing country (_____).
- Covered under the Convention on International Trade in Endangered Species (CITES)
- Pickled/frozen/preserved/processed food product and therefore does not come under the purview of phytosanitary certification.

***Tick out in appropriate box.**

Date: _____
Place _____

_____ (Seal)
officer)

(Name/Signature/Stamp of Authorised

Copy to: _____
(Name & Address of Customs officer at the designated port }

3.1. Seeds for Propagation:

3.1.1. Inspection and sampling of seed consignments will be carried out by an inspector at the storage premises of a seed company or the exporter from properly identifiable bagged seed lots or bulk seed storage bins or alternatively sampled by an automatic sampling device fitted on to a seed conveyor prior to bagging or packing at the seed processing unit.

3.1.2. The sampling of the seed for propagation will be in accordance with the sampling procedures prescribed by International Seed Testing Association (ISTA) Rules, 1976.

3.1.3. The maximum size of seed lot for agricultural and horticultural crops is 20 metric tones (MTs) for seeds of the same size of wheat or larger. However for small size seeds the lot size is 10 MTs. For tree species with seeds of the size of *Fagus* species or larger, the maximum is 5 MTs.

3.1.4. The sampling regime for seed lots in bulk will be as follows:

Lot size	No. of primary samples required to be drawn
Up to 500 kg.	At least five primary samples.
501 to 3000 kg.	One primary sample for each 300 kg. but not less than 5 samples
3001 to 20,000 kg.	One primary sample for each 500 kg but not less than 10 samples

3.1.5. The sampling regime for seed lots in bags or containers of uniform size will be as follows:

Lot size	Samples required to be drawn
Up to 5 containers	Sample from each container.
6 -30 containers	Sample in every 3 containers but not less than 5 samples are drawn
31 or more containers	sample in 1 of every 5 containers but not less than 10

3.1.6 Sampling is usually carried out by the slotted tube sampler or Nobbe sampler in case of bagged cargo and in case of sampling of seed in bulk from storage bins a deep bin probe is used. Sampling by hand is carried out in case of lighter seeds or from air-tight containers and the containers will be re-sealed immediately after sampling. Each of the primary samples, will be mixed to form a composite sample, which is divided to get appropriate size of sample for submission to laboratory testing as indicated in 3.1.7

Note: - The required quantity of primary sample to be drawn depends upon number of primary samples to be drawn in each lot and the size of submitted samples. Only small quantities of primary sample (2.5-100g) at random following random table to represent the lot will be drawn and mixed to form a composite sample.

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Inspection & Sampling of Consignments

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3.1.7 The minimum weight of submitted samples for various crop species, as prescribed under ISTA Rules, is given below:

Minimum weight of submitted samples	Crop species
1000 g	<i>Avena sativa</i> (oat), <i>Cajanus cajan</i> (pigeon pea), <i>Cicer arietinum</i> (chick pea), <i>Cucurbita</i> spp., <i>Dolichos lablab</i> (lablab bean), <i>Fagus sylvatica</i> (common beech), <i>Glycine max</i> (soybean), <i>Gossypium</i> spp (cotton)., <i>Hordeum vulgare</i> (barley), <i>Leucaena leucocephala</i> (Leucaena), <i>Phaseolus</i> spp (beans)., <i>Pinus pinea</i> (stone pine), <i>Pisum sativum</i> (pea) <i>Secale cereale</i> (rye), <i>Vigna unguiculata</i> (cowpea), <i>Triticum aestivum</i> (wheat), <i>Vicia</i> spp (broad bean & vetches)., <i>Zea mays</i> (maize)
900 g	<i>Prunus avium</i> (sweet cherry), <i>Sorghum vulgare</i> (Sorghum)
500 g	<i>Beta vulgaris</i> (beet root), <i>Prunus serotina</i> (black cherry)
400 g	<i>Oryza sativa</i> (rice), <i>Calopogonium mucunoides</i> (Calopogonium)
250 g	<i>Sorghum sudanense</i> (Sudan grass), <i>Spinacea oleracea</i> (spinach), <i>Trifolium subterraneum</i> (subterranean clover)
200 g	<i>Sinapis alba</i> (white mustard)
150 g	<i>Capsicum</i> spp.,(chillies/bell pepper) <i>Cucumis melo</i> (musk melon), <i>Cucumis sativus</i> (cucumber), <i>Linum usitatissimum</i> (linseed or flax), <i>Lycopersicon esculentum</i> (tomato), <i>Pennisetum typhoides</i> (pearl millet), <i>Solanum melongena</i> (brinjal)
100 g	<i>Brassica napus</i> (rape), <i>Brassica oleracea</i> (cabbage & cauliflower), <i>Brassica rapa</i> (turnip), <i>Pinus caribaea</i> (carribbean pine)
80 g	<i>Allium cepa</i> (onion), <i>Stylosanthes</i> spp (stylosanthes).
70 g	<i>Allium porum</i> (leek), <i>Sesamum indicum</i> (sesamum).
60 g	<i>Cuminum cyminum</i> (cumin), <i>Trifolium alexandrinum</i> (berseem)
50 g	<i>Allium fistulosum</i> (welsh onion), <i>Cichorium intybus</i> (chicory), <i>Malus</i> spp., (apple) <i>Medicago lupulina</i> (black medick), <i>Medicago sativa</i> (alfalfa or lucerne), <i>Melilotus</i> spp., (white clover) <i>Rosa</i> spp.,(Rose), <i>Trifolium pratense</i> (clover)
40 g	<i>Brassica chinensis</i> (chinese cabbage), <i>Brassica nigra</i> (black mustard) <i>Cichorium endivia</i> (endive), <i>Picea abies</i> (Picea)
30 g	<i>Daucus carota</i> (carrot), <i>Lactuca sativa</i> (lettuce), <i>Ulmus</i> spp., (elm)
25 g	<i>Apium graveolens</i> (celery), <i>Nicotiana tabacum</i> (tobacco),

3.1.8 In case of smaller size seed lots, than indicated above, a representative sample of seed will be drawn for each species/variety, which is just sufficient enough for carrying out required seed health testing. In case of germplasm, which is exported in small packets, each individual packet of seed will be inspected.

3.1.9 The samples of seed will be submitted in a sealed polythene bag with appropriate labeling as per section 3.9., for laboratory testing.

3.2. Nursery stock & other propagating plant material:

- 3.2.1. The inspection of nursery stock and other planting material will be usually carried out at the nursery site by an inspector either generally or in association with a technical expert or authorized officer depending upon specific phytosanitary requirements of the importing country. Also during inspection it will be ensured that the production facility shall meet adequate vector-proof ness of enclosure and that the plants are raised above the ground in soil-less media such as peat, vermiculite etc and the incidence of pests are monitored and appropriate plant protection measures to control pests. If soil or other organic media such as compost is used it should be appropriately treated or else soil less media should be used.
- 3.2.2 Each variety/species of the plant inspected separately and it should be ensured that each individual plant or pot or the package is adequately labeled to ensure correct identity of plant species/variety.
- 3.2.3. The sampling regime for nursery stock and other propagating plant material (cuttings/grafts/bud wood) will be as under:

Number of plants in a lot	Number of plants to be inspected
Less than 10	Inspect all plants
11-100	20 % plants subject to a minimum of 10 Nos
101-1000	10% plants subject to a minimum of 20 Nos
1001-10000	5% plants subject to a minimum of 100 Nos
10001-100000	1% of plants subject to a minimum of 500 Nos

- 3.2.4. Inspection of sampled plants/planting material will be carried out to ensure free from soil contamination and the roots are examined for freedom from infestation/infection by nematodes, crown gall, root rots and wilts. The sampled plants are examined to ensure free from infestation by quarantine pests of concern to the importing country and to the extent possible for freedom from non-quarantine pests such as thrips, aphids, mealy bugs, scales, etc. Also the packing material/growing media/containers are examined for insect infestation.
- 3.2.5. The samples of plants/plant parts are packed in ventilated cartons/paper bags and labeled and the specimens of insect pests, if any are collected in sealed vials and labeled and submitted for laboratory testing for pest diagnosis and identification.

3.3. Tissue culture plants for propagation:

- 3.3.1. The tissue culture plants will be inspected/sampled and subjected to virus testing by the accredited testing laboratories as per the diagnostic protocols established under National Certification Programme for Tissue Culture Plants by the Department of Biotechnology of Ministry of Science & Technology
- 3.3.2. It will be ensured that the ex-agar plants will be gently washed to remove the entire agar adhering to the roots and blot dry before packing.
- 3.3.3. The following scale of sampling will be adopted for sampling of tissue culture plants at random for each batch of production in respect of each plant species for virus testing by the testing laboratory accredited by the Department of Biotechnology of Ministry of Science & Technology

Lot size	Number of tissue culture plants to be sampled
Up to 1000 Nos	1% plants subject to a minimum of 10 Nos
1001 to 10000 Nos	0.5% of plants subject to a minimum of 10 Nos
10001 to 100000 Nos	0.1% of plants subject to a minimum of 50 Nos

- 3.3.4. The samples of tissue culture plants are packed in thermo-cool boxes kept with icepack, which are appropriately sealed and labeled before forwarding to accredited laboratory for virus testing.

3.4. Bulbs/tubers/corms/rhizomes and other underground roots for propagation:

- 3.4.1. The inspection of bulbs/tubers/corms/rhizomes and other underground roots of flowers and other ornamental plant species will be carried out by an inspector generally or in association with technical expert or authorized officer at the premises of exporter or production place just prior to shipment.
- 3.4.2. The sampling regime for the bulbs/tubers/corms/rhizomes etc., will be as under:

Quantity in a lot (Nos)	Amount of sample to be inspected
Less than 100	Inspect all the bulbs
101-1000	Inspect 25%, subject to a minimum of 100 Nos
1001-10000	Inspect 10%, subject to a minimum of 250 Nos
10001-100000	Inspect 2 %, subject to a minimum of 1000 Nos

- 3.4.3. The inspection of bulbs/tubers/corms/rhizomes etc., will be carried out to ensure free from soil contamination, nematodes and bulb/tuber/corm rots.
- 3.4.4. The samples of bulbs/tubers/ corms/rhizomes are appropriately packed in paper cartons, sealed and labeled for submission to laboratory testing

SOPs for Export Inspection & Phytosanitary Certification**Section-3****Inspection & Sampling of Consignments****Page 5 of 11****December 2007****3.5. Grain/Pulses and other seeds for Consumption:**

3.5.1. The inspection of grain/pulses and other seeds for consumption/industrial use will be inspected by an inspector and /or accredited sampler at the storage premises of the exporter or container terminal or port warehouse or mill just prior to loading into container or carrier.

3.5.2. The sampling of grain/pulses and other seeds for consumption/industrial use will be carried out as per the sampling procedures established by the Bureau of Indian Standards, which is described as follows

3.5.3. The sampling regime for bagged cargo of grain/pulses and other seeds for consumption/industrial use will be as follows:

Lot size	No. of bags to be sampled
Up to 100 bags	20
101 to 300 bags	32
301 to 500 bags	50
501 to 1000 bags	80
1001 and above	125

3.5.4. The sampling regime for bulk grain/pulses and other seeds for consumption/industrial use will be as follows:

Lot size	No. of primary samples to be drawn
Up to 300 MT	30
301 to 1000 MT	50
1001 and above	100

3.5.5. The sampling regime for containerized cargo is as follows:

Total No of containers	No of containers to be sampled
Up to 10 containers	Sample at least 2 containers
11 to 25 containers	Sample at least one for every five containers.
Above 26 containers	Sample at least one for every eight containers subject to a minimum of six containers

3.5.6. Sampling of grain/pulses and other seeds for consumption/industrial use will be drawn at random from bags with the help of a slotted tube sampler or by the Nobbe sampler in case of large size seed as that of maize, pea, beans and gram etc. At least 10-15 bags are sampled for each container in case of containerized cargo per each container.

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- 3.5.7. Sampling of the grain/pulses and other seeds for consumption/industrial use from the bins will be carried out by a deep bin probe or thermo-sampler.
- 3.5.8. Sampling of grain/pulses and other seeds for consumption/industrial use will be carried out by automatic sampling device fitted on to the conveyor prior to bagging at the processing facility or grain elevator or a mill.
- 3.5.9. Each of the primary samples (small quantities ranging from 10-100 g depending on lot size and size of submitted sample) drawn shall be thoroughly mixed to constitute a homogeneous composite sample. From the composite sample, two sample of each of the following quantities of samples are drawn and submitted in sealed polyethylene bag with appropriate labeling for laboratory testing.
- 3.5.10. The size of submitted sample for stored products including grain will be as follows:

S.No.	Type of Commodity	Minimum weight of submitted sample/ No of samples
1	Grains (wheat/rice/maize) other large size seeds	1 kg X 2
2.	Pulses (beans/chick pea/pea/cow pea etc) whole/split	1 kg X 2
3.	Milletts (sorghum, pearl millet, finger millet etc)	0.5 kg X 2
4.	Small size seeds (mustard, rape, sesame, coriander etc)	0.25 kg X 2
5.	Cashew kernels/dry fruits & nuts	0.25 kg X 2
6.	Turmeric finger/zinger rhizomes/garlic or onion bulbs etc	0.5 kg X 2
7.	Flours (wheat/rice/maize/chick pea etc)/meals/malt/feeds	0.5 kg X 2*
8.	Powdered Condiments (Chillies/Turmeric/Coriander etc)	0.25 kg X 2*
9.	Whole spices & condiments (cloves/cinnamomum/cardamomum/cumin/fennel etc)	0.1 kg X 2*
10.	Any other stored products	0.25 kg X 2*

* incase of consignment packed in small consumer packets, 2 packets will be sampled at random and submitted.

- 3.5.11. The samples of grain/pulses other stored products will be submitted in a sealed polythene bag with appropriate labeling as per section 3.9., for laboratory testing.

3.6. Milled Products for Consumption:

- 3.6.1. The inspection/sampling of milled products such as wheat flour (maida), rice flour, dhal (split pulse), gram flour, malt, feeds, oilseed extracts, meals, grounded spices etc., will be inspected by an inspector at the storage area of mills/premises of exporter/container freight station/port warehouses etc., prior to loading of the containers or loading into ship.
- 3.6.2. The inspection will involve raw material storage area & mill premises besides the inspection of finished product storage areas to ensure it is free from insect infestation and regular disinfestations measures are followed to reduce insect infestation in mill, mill premises and storage structures and hygienic practices are adopted to minimize microbial contamination.
- 3.6.3. In the case of commodities packed in consumer pack in cartons, 2 packets are randomly picked up for each product and labeled for laboratory testing. If the consignment is loosely packed in HDP bags such as wheat/rice flour, at least three bags randomly sampled and opened to collect the specified quantity of submitted sample (refer to section 3.5.10 above) either by hand using disposable gloves or with a clean scoop or measuring can and the opened bags will be immediately be sealed or stitched in the presence of inspector to avoid contamination and /or spillages. The sample will be collected into a clean polythene bag and sealed and labeled for laboratory testing.
- 3.6.4. The lots of milled products should be surface inspected for insect infestation at the sims/edges and also for any wet damage leading to the development of mould growth and the date of packing of the milled product as products stored for sufficient time or old lots may likely to develop infestation.

3.7. Fresh Fruits, Berries & Vegetables for consumption:

- 3.7.1. The inspection of fresh fruits/berries/vegetables will be carried out by an inspector either at the office of PQS or cold storage facility at air port or at packing house facility or at the cold storage premises of exporter just prior to shipment depending upon specific phytosanitary requirements of the importing country.
- 3.7.2. The sampling regime for the fresh fruits/berries/vegetables will be as under:

Total No. of Packages in the shipment	No of packages to be sampled
< than 10	All packages
11-100	20 % of packages subject to a minimum of ten packages
101-1000	5% packages subject to a minimum of 20 packages
>1000	2 % packages subject to a minimum of 50 packages

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- 3.7.3. The packages are sampled at random using a random table. The entire fruits of sampled packages are surface inspected for the pests of quarantine concern to importing country and to the extent possible for non-quarantine pests in an air-conditioned inspection facility with all openings fitted with insect-proof screen. Any suspected fruit will be cut open and examined for fruit fly infestation/fruit or nut borer. If apparently healthy, at least 1% of the fruits will be cut open and examined for fruit fly/fruit (pod) & seed (nut) borer infestations.
- 3.7.4. The specimens of affected fruits/insect specimens collected during inspection will be appropriately labeled and packed and submitted to laboratory testing for pest diagnosis and identification.

3.8. Cut Flowers, branches & Foliage for decorative purpose:

- 3.8.1. The inspection of cut-flowers/branches/foilage will be carried out at the packing/ cold storage place of the exporter or at the office of PQS or at the cold storage facility at airport, as the case may be.
- 3.8.2. The sampling regime for cut flowers/branches/foilage will be as under:

Total No. of packages in the shipment	Number of plants to be inspected
Less than 10	Inspect all packages
11 – 100	20 % of packages, subject to a minimum of 10 packages
101 – 1000	5 % of packages subject to a minimum of 20 packages
More than 1000	2 % of packages subject to a minimum of 50 packages

- 3.8.3. The packages are sampled at random using a random table. The entire bundles of cut flowers/branches/ foliage of sampled packages will be surface inspected for the pests of quarantine concern to the importing country and to the extent possible for non-quarantine pests in an air-conditioned inspection facility. For this purpose the cut-flowers/branches/foilage will be shaken or gently tapped on white surface of inspection table to dislodge the live insect infestation such as thrips, aphids and early instar larvae of Lepidopteron insects (bud borers/cutworms). Also tight buds are closely examined for the damage by bud borers and the leaves are examined for leaf mining insects/galls/scales/mealy bugs/stem and bulb nematode infestation, fungal/bacterial/viral infection.
- 3.8.4. The specimens of affected plant parts/insect specimens collected during inspection will be appropriately labeled and packed and submitted to laboratory testing for pest diagnosis and identification.

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3.9. Inspection & sampling of potatoes

3.9.1. The inspection of fresh potatoes is carried out by an inspector at the inspection area at the ports or at the office of phytosanitary certificate issuing authority or at the storage godown of potatoes

3.9.2. The certified seed potatoes are sampled as per ISTA Rules, 1976 and the following scale of sampling is used:

Sampling of certified seed potato in bags (50 kg/bag)

Less than 50 MTs	5 bags	200 tubers
50 - 200 MTs	1 bag per 10 MTs	200 tubers
More than 200 MTs	1 bag per 20 MTs	1 tuber per MTs

3.9.3. The sampling regime for warehouse potatoes exported for table purpose/industrial processing will include:

Sampling of table/warehouse potatoes in bags (25 kgs/bag)

Number of bags in consignment	Number of bags to be sampled
Less than 10	All bags
11 – 100	20 % bags subject to a minimum of 10 bags
More than 100	5%, bags subject to a minimum of 20 bags

Sampling of table/ware house potatoes in bulk

Quantity in lot (MTs)	Number of sub-samples/total quantity of material sampled
Less than 10	5 sub-samples, 1 litre
11-50	8 sub-samples, 1,5 litre
51 - 100	10 sub-samples, 5 litre
More than 100	15 sub-samples, 10 litre

3.9.4 Samples of 200 tubers shall be first surface examined for dry/wet rots, warts, tubercles, soil sticking to the tubers. The suspected tubers showing bacterial oozing are cut in two halves by knife to verify characteristic symptoms/signs of brown rot (*Ralstonia solanacearum*)/soft rot (*Erwinia caratovora*). For this purpose at least 200 tubers shall be cut from each lot. If brown rot infection is suspected, the samples are taken for laboratory testing. The soil adhering to the tubers and tuber brushings will be examined for nematode analysis. The samples of certified seed potatoes are further tested for freedom from viruses and other quarantine pests of concern to importing country.

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3.10. Sample forwardal/receipt for laboratory testing:

- 3.10.1. The sample collected/forwarded for laboratory testing will be appropriately packed to prevent any escape of pest, sealed and labeled. The sampling label will provide detailed information viz., Lot/Batch Number, Name of the Commodity (species/variety), Plant parts sampled, Sample size, Place of inspection, Date of inspection, Name/Signature of Inspector
- 3.10.2. The samples on receipt at the office of phytosanitary certification agency will be entered in a sample register (Annexure-3A) and stored in sample storage room until issued for laboratory testing. The seed sample storage area is appropriately air-conditioned. The perishable samples will be held under refrigerator/cold storage room to prevent spoilage by microbial contamination.
- 3.10.3. The perishable samples will be retained for 72 hours after inspection and non-perishable commodities will be retained for a period of 30 days before disposal.

3.11. Verification of inspection/sampling procedures:

- 3.11.1. The inspector at the end of inspection will affix “Inspected by PSC Issuing Authority” on the packages/bags sampled
- 3.11.2. The authorized officer will conduct at random audit checks to verify that the inspection/sampling procedures adopted by the inspector are adequate for the detection of quarantine pests and /or regulated non-quarantine pests and are consistent with phytosanitary requirements of importing country.
- 3.11.3. In certain instances, the importing country may like to verify the inspection/sampling procedures to ensure that they are proper and consistent with the phytosanitary requirements of importing country, through bilateral agreements.

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4.1. Growing Media:

4.1.1. The consignments of growing media such as soil/compost or other organic media will be inspected for soil borne-insects/nematodes/weed seeds and root rot and wilt causing fungi

4.2. Packaging Material:

4.2.1. The packaging material will be inspected for hitchhiking pests. If solid wood packing material used it shall be ensured that the wood packing material is appropriately treated and marked in compliance with *ISPM 15 (2002) with modification to Annex-I (2006): Guidelines for regulating wood packaging material in international trade, FAO, Rome.*

4.3. Cargo containers:

4.3.1 The empty containers will be inspected prior to loading of the consignment to ensure it is thoroughly cleaned and free from insect infestation.

4.4. Transport Vehicles (Trucks/Wagons):

4.4.1. The transport vehicles and other conveyances will be inspected prior to loading of the consignment to ensure it is thoroughly cleaned and free from insect infestation

4.5. Ships & Other Vessels:

4.5.1. The empty holds of ships and other vessels will be inspected to ensure they are cleaned and thoroughly washed to remove extraneous matter and free from live insect infestation prior to giving permission for loading of the grain into the vessel. A ship inspection report (Annex-3A) will be submitted at the end of inspection of ship holds prior to granting permission for grain loading.

4.6. Storage Places:

4.6.1. The storage places such as port warehouses/storage godowns, where export consignments are stored, will be inspected to ensure free from storage pests and other contaminations and are regularly disinfested.

4.6.2. The mill premises will be inspected to ensure that the raw material stored for milling is free from infestation and that the finished products such as flours/grounded spices etc., are stored separately from raw material to prevent cross infestation and are regularly disinfested.

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4.6.3. The packing house facilities will be inspected to ensure appropriate sanitary/hygienic practices are adopted in post-harvest processing of fruits/vegetables and that the packing areas are free from hitchhiking pests and regularly disinfested.

4.7. Farm Equipments/Machinery:

4.7.1. The farm equipments such as one used for hoeing, tilling and uplifting the bulbs/tubers/rhizomes, bud/cutting knives will be inspected to ensure free from soil contamination and thoroughly washed and greased

4.7.2. The farm machinery such as tillers, tractors will be examined for the soil contamination and pressure washed. Other machinery such as harvesters, threshers and combines etc., will be inspected to ensure free from grain spillages and plant debris as the same likely to harbour seed borne pathogens such as smut/bunt and rust spores/storage pests and hitch hiking pests and thoroughly cleaned.

4.8. Biological control agents/other Beneficial Organisms & Pests

4.8.1. Ministry of Agriculture (Department of Agriculture) in consultation with Dte of PPQS (NPPO) may notify an authority with appropriate competencies for the purpose of export inspection and phytosanitary certification of biological control agents & other beneficial organisms as per the guidelines established under *ISPM 3 (2005): Guidelines for the export, shipment, import & release of biological control agents and other beneficial organisms*

4.8.2. The specially notified authorities will undertake inspection of biological control agents to ensure correct identity of species and free from hyperparasites and other natural enemies and microbial contamination of the agents and ensure that they are reared on suitable host species under contained facility and are securely packed to prevent any escape of agents and appropriately labelled.

4.8.3. The specially notified authorities will undertake inspection of beneficial organisms to ensure they are free from natural enemies and microbial contamination and are reared under contained facility or cultured under sterile conditions and are securely packed to prevent any escape of organisms and appropriately labelled.

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5.1. Entomological Examination:

- 5.1.1. The technical expert specialized in entomology will be responsible for correct identity of the pest. He will consult pest diagnostic keys, where available and endemic pest datasheets for correct identification of the insect/mite pests. Where new pest is encountered for the first time, the same will be get authentically identified by a specific taxonomical expert or national insect repository. Also specific taxonomic skills will be required for identification of fruit fly pests.
- 5.1.2. The laboratory technician attached to the entomological laboratory will record the samples of plants/plant products received for testing or specimens received for identification in a laboratory work book. He will consult the laboratory manual for entomology regarding collection and preservation of insect specimens, mounting and labeling of insect specimens and storage of insect specimens and mailing of insects for taxonomical identification, where applicable.
- 5.1.3. The X-ray technician will be responsible for carrying out X-ray test. He will record the samples received for X-ray examination in an X-ray register and the results of x-ray examination and preserve the X-ray films for future reference.
- 5.1.4: The entomological tests are described as under:

5.1.4.1. Visual Examination

Visual examination of samples/specimens received at the laboratory will be carried out with the help of illuminated magnifier to detect live insect infestation. Milled products are subject to sieving to detect insect infestation.

5.1.4.2. X-ray test

X-ray tests will be carried out by a trained X-ray technician. X-ray test is used for the detection of hidden infestation in seeds of leguminous crops... For this purpose a working sample of 50 (large size)-100 (small size) seeds will be selected at random and mounted on a card board or placed in a paper tray and examined under fluorescent screen of X-ray scanner (Soft X-ray type) to reveal internal damage. The seeds showing internal damage will be split open to record live infestation and the specimens are collected and further examined under microscope to characterize the pest species. Also the X-ray radiography will be carried out by exposing the film. For this purpose the film will be loaded into thick dark card board casket and the sealed casket will be kept on the top of seed tray and exposed to the X-rays and the exposed film is further developed in dark room to reveal internal infestation. The internal damage will be indicated by darker regions in the seed. Also X-ray test is used to detect internal infestation/infection in bulbs and tubers to detect bulb rots/nematode/bulb fly infestation. X-ray techniques are as well used for the detection of internal damage by fruit/nut borers and also detection of budworms in un-opened cut flowers (tight buds).

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5.1.4.3. Microscopic Examination

Stereomicroscope fitted with image grabber is used to capture the images of insect, which can be stored/retrieved through a computer.

- 5.1.5. The results of entomological examination will be entered in laboratory work book and the particulars of pest detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer or phytosanitary certificate issuing authority

5.2. Plant Pathological Examination:

- 5.2.1. The technical expert specialized in plant pathology is responsible for correct diagnosis and identification of plant pathogenic organisms such as fungi, bacteria & viruses.
- 5.2.2. The laboratory technician attached to the plant pathology laboratory will record the samples of plants/plant products received for testing or affected plant specimens received for identification in a laboratory work book. He will consult the laboratory manual for plant pathology regarding preparation of slide mounts for microscopic examination including permanent mounts, and labeling of microscopic slides and preservation of affected plant specimens (both wet/dry preservation) including colour preservation, preparation of media, isolation techniques for fungi/bacteria, preservation/ mailing of fungal and bacterial cultures for identification including long term preservation (lyophilization).
- 5.2.3. Plant pathological examinations are described as under:

5.2.3.1. Visual Examination

Visual examination of samples of affected plant material received at the laboratory will be carried out with the help of illuminated magnifier to detect mould growth, fungal fructifications, bacterial ooze/root galls and characteristic virus symptoms

5.2.3.2. Microscopic Examination

Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of fungi. The photomicrographs of fungi will be taken with the help of compound microscope fitted with photomicrographic equipments. Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference. The bacterial infections will be characterized by examining for ooze at the cut surface and the bacterial smears are stained in crystal violet or methylene blue or basic fuchsin for microscopic examination using oil immersion objective

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5.2.3.3. *Incubation test*

In case of latent infections, the affected plant material is incubated in moisture chambers over night and examined for fungal growth. Alternatively the affected leaf tissue after surface sterilization with alcohol inoculated on to suitable agar media (potato dextrose agar) for isolation of fungi or crushed in sterile water and streaked on nutrient agar in plates for isolation of bacteria

5.2.3.4. *Special diagnostic tests for plant pathogenic bacteria & viruses*

Special diagnostic tests such as isolation on selective media coupled with serological tests (ELISA/DIBA) will be used for characterization of bacteria and viruses. Molecular diagnostic tests such as NASH or RT-PCR or C-DNA probes are used for characterization of virus infection. Electron microscopy is used to characterize virus particles

- 5.2.4. The results of plant pathological examination will be entered in laboratory work book and the particulars of pathogen detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer or phytosanitary certificate issuing authority

5.3. Nematological Examination:

- 5.3.1. The technical expert specialized in nematology is responsible for correct diagnosis and identification of plant parasitic nematodes

- 5.3.2. The laboratory technician attached to nematology laboratory will record the samples of plants/plant products received for testing or affected plant specimens received for identification in a laboratory work book. He will consult the laboratory manual for nematology regarding extraction of nematodes from soil or infested plant material, preparation of slide mounts for microscopic examination including permanent mounts, and labeling of microscopic slides and preservation of affected plant specimens (both wet/dry preservation) including colour preservation, mailing of specimens for identification.

- 5.3.3. The nematological tests are described as under:

5.3.3.1. *Visual examination:*

Visual examination of samples of affected plant material received at the laboratory will be carried out with the help of illuminated magnifier to detect root lesions/root knots caused by nematodes and cysts adhering to the roots and also bulb rots

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5.3.3.2. *Washing and sieving test*

The soil adhering to the roots washed thoroughly and the root washings are sieved through a set of nematode sieves and the nematode trapped on finer sieve is extracted in small quantities of water and placed in a cavity slide examined under microscope

5.3.3.3. *Floatation test*

The soil collected from potato tuber brushings is suspended in sufficient quantity of acetone/water mixture (1:4) in wide mouthed enamel dish. The cysts floated at the top of dish is stained in cotton blue and examined under the microscope to characterize the nematodes

5.3.3.4. *Baerman funnel test:*

In this test, small bits of affected plant tissue are kept on a top of tissue paper supported by fine aluminium mesh resting on the top of a funnel and filled with water up to the neck, which is connected to a rubber tube clamped at the end left overnight under fine mist chamber. The water decanted from the neck of funnel examined for the presence of nematodes

5.3.3.5. *Microscopic Examination*

Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of nematodes. The photomicrographs of nematodes will be taken with the help of stereobinocular/compound microscope fitted with photomicrographic equipments. Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference.

5.3.3. The results of nematological examination will be entered in laboratory work book and the particulars of nematodes detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer or phytosanitary certificate issuing authority.

5.4. Weed Seed Examination:

5.4.1. The technical expert specialized in Weed Science is responsible for correct diagnosis and identification of weed seeds intercepted with seeds/grains/pulses

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5.4.2. The laboratory technician attached to weed laboratory will record the samples of plants/plant products received for testing for weed seed contamination or specimens of weed seeds received for identification in a laboratory work book. He will consult the laboratory manual for segregation, collection and preservation of weed seeds for identification and future reference, preparation of slide mounts for microscopic examination including permanent mounts for minute seeds, and labeling of microscopic slides and present to weed specialist for identification. He will arrange for mailing of un-identified weed seed specimens for identification to a Weed Taxonomist.

5.4.3. Weed seed examination tests are described as under:

5.4.3.1. Visual Examination

Visual examination of entire quantity of sample of seeds/grains/pulses will be carried out with the illuminated magnifier or magnoscope (10 X magnification) to record seeds of any weed species. Alternatively sieving is done to remove minute seeds of parasitic weed species:

5.4.3.2. Sieving/Gravity Separation

The samples are sieved to collect the minute weed seeds or lighter weed seeds through gravity separation.

5.4.3.2. Microscopic Examination

Microscopic examination of weed seeds carried out under stereobinocular microscope/compound binocular microscope to characterize the weed species by studying their morphological characteristics of seed appendages and seed-coat ornamentation

5.4.4. The results of weed seed examination will be entered in laboratory work book and the particulars of weed seed detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer or phytosanitary certificate issuing authority

5.5. Seed health testing:

5.5.1. The technical expert specialized in seed pathology/plant pathology is responsible for correct diagnosis and identification of seed-borne pathogens.

5.5.2. The technician trained in seed health testing will record the samples of seed received for seed health testing in a laboratory work book. He will conduct the tests as per procedures described in "Seed-health testing manual" which are summarised below:

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5.5.2.1. Microscopic examination

The examination is carried out either by direct examination of seed under a stereobinocular microscope for seed coat abnormalities or oospore encrustation or other fungal fructifications or seed discolourations. Slide preparations suitably stained in lactophenol or cotton blue are examined under high power magnification of compound binocular research microscope for identification and characterization of fungi. The photomicrographs of fungi will be taken with the help of stereobinocular/compound microscope fitted with photomicrographic equipments.

Also permanent slide mounts made in glycerol will be sealed with nail polish and appropriately labeled and stored in slide box for future reference. The bacterial infections will be characterized by examining for ooze at the cut surface and the bacterial smears are stained in crystal violet or methylene blue or basic fuchsin for microscopic examination using oil immersion objective.

5.5.2.2. Incubation test (blotter/agar plate method)

The seed samples are subject to blotter test/agar plate test for detection of seed-borne fungi. The seeds are tested in lots of 400 seeds by plating on moist blotters kept in transparent plastic Petri dishes or alternatively plated in seed germination boxes and are incubated for 7 days at 25-30°C under 12 hr. NUV or day light fluorescence/darkness cycles for revealing specific fungal infection. The plates are examined by a trained laboratory technician under stereobinocular microscope to detect specific fungi by habit characteristics of fungi and further confirmed by microscopic examination of slide mounts.

5.5.2.3. Washing test

A working sample of 200 seeds is used for carrying out washing test. The samples of seed is soaked in 20 ml of water in 250 ml conical flask and flasks are shaken for 10 min in wrist action type shaker and then the seed suspension is subject to low speed centrifuge for 15 minutes. After which, the supernatant is thrown out and the sediment is suspended in small quantities of water or stain and examined by a placing a drop of the aliquot on microscopic slide and examined under the microscope or alternatively a haemocytometer is used for making spore counts. The washing test is employed usually for the detection of oospores of downy mildews, rust, bunt and smut spores.

Internally seed-borne nematode infestation such as *Ditylenchus angustus* detected by soaking seeds in water for 24 hours and examining the seed suspensions for nematodes under a compound microscope.

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5.5.2.5. *Grow out test*

The seeds are subjected to grow out test to detect for the presence of any latent infection especially that of seed borne bacteria, viruses and downy mildews. For this purpose at least 400 seeds are usually sown in sterile peat or sand or vermiculite in multi pot trays and incubated in controlled light and temperature growth chambers or insect-proof screen house or glass house for a period of 3-4 weeks and examined for the characteristic symptoms of the disease. The plants showing virus symptoms are inoculated to a sensitive indicator host such as *Chenopodium quinoa*, which produce typical local lesions characteristic of virus infection.

5.5.2.6. *Special tests for seed-borne bacteria & viruses*

Special diagnostic tests such as isolation on selective media coupled with serological tests (ELISA/DIBA) will be used for characterization of bacteria. Molecular diagnostic tests such as C-DNA Probe, NASH or RT-PCR are used for characterization of virus infection. Electron microscopy is used to characterize virus particles

- 5.5.3. The results of seed-health testing will be entered in laboratory work book and the particulars of seed-borne pathogens detected will be recorded in the inspection report (Annexure-6A) and submitted to the authorized officer or phytosanitary certificate issuing authority

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6.1. Reporting of Results of Inspection/Testing

- 6.1.1. The inspector at the end of inspection/sampling will report the results of inspection to the authorized officer in the format prescribed at Annexure-6A, giving particulars of commodity inspected, Lot Number or Marks, if any, date/time and place of inspection and number of samples drawn and the quantity along with inspection, remarks if any.
- 6.1.2. He will submit the inspection report along with samples drawn and specimens, if any collected, to the authorized officer for laboratory testing
- 6.1.3. The technical expert of concerned laboratory, at the end of testing, will complete the rest of the report indicating the type of tests carried out, plant species/variety examined, plant parts examined and name of pest detected, if any and the degree of infestation/infection and quarantine status of the pest noticed along with recommendations, if any, and submit to the authorized officer.

6.2. Action to be taken:

- 6.2.1. The authorized officer, immediately after the receipt of inspection/testing report will verify with concerned laboratory expert, the identity of pest detected and its status.
- 6.2.2. If any quarantine pest is detected, the consignment will be rejected for issue of phytosanitary certificate and the exporter or his agent will be communicated the action taken in prescribed format (Annexure-9A) under intimation to Customs/port authorities concerned to prevent its export.
- 6.2.3. If any regulated non-quarantine pest or non-quarantine pest is noticed, the consignment will be subject to fumigation/disinfestations/disinfection treatment by an accredited fumigation agency or at an approved and certified treatment facility under the supervision of authorised officer and the consignment will be reinspected after fumigation/disinfestations/disinfection treatment to ensure free from infestation before issue of phytosanitary certificate.
- 6.2.4. If no pest infestation is detected, the consignment will be certified for export and PSC will be issued.

Annexure-6A
INSPECTION REPORT

Ref. No.:			Date of Reporting:			
Commodity (Common/Scientific Name)	Variety	Type of material	Quantity (MTs/Nos)	Origin	Packed in	Container No, if any
Marks/Lot/Batch No	No of samples drawn	Sample size	Sample Code No, if any	Date/time of Sampling	Place of inspection	Sampled in the presence of
Inspection Remarks, if any:			Re-inspection, if any:			
_____			_____			
(Sign of inspector)			(Sign of verifying officer)			
Laboratory Testing (Tick out appropriate (✓))						
<input type="checkbox"/> Entomological; <input type="checkbox"/> Plant Pathological; <input type="checkbox"/> Nematological; <input type="checkbox"/> Seed health Testing; <input type="checkbox"/> Weed Seed Examination						
<i>Microscopy:</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	<i>Washing test:</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	<i>Special tests:</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	
<i>X-ray :</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	<i>Incubation test: (Blotter/Agar)</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	_____		
<i>Fluoroscopy :</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	<i>Grow-out test:</i>	<input type="checkbox"/> Yes / <input type="checkbox"/> No	_____		
			(Specify test)			
			(Specify test)			
Host (Scientific Name)/Variety	Pest (Scientific Name)	Taxon[®]	Life Stage*	Intensity	Risk Category[§]	
Recommendation for Treatment (if any):						
			1. _____ (Sign/Name of Technical Expert/Lab-incharge)			
			2. _____ (Sign/Name of Technical Expert/Lab-incharge)			
Treatment Type <input type="checkbox"/> Fumigation <input type="checkbox"/> Spray/Dip <input type="checkbox"/> Hot-Water <input type="checkbox"/> Vapour Heat <input type="checkbox"/> Irradiation <input type="checkbox"/> _____						
Chemical:		Dosage:		Duration:		
Temperature:		NAP:		Vacuum:		
Post-treatment inspection, Remarks			Post-treatment inspection by: _____			
			(sign of inspector)			
Final Recommendation:						

			Name & Signature of Authorised Officer with date & seal:			

[®]Taxon: Family & Order. *Life stages in case of insect pests eg: Egg; Larva; Adults. In case of fungi: asexual (zoosporangia/conidia/pycnidia/acer vulai/sclerotia); Sexual (Oospores/Asci & Ascospores/Pycnia/Aecia/Telia/Basidia)

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7. Fumigation/Disinfestation/Disinfection of Consignments

- 7.1. Where fumigation/disinfestation/disinfection treatment is recommended, consequent to inspection/testing and /or made mandatory to meet the phytosanitary requirements of the importing country, it shall be carried out under the supervision of inspector by an accredited fumigation agency or treatment facility duly approved and certified by the Dte of PPQS (NPPO) as per the guidelines established by the Dte of PPQS.
- 7.2. Where fumigation/disinfestations/disinfection treatment ordered, the exporter shall complete and submit an Undertaking for Fumigation of Agricultural Commodities/Containers/Vessel by or under the supervision of Plant Quarantine Authority (Appendix-7A) and will pay the supervision charges at the prescribed rates assessed by the inspector.
- 7.3. The authorized officer will issue a quarantine order directing the accredited technical expert to supervise the fumigation/disinfestation/disinfection treatment at the specified place by an accredited fumigation agency or at certified treatment facility, as the case may be.
- 7.4. All the fumigation treatment of consignments will be carried out as per the treatment schedules approved by the Dte of PPQS (NPPO). The fumigation treatments will be monitored by an accredited technical expert to ensure that the correct dosage of chemical is applied and right gas concentrations are monitored through out the fumigation in the gas-tight enclosures and right exposures are maintained as per the guidelines/procedures prescribed under *NSPM 11 (2005) Quarantine Treatments and Application Procedures: Methyl Bromide Fumigation*.
- 7.5. At the completion of fumigation, the consignment will be reinspected by the accredited technical expert to ensure the fumigation is effective and the fumigation check sheet will be completed. The fumigation certificates issued by the accredited fumigation agencies will be endorsed, where required. The containers will be immediately sealed after degassing to prevent any cross-infestation and to ensure that no untreated commodity will be loaded into the container.
- 7.6. Where treatments other than fumigation are applied to the consignment such as heat/cold treatments, the treatments given will be verified through temperature recordings/charts and irradiation treatments through dosimetry/dose mapping studies and the treatments will be endorsed on the phytosanitary certificate to meet the phytosanitary requirements of importing country.

Annexure-7A

From:
M/s.

To:

Undertaking For Fumigation/Disinfestation/Disinfection Treatment of Agricultural Commodities/ Containers/ Vessel under the Supervision of Plant Quarantine Authority

I / We, on behalf of M/s. _____ give the following undertaking for fumigation/disinfestations/disinfection treatment by/under the supervision of Plant Quarantine Authority for a consignment of _____ weighing _____ and/ or container(s)/vessel lying at _____ and agree to the following with reference to my/our application Reg. No. _____ dated _____.

- (1) to carry out fumigation/disinfestations/disinfection treatment by you/by any accredited fumigation agency and or treatment facility approved by the Plant Protection Adviser to the Government of India under the supervision of officer duly authorised by him.
- (2) to provide all facilities including labour/transport facilities for PQ officers nominated for undertaking/supervising fumigation/disinfestations/disinfection treatment of consignment/container/vessel at our cost.
- (3) to pay the fumigation/treatment fees, if any and or/supervision charges as prescribed towards fumigation/disinfestations/disinfection treatment and or/ supervision of fumigation/disinfestations/disinfection treatment of the said consignments/containers/vessel, as the case may be.
- (4) to pack the consignment/load the containers in such a manner to facilitate proper fumigation/disinfestations/disinfection and follow necessary instructions/guidelines issued by PQ officer nominated for this purpose.
- (5) to arrange fumigation of consignments/container(s) in an approved site/godown under gas proof covers/fumigation chamber or vessel at mooring and to follow all safety measures related to fumigation
- (6) to not to move/transport any part of the goods/containers/vessel, while under fumigation and /or without degassing and written clearance from PQ authority and to seal the containers immediately after completion of fumigation to prevent cross-infestation...
- (7) to abide by the decision taken by Plant Quarantine Authority either to approve or disapprove a fumigation at any point of time if the treatment is or will not be safe or effective or if any of the terms and conditions outlined here are not met with or refumigation or .rejection of consignment on technical grounds.

Date : _____
Station: _____

*Signature of Exporter/ Authorised Agent

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8.1. Format of Certificate:

- 8.1.1. The phytosanitary certificates for export of consignments will be prepared in the format prescribed in Annexure-8A and the phytosanitary certificates for re-export will be prepared in the format prescribed in Annexure-8B in accordance with model certificates prescribed under the *International Plant Protection Convention (1997), FAO, Rome* and guidelines prescribed under *ISPM 12 (2001) Guidelines for Phytosanitary Certificates, FAO, Rome..*
- 8.1.2. Pre-printed format on A-4 size map litho paper of 72 GSM will be used for computerized issuance of phytosanitary certificate. The certificate will be printed in duplicate and serially numbered and fan fold.

8.2. Control over Issuance of Certificate (Manual/Electronic):

- 8.2.1. The certificates will be issued manually either type written and /or computer printed. The headings of different columns will be pre-printed bilingual (English & Hindi)
- 8.2.2. If certificates are issued manually, the unutilized certificates will be securely held under the custody of authorized officer to prevent tampering of certificates and also the seals and stamps used on the certificates
- 8.2.3. Alternatively e-certification may be considered provided that: the mode of its issue and security is acceptable by the importing country; the information provided is consistent with appropriate model certificates; and the identity of the issuing authority can be adequately established.
- 8.2.4. The validity of phytosanitary certificate should not be indefinite but limited in duration (prior to export) to the extent possible to ensure phytosanitary integrity and physical integrity of consignment is maintained. It should be ensured that the consignment will be shipped immediately after certification.
- 8.2.5. The certificates issued in respect of perishable consignments will be valid for a maximum period of 7 days and for non-perishable consignments will be valid for a maximum period of 30 days from the date of issue and held valid for current shipment only.

8.3. Authorization of Officer for Issue:

- 8.3.1. .
- 8.3.2. Dte of PPQS (NPPO) will maintain an up-to-date list of authorised officers notified by the Ministry of Agriculture (Department of Agriculture & Cooperation) together with the name, designation & signature for future reference.

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8.3.3. The Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will maintain a list of such notified phytosanitary certification agencies in the National Phytosanitary Data base along with the name/designation of authorized officer and the specimen signature for reference and future verification in case of fraudulent issue of certificates.

8.3.4. If there is any change of authorized officer on account of transfer/retirement, it should be brought to the immediate notice of Dte of PPQS (NPPO) for updating the data base.

8.4. Distinguishing Marks:

8.4.1. Distinguishing marks may be indicated on the phytosanitary certificate, or else on a stamped and signed attachment to the certificate to identify and trace back of consignment, where required and is limited to those marked on the bags or cartons or other containers used for packing consignment or cargo container seals in case of containerized cargo.

8.4.2. If no entry is made, the term “none” should be entered or the line should be blocked out (to prevent false certification).

8.5. Incorporation of Additional Declarations:

8.5.1.. The phytosanitary certificate will incorporate additional declarations to the minimum extent possible and contain declarations for freedom from quarantine pests and linking it with current phytosanitary requirements of importing country such as phytosanitary regulations, import permit or bilateral agreement.

8.6. Treatment Endorsement:

8.6.1. Treatments indicated on the phytosanitary certificate are those which are specified by the importing country and duly considered by the Dte of PPQS (NPPO) and/or approved by the Dte of PPQS (NPPO).

8.6.2. Fumigation and/or other treatments are carried out by accredited fumigation agencies and/or certified treatment facilities in accordance with guidelines and procedures established by the Dte of PPQS (NPPO).

8.7. Completion & Issue of Certificate:

8.7.1. The phytosanitary certificate should be verified before issue to ensure it is correct and complete and the information provided therein is adequate to meet the current phytosanitary requirements of the importing country

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8.7.2. The certificate will be issued in “original” to the exporter and/or his authorized agent in respect of each consignment and the “office copy” will be filed along with case folder. Under special circumstances a “certified copy” may be issued by the authorized officer that accompanies the consignment and is presented to the relevant officials upon arrival in the importing country

8.7.3. In case a “duplicate” phytosanitary certificate requested by the exporter and or his agent to meet the demand of importing country, on account of reported loss of original phytosanitary certificate, it should be endorsed on the top of the duplicate certificate that “this certificate is issued in lieu of original phytosanitary certificate No_____dated_____, which is reported lost and the same is herewith cancelled” to prevent misuse of certificate.

8.8. Correction Attestation:

8.8.1. All the corrections/overwriting made in the Phytosanitary certificates should be clearly attested by a signature, and seal of authorised officer

8.9. Name/Signature/Affixing Seal/Stamp on Certificate:

8.9.1. The phytosanitary certificate will bear the name of authorised officer, either typed or printed in clear capital letters and also the date indicating the day/month/year and proper signature of authorised officer as reflected in electronic database of authorised officers for issue of phytosanitary certificate maintained by Dte of PPQS (NPPO) and that the certificates will not be issued pre-dated or post-dated or issued after dispatch of the consignment unless bilaterally agreed.

8.10. Attachments to Certificate:

8.10.1. The attachments to the phytosanitary certificate will be limited to those where the information required to complete the certificate exceeds the available space on the certificate.

8.10.2. Any attachment containing phytosanitary information should bear the phytosanitary certificate number and should be dated, signed and stamped same as phytosanitary certificate.

8.10.3. The phytosanitary certificate will indicate in the appropriate section that the information belonging to that section is contained in the attachment.

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8.11. Conditions for issue of Phytosanitary Certificate for Re-export:

- 8.11.1. The authorized officer will issue a phytosanitary certificate for re-export for re-export of an imported consignment, if he is satisfied that the importing country's phytosanitary requirements are met with.
- 8.11.2. Re-export certification will be carried out; provided it has been stored, split-up, combined with other consignments or repacked and after ensuring that the consignment is not infested or contaminated with pest. The original phytosanitary certificate or its certified copy should also accompany the consignment

Annexure-8A

 सत्यमेव जयते	GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE DEPARTMENT OF AGRICULTURE & COOPERATION DIRECTORATE OF PLANT PROTECTION, QUARANTINE & STORAGE		PSC No. _____
	PHYTOSANITARY CERTIFICATE		Reg. No. _____
FROM: PLANT PROTECTION ORGANISATION OF INDIA		2. TO: THE PLANT PROTECTION ORGANISATION OF	
DESCRIPTION OF CONSIGNMENT			
3. Name & address of exporter		4. Declared name & address of consignee	
5. Declared means of conveyance		6. Place of origin	7. Declared point of entry
8. Distinguishing marks		9. Number & description of packages	
10. Name of produce/ Botanical name of plants		11. Quantity declared	
This is to certify that the plants or plant products or other regulated articles described herein have been inspected and/or tested according to appropriate official procedures and are considered to be free from quarantine pests specified by the importing contracting party and to conform with the current phytosanitary requirements of the importing contracting party, including those for regulated non-quarantine pests.			
DISINFESTATION AND/OR DISINFECTION TREATMENT			
12. Date:		13. Treatment:	
14. Chemical (active ingredients):		15. Duration & Temperature:	
16. Concentration:		17. Additional information:	
18. Additional declaration:			
19. Date: _____		Name of authorised officer	
20. Place of issue _____		_____ Signature	
21. Code No.		Stamp of organization	
No financial liability with respect to this certificate shall attach to the Ministry of Agriculture (Department of Agriculture and Cooperation), Government of India or any authorized officer of state/central government organizations notified by the Ministry of Agriculture. The certificate issued is valid up to _____ days from date of issue			

Annexure-8B

 <p align="center">सत्यमेव जयते</p>	GOVERNMENT OF INDIA MINISTRY OF AGRICULTURE DEPARTMENT OF AGRICULTURE & COOPERATION DIRECTORATE OF PLANT PROTECTION, QUARANTINE & STORAGE		PSC No. _____
	PHYTOSANITARY CERTIFICATE FOR RE-EXPORT		Reg. No. _____
FROM: PLANT PROTECTION ORGANISATION OF INDIA		2. TO: THE PLANT PROTECTION ORGANISATION OF	
DESCRIPTION OF CONSIGNMENT			
3. Name & address of exporter		4. Declared name & address of consignee	
5. Declared means of conveyance		6. Place of origin	7. Declared point of entry
8. Distinguishing marks		9. Number & description of packages	
10. Name of produce/ Botanical name of plants		11. Quantity declared	
<p>This is to certify that the plants or plant products or other regulated articles described above were imported into (contracting party of re-export) from (contracting party of origin) covered by Phytosanitary Certificate no. _____ *Original [] certified true copy [] of which is attached to this certificate; that they are* packed [] repacked [] in original [] *new [] containers that based on the original Phytosanitary Certificate [] and additional inspection [], they are considered to conform to the current phytosanitary regulations of the importing contracting party, and that during storage in (contracting party of re-export)the consignment has not been subjected to the risk of infestation or infection.</p> <p>* Insert tick in appropriate boxes</p>			
DISINFESTATION AND/OR DISINFECTION TREATMENT			
12. Date:		13. Treatment:	
14. Chemical (active ingredients):		15. Duration & Temperature:	
16. Concentration:		17. Additional information:	
18. Additional declaration:			
19. Date:		Name of authorised officer	
20. Place of issue		_____	
21. Code No.		Stamp of organisation	Signature
<p>No financial liability with respect to this certificate shall attach to the Ministry of Agriculture (Department of Agriculture and Cooperation), Government of India or any authorized officer of state/central government organizations notified by the Ministry of Agriculture. The certificate issued is valid up to _____ days from date of issue</p>			

.SOPs for Export Inspection & Phytosanitary Certification		
Section-9	Rejection of consignment/ Refusal of Issue of Phytosanitary Certificates	Page 1-2 of 2
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9. Rejection of consignment/ Refusal of Issue of Phytosanitary Certificates

9.1. The authorized officer may reject the consignment for export/refuse for issue of phytosanitary certificate provided that it is:

- banned export under the export regulations of Ministry of Commerce & Industry.
- prohibited import by the phytosanitary regulations of importing country.
- covered under the provisions of CITES.
- found to be infested/infected with a quarantine pest/regulated quarantine pest and no effective quarantine treatment to render the consignment free from quarantine pests.
- packed with objectionable packing material such as paddy straw/hay.
- contaminated with soil/noxious/parasitic weed seeds, which are phytosanitary concern to importing country
- susceptible to fumigation treatment and no other equal effective treatment is available to render pest-free to meet the phytosanitary requirements of importing country
- packed with impervious packing material and fumigation not possible to render pest-free

9.2. The authorized officer will issue a letter of rejection of consignment for export (Annexure-9A) under intimation to customs/port authorities to ensure to prevent its export

Annexure-9A

To	Reg. No.:	
	Date:	
Memorandum of Rejection of Consignment for Export		
This is to inform that the following consignment of plants/plant material presented by you has been inspected and the same is rejected for export and issue of Phytosanitary Certificate (PSC) due to the reasons given hereunder		
Commodity	Quantity (Wt. /No.)	No. of packages
Distinguishing marks	Export to	Invoice/ shipping bill No.
Date of Inspection	Place of Inspection	Vessel/ container particulars
Reasons for rejection for issue of PSC		
<input type="checkbox"/> Prohibited export / import <input type="checkbox"/> Contaminated with soil/weed seeds <input type="checkbox"/> Objectionable packing material such as hay/straw etc., <input type="checkbox"/> Not meeting the phytosanitary requirements of importing country <input type="checkbox"/> Contain salt/sugar/chemical additives/ preservatives <input type="checkbox"/> Commodity susceptible to fumigation/ treatment <input type="checkbox"/> Packed in air-tight container, treatment not possible <input type="checkbox"/> Not properly fumigated/treated to render pest free <input type="checkbox"/> Infested or infected with quarantine pest (specify)		
N.B.: Tick out appropriate (✓)		
Station:		
Date :	_____	
	(Name/Sign./Stamp of Authorised officer)	
Copy to: _____		
(Name/Address of Customs Officer at the designated port)		

SOPs for Export Inspection & Phytosanitary Certification		
Section-10	Consignment Integrity, Phytosanitary Security & Tracing Back after Export	Page 1 of 1
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10. Consignment Integrity, Phytosanitary Security & Tracing Back after Export

- 10.1. The inspection for identity and integrity will involve checking to ensure that the consignment is accurately described by the documents. The identity check will verify, whether the type of plant or plant product or species/variety is in accordance with the application made and the phytosanitary certificate received or to be issued. The integrity check will verify, if the consignment is clearly identifiable and the quantity and status as declared in the phytosanitary certificate to be issued. This may involve actual physical examination of consignment to confirm the identity and integrity, including checking the packing condition and labeling/markings and seals and other relevant physical aspects of the shipment that may be of phytosanitary concern.
- 10.2. It should also be ensured that the treated commodities are securely stored separately from untreated commodities to prevent cross-infestation and insect proofing packing material used for packing fresh fruits and vegetables to prevent re-infestation by fruit flies and further that to maintain the phytosanitary security of treated consignments, the palletized cargo will be wrapped with shrink wrap or insect proof netting in case of sea shipments.
- 10.3. The consignment after certification should be traced back through all stages of production, processing, packing, treatment and transport to the point of export. To facilitate trace back of consignment the packages should be appropriately labeled to provide adequate information viz., Lot Number/Production Unit Code Number, as applicable, plant species/variety, origin, Name of packing house facility, where applicable, date of packing/processing.
- 10.4. The cargo containers should be securely locked and seals will be affixed on the door locks immediately after loading the treated consignment or immediately after completion of degassing

Section-11	Monitoring/Reporting of Export Inspection Activities	Page 1 of 3
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11. Monitoring/Reporting of Export Inspection Activities

- 11.1. The Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO) will closely monitor the export inspection/issue of phytosanitary certificate through an on-line reporting system established under National Phytosanitary Data Base. Where appropriate software programme is installed, the authorized officer will upload the data on case to case basis immediately after the issuance of phytosanitary certificate.
- 11.2. The Export Inspection & Phytosanitary Certification Unit will establish uniform commodity codes for adoption by the various phytosanitary certification authorities to facilitate uniform reporting
- 11.3. Where there is no on-line reporting system installed in the computer or computer facilities are not immediately available, the authorised officer will submit the reports on export inspection and phytosanitary certification in the format prescribed in Annexure-11A at fortnightly intervals to the Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) by fax/e-mail/post.
- 11.4. The Export Inspection & Phytosanitary Certification Unit, immediately upon the receipt of the reports, will verify the reports and manually enter the data into the NPSDB to make it upto date
- 11.5. The state/central government phytosanitary certification agencies will ensure that the following time frames are adhered to with the export inspection & phytosanitary certification of plants/plant products & other regulated articles
- The inspection and certification of seed will be completed within a maximum period of 8-10 days, except those cases where phosphine fumigation is ordered to control insect infestation an additonal.time period of 5 days required;
 - In case of bulbs/tubers/nursery stock/plant tissue culture the inspection and certification will be completed within a maximum period of one day as these being highly perishable.
 - Also the inspection and certification of fresh fruits/vegetables/cut flowers/foilage and other perishable plant products for consumption will be carried out within a maximum period of one day.
 - In case of consignments of grains/pulses and other stored products requiring fumigation, the inspection and phytosanitary certification will be completed within a maximum period of 3 days.
 - However in case of bulk shipments of grains (wheat/rice), which involve ship inspection, pre-shipment inspection, fumigation/disinfestations of consignments, final inspection and certification will take 7-15 days depending on the capacity of vessel and the rate of loading.

SOPs for Export Inspection & Phytosanitary Certification		
Section-11	Monitoring/Reporting of Export Inspection Activities	Page 2-3 of 3
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11.6. The above time frame for export inspection/ certification excludes the delay in presentation of the consignment for inspection, delay in arrangement for fumigation/ treatment, delay in submission of essential documents etc. by the exporters.

SOPs for Export Inspection & Phytosanitary Certification		
Section-12	Action taken on Notification of Non-compliance and Emergency Action	Page 1 of 1
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12.1. Action taken on Notification of Non-compliance:

12.1.1. The Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) on receipt of notification of non-compliance will investigate significant instances of non-compliance to determine the possible cause with the concerned authorized officer with a view to avoid recurrence. Upon request the results of investigation will be reported to the NPPO of importing country. Where the results of investigation reveal a change of pest status, this information should be communicated according to good reporting practices indicated in *ISPM 8 (1998): Determination of pest status in area, FAO, Rome*.

12.2. Action taken on Notification of Emergency Action:

12.2.1. The National Phytosanitary Certification Unit on receipt of notification of emergency action by the importing country, due to the new or unexpected phytosanitary situation, will immediately suspend the exports from the specified areas and implement additional measures in those areas to control the pest and verify the occurrence of new pest or changed pest status before revoking any suspension of exports from those areas and such revoking will be done in consultation with the importing country.

12.3. Action taken in respect of transit consignments:

12.3.1. Where the transit country has reason to believe that the non-compliance or new or unexpected phytosanitary situation may be problem for the country of final destination, the transit country may provide a notification to the country of final destination under intimation to the exporting country.

12.4. Action in case of Re-export consignments:

12.4.1. The Export Inspection & Phytosanitary Certification Unit will implement similar action plans in regard to the receipt of notification of non-compliance and emergency action in case of re-export consignments

SOPs for Export Inspection & Phytosanitary Certification		
Section-13	De-notification of Phytosanitary Certification Agencies	Page 1 of 1
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13.1. De-notification of Phytosanitary certification Agencies:

13.1.1. The Dte of PPQS (NPPO) may recommend any notified phytosanitary certification agency to the Ministry of Agriculture (Department of Agriculture & Cooperation) for denotification, provided that there are reasonable grounds to believe that concerned phytosanitary certification agency and or its authorized officer involved in issuing fraudulent certificates or issued certificates for commodities for which export is banned or import is prohibited by specified country as verified from records and after constituting enquiry into the incident.

13.2. Action against un-authorized issue of PSC:

13.2.1. If any phytosanitary certificates issued by a person or organization, other than those notified by the Ministry of Agriculture (Department of Agriculture & Cooperation) has come to the notice or detected by the authorised officer, appropriate legal action may be initiated against the person or organization concerned under intimation to the Dte of PPQS (NPPO), as unauthorized issue of certificates or tampering of the certificates issued by authorised officer will be treated as illegal and tantamount to forgery and the exports by those persons involved in tampering of certificates are suspended for a period of 3 months to facilitate investigation and further action. .

13.2.2. The authorised officer will immediately lodge the police complaint and further investigate into the issue to prevent recurrence.

SOPs for Export Inspection & Phytosanitary Certification		
Section-14	Documentation Management & Record Control	Page 1 of 2
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14.1. Documentation Management:

- 14.1.1. The State/Central Government phytosanitary certification agencies will adopt the standard formats prescribed herewith for export inspection and phytosanitary certification and follow the standard operational procedures for export inspection & phytosanitary certification established by the Dte of PPQS (NPPO) for uniform certification.
- 14.1.2. The State/Central Government phytosanitary certification agencies will maintain a technical folder to receive and file all the technical information received from the Dte of PPQS (NPPO) related to export inspection and phytosanitary certification list of export banned items; list of regulated pests published by the importing country; list of commodities prohibited import; and specific phytosanitary requirements entered through bilateral agreements and list of accredited fumigation agencies/certified treatment facilities etc.
- 14.1.3. If any changes to the Standard Operating Procedures or revision of document considered necessary, the required changes will be communicated by the State/Central Government phytosanitary certification agencies to the Dte of PPQS (NPPO) along with technical justification for necessary approval and adoption. The State/Central Government phytosanitary certification agencies will not make any changes to the document or introduce new sections without the written approval of Competent Authority.
- 14.1.4. As and when any modifications/amendments/revision of documents is brought out, the Dte of PPQS will promptly communicate to all the authorised officers of State/Central Government phytosanitary certification agencies concerned and ensure their replacement. The authorised officer should ensure that the obsolete documents are promptly replaced by the revised documents together with revision number to keep it up-to-date. The obsolete documents will be cancelled and filed separately in “obsolete document” folder to prevent confusion or misuse.
- 14.1.5. The authorised officer will ensure that this document is easily accessible to inspectors/laboratory technicians/technical expert’s in-charge of laboratory to facilitate compliance with the Standard Operating Procedures for export inspection & phytosanitary certification.

SOPs for Export Inspection & Phytosanitary Certification		
Section-14	Document Management & Record Control	Page 2 of 2
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14.2. Record Control:

- 14.2.1. The state/central government phytosanitary certification agencies will maintain all the records of all activities related to export inspection & phytosanitary certification in each folder in respect of each consignment.
- 14.2.2. Each folder should contain the original application received from the exporter and /or his agent and attached documents (letter of credit, invoice, shipping/ airway bill, packing list, import permit, export license etc); an operational checklist duly completed and signed by the concerned technical staff associated with each activity; an inspection/sampling/testing report; an undertaking given by the exporter and /or his agent for supervising fumigation/disinfestations/disinfection of treatment; a copy of treatment certificate issued by an accredited fumigation agency and /or certified treatment facility; a copy of phytosanitary certificate issued; and any other relevant records.
- 14.2.3. Each folder should be arranged registration number-wise for easy retrieval. Also the records of rejection of consignments for export and issue of phytosanitary certificate and the cancelled applications.
- 14.2.4. The records of pest interception in consignments offered for export inspection and phytosanitary certification and their identification including digital images, microphotographs and X-ray films etc.
- 14.2.5. The records related to export inspection and phytosanitary certification will be maintained for a period of at least one year and should be able to be retrieved when required. Besides this export inspection register; sample register, X-ray register and laboratory work books are maintained up to date, serially numbered and duly certified by the authorized officer.

SOPs for Export Inspection & Phytosanitary Certification		
Section-15	Training	Page 1 of 1
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15. Training:

- 15.1. The authorised officer of State/Central Government phytosanitary certification agencies through management review will identify and record the training needs of the technical personnel in undertaking export inspection and phytosanitary certification.
- 15.2. He will identify internal/external training needs after taking into account resources available and prepare training programme and request the Dte of PPQS (NPPO) for organising the training.
- 15.3. Dte of PPQS (NPPO) will develop appropriate training modules through the consultancy of external expert
- 15.4. The Dte of PPQS (NPPO) will identify human resources (trainers/training coordinator) and prepare training schedule (Title of Training Work-Shop, Place, Dates (From/To, Trainers & Contact Address of Training Coordinator) for conducting training and budget plan for organizing training workshops
- 15.5. The selected place of training workshop should have comfortable room with sitting chairs with tables/desks for 15-20 trainees and the trainers, LCD Projector and screen for powerpoint presentations and computer facility and printer and white board with marker pens and with drinking water facilities and the space is adequately lighted. Also provided with necessary equipment facilities for organizing practical demonstrations. The nominated trainers will organize training workshop on scheduled dates and venue as per the training modules approved by the Dte of PPQS (NPPO).
- 15.6. All the personnel with responsibilities of inspection/sampling of consignments for phytosanitary certification, with proper qualifications will be given a basic level operational training on all activities related to phytosanitary certification and those entrusted with laboratory work given specific trainings related to Entomology, Plant Pathology, Nematology, Virology, Seed-Health Testing & Weed Science based on Laboratory Manuals. The technical experts/laboratory-incharges will be given specialized training in developing skills in Fruit fly Taxonomy, Storage Entomology, Seed Pathology & Molecular Diagnostics.
- 15.7. The basic level operational training/laboratory trainings will be of minimum of one week duration and is a must for all new entrants entrusted with operational activity responsibilities (inspection/certification) and the laboratory responsibilities (pest diagnosis/identification) respectively. The specialised training programmes will be tailor made depending upon level of training & taxonomical competency, which may be 2-4 weeks duration as may be decided by the recognised institute which is offering the training.
- 15.8. The nominated trainers will distribute training material and exercises and at the end evaluate the trainees and qualified trainees will be issued a training certificate by the Dte of PPQS (NPPO). The authorized officer of State/Central Government phytosanitary certification agencies will maintain up-to-date record of all those personnel who underwent training

SOPs for Export Inspection & Phytosanitary Certification
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16.1. Communication:

16.1.1. The Dte of PPQS (NPPO) will establish appropriate procedures for timely communication to relevant personnel and to the industry concerning changes in:

- importing country phytosanitary requirements;
- pest status and geographical distribution
- operational procedures

16.1.2. The Dte of PPQS (NPPO) will:

- liaise with the nominated representatives of NPPO of relevant importing contracting party to discuss the phytosanitary requirements/issues;
- establish contact point for the NPPO of importing country to report cases of non-compliance and communicate emergency action.
- liaise with the relevant Regional Plant Protection Organization and other international organizations to facilitate the harmonization of phytosanitary measures and the dissemination of technical and regulatory information.

16.2. Technical Auditing:

16.2.1. The Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO) will establish a panel of technical experts (both internal and external) for auditing of export inspection and phytosanitary activities performed by the various state/central government agencies including the offices of PQS as per the *NSPM 5 (2002): Guidelines for Auditing of Plant Quarantine Activities, Dte of PPQS, Faridabad.*

16.2.2. The Head of Export Inspection & Phytosanitary Certification Unit will establish a schedule of audit and nominate at least two experts from the auditing panel for carrying out the technical audit of export inspection and phytosanitary activities and intimate the concerned experts and the phytosanitary certification agencies at least one month in advance to facilitate making travel arrangements. The scheduled audits will be carried out once in every year.

16.2.3. Besides the above, unscheduled audits will be organized at least once in a year at a short notice without intimating the concerned phytosanitary certification agencies to ensure compliance with the standard operation procedures for undertaking export inspection & phytosanitary certification and work instructions.

Section-15	Technical Auditing & Review	Page 2-5 of 5
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- 16.2.4. Surveillance audits will be carried out at least once in six months or at such intervals as may be decided to ensure corrective actions are taken and preventive measures are implemented subsequent to scheduled auditing.
- 16.2.5. Such audit inspections will involve the verification of records, verification of inspection and sampling/testing procedures actually practiced verification of treatments, verification of action taken on previous audits and testing skill competency of technical staff and verification of nonconformities with phytosanitary certification etc.
- 16.2.6. At the end of each audit, an audit report in prescribed format (Annexure-14A) will be prepared by the auditors in consultation with concerned phytosanitary certification agency and submitted to the head of Export Inspection & Phytosanitary Certification Unit. The audit report should indicate the non-conformities observed and corrective/preventive action to be taken and time by which the measures are implemented to improve the functioning.
- 16.2.7. Dte of PPQS (NPPO) will review the audit report and communicate corrective/preventive actions to be taken and time schedule for their implementation to the authorized officer of concerned phytosanitary certification agency
- 16.2.8. The concerned state/central government phytosanitary certification agency including the offices of PQS will submit the corrective action/preventive measures taken report (Annexure-14B) to the Dte of PPQS (NPPO), which will be reviewed by the auditors at the time of surveillance auditing and further report it to the Head of Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO)..

16.2. Review:

- 16.2.1. The Dte of PPQS (NPPO) will periodically review the effectiveness of all aspects of its export certification system in consultation with all the phytosanitary certification agencies and the industry and implement changes to the system, if required.
- 16.2.2. The Dte of PPQS (NPPO) will establish a procedure for investigating reports into non-conforming consignments covered under phytosanitary certificate. If requested by the importing country, a report of the outcome of investigation and the action taken should be supplied to the importing country

Audit (Scheduled) Report.

1.	Name & Address of PQ Station/ Phytosanitary Certification Agency audited		
2.	Auditees (Name & Designation): 2.1. Authorised Officer: 2.2. Technical officer/staff responsible for concerned activity		
3.	Auditing related to the period of		
4.	Date (s) of Auditing:	From:	To:
5.	List of Records Audited/Documents verified:		
6.	Audited by (Name & Designation):		
7.	Details of Auditing reported:		
7.1	General Comments:		
7.2	Specific non-conformities observed:		
S.	Type of non-conformity observed	Frequency	Corrective Action/ preventive

Section-17	Authorization of State/Central Government Agencies for Issue of PSC	Page 1-7 of 7
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17. Authorisation of state/central government agencies for export inspection & issue of PSC:

- 17.1. Any state/central government agency seeking for authorisation for export inspection & issue of phytosanitary certificate will submit an application in the prescribed format (Annexure-17 A) to the Dte of PPQS (NPPO) provided they fulfil the criteria laid under Annexure-17B.
- 17.2. The Head of Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will scrutinise the application to ensure the applicant seeking authorisation will fulfill the criteria laid down under Annexure-17B communicate deficiencies, if any to the applicant for correction.
- 17.3. If the applicant fulfill the criteria laid down in Annexure-17B, he will nominate an expert team (a minimum of two members), who have technical competency and experience in export inspection and phytosanitary certification, for on-site visit to assess the technical facilities and expertise. He will communicate the schedule of visit to the concerned state/central government agency seeking authorization under intimation to nominated experts
- 17.4. The nominated expert team will assess the facility of state/central government agency on the scheduled date of visit and submit a technical assessment report in the prescribed format (Annexure-17C) along with appropriate recommendation either to consider the agency for authorization for undertaking export inspection and issue phytosanitary certificate or advise about corrective action, if any nonconformity has been noticed.
- 17.5. The Head of Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will communicate the nonconformities observed and corrective action plans to the concerned agency for implementation.
- 17.6. The concerned agency will communicate the implementation of corrective actions to the Head of Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO).
- 17.7. The Head of Export Inspection & Phytosanitary Certification Unit of PQ Division of Dte of PPQS (NPPO) will nominate an expert to verify the implementation of corrective actions and a report will be submitted for considering the agency for authorization.
- 17.8. He will prepare a draft notification of the considered agency (name, designation of authorized officer & code number) and submit it to the Joint Secretary (Plant Protection), Department of Agriculture & Cooperation, Ministry of Agriculture for approval and publication in Gazette of India.
- 17.9. The notified agency will deposit the signature of authorized officer along with designation stamp & official seal of agency, with the Dte of PPQS (NPPO) for future verification, if requested by the importing country in the event of any discrepancy with PSC issued.

Annexure-17A

Application for Authorisation of the State/Central Government Agencies for Export Inspection & Issue of Phytosanitary Certificate.					
1. Name of the State/Central Government Agency					
2. Mailing Address (including Tel/Fax/E-mail)					
3. Name & designation of officer seeking authorization for issue of PSC (including Tel/Fax/e-mail)					
4. Details of qualification/training/expertise of the officer seeking authorization for issue of PSC.					
5. Details of supportive technical personnel (inspection/laboratory)					
Name	Date of Employment	Designation	Qualifications	Experience	Training
6. Details of Infrastructure Facilities possessed:					
Particulars of Facility		Dimensions (LXB)	Area (sq.m)	Air-conditioning/other special features, if any	
a. Office room					
b. Inspection Room					
c. Laboratory Rooms (Entomology/Nematology/Plant Pathology)					
d. Storage Room/Record Room					
e. Incubation Room (seed health testing)					
f. Molecular Laboratory (Virus testing)					
7. Details of Equipments Available (office/ inspection/laboratory). (Attach the list of equipments & number of items)					
8. Particulars of authorization sought for issue of Phytosanitary Certificate (Tick out in appropriate box)			<input type="checkbox"/> Produce (Consumption plant material) certification		
			<input type="checkbox"/> Seed/Planting Material Certification		
			<input type="checkbox"/> Tissue Culture Plants Certification.		
			<input type="checkbox"/> Germplasm/GMOs certification.		
			<input type="checkbox"/> Biological control agents/beneficial organisms certification		

9. Whether the agency applying for the authorization for the issue of PSC for first time?	Yes/No
10. Is the application for additional authorization of officer? If 'yes' indicate particulars of authorised officers viz., name/designation/code (Attach a list, if applicable).	Yes/No
11. Give reasons for seeking additional authorization of officer for issue of PSC	
12. Whether all the technical personnel have undergone basic training in standard operation procedures for export inspection/phytosanitary certification	Yes/No
13. Any additional information	
14. Signature/Name/Designation of officer seeking authorization to issue Phytosanitary Certificate	_____ (Signature/Name/Designation/date)
15. Counter signature by the forwarding state/central government agency	_____ (Counter Signature/Name/Designation/date)
For Official Use by Dte of PPQS (NPPO)	Reg. No. _____ Date: _____
16. Whether the application received is correct and complete? If 'no' indicate if any deficiencies noted.	Yes/No.
17. Whether the applicant fulfills all the criteria laid down for authorization for issue of phytosanitary certificate? If 'no' indicate the deficiencies noted	Yes/No
18. Whether any deficiencies have been communicated to the applicant & corrections have been effected to process application further?	Yes/No
19. Whether technical assessment of facilities has been carried out by an expert team and any corrective actions advised?	Yes/No
20. Whether corrective actions have been undertaken by the agency and verified by an expert?	Yes/No
21. Final Recommendation for considering application for authorisation to issue PSC	
_____ Signature/Name/ Designation of Head of Export Inspection & Phytosanitary Certification Unit of Dte of PPQS (NPPO)	

Annexure-17B

Criteria for Authorisation of State/Central Government Agency for Undertaking Export Inspection & Issue of Phytosanitary Certificate.

Expertise & Training.

1. The officer seeking authorisation to issue phytosanitary certificate should have at least post graduate degree in agriculture with specialisation in any field of plant protection and have adequate knowledge regarding international agreements/standards; national export inspection and phytosanitary certification system; and managerial skills in implementation of standard operating procedures for export inspection and phytosanitary certification.
2. The laboratory experts should have at least post graduate qualification in agriculture in specialised field of entomology/nematology/plant pathology/molecular diagnostic laboratory facilities, as the case may be, and have skill competency in carrying out laboratory testing for pest diagnosis & identification.
3. The inspectors should have atleast basic degree in agriculture and have undergone operational training in carrying out inspection and sampling of consignments; supervising of fumigation & other treatment operations; preparation of phytosanitary certificates and maintenance of appropriate records related to export inspection and phytosanitary certification

Infrastructure Facility:

4. The applicant should have adequate infrastructure facility which includes an exclusive office room for authorized officer; an inspection room with well lighted inspection table with white surface, a sample storage room for keeping the samples, a record room and laboratory rooms for entomology/nematology/plant pathology, for carrying out laboratory testing for diagnosing pests, depending on level of phytosanitary certification authorisation. Besides these, incubation/growth room facilities with automatic lighting/humidity/temperature controls are required for seed-health testing/grow-out tests for phytosanitary certification of seed consignments and molecular diagnostic facilities for phytosanitary certification of tissue cultured plants.

Equipments:

5. The facility should have necessary office equipments, such as telephone, fax, and computer with dedicated printer and UPS and internet facility.
6. The facility should have adequate inspection equipment as listed under Section-1 for general inspection of commodities.
7. The facility should have adequate laboratory equipment as listed under Section-1 for entomological/nematological/plant pathological examination for seed/planting material certification
8. The facility should have special equipments as listed under Section-1 for molecular/serodiagnosis for virus testing for tissue culture plants certification.

9. The facility should have gas monitoring equipments such as Riken gas leak detector & gas monitor and safety equipment such as respirator fitted with canister for supervising fumigation operations for produce certification.

Document & Record Management:

10. The facility should have documentation and record management in line with the SOPs established for export inspection & phytosanitary certification

Technical Assessment Report of Facilities of State/Central Government Agency for Authorisation to Undertake Export Inspection and Phytosanitary Certification

1. Name of the State/Central Government Agency:	
2. Application Reg No/Date:	
3. Mailing Address (including Tel/Fax/E-mail)	
4: Name & designation of officer seeking authorization for issue of PSC (including Tel/Mobile/Fax/e-mail)	
5. Assessed by	i) _____ (Name & Designation of Expert) ii) _____ (Name & Designation of Expert)
6. Date of Visit	
7. Particulars of Authorisation sought for issue of PSC	<input type="checkbox"/> Produce (Consumption plant material) certification
	<input type="checkbox"/> Seed/Planting Material Certification
	<input type="checkbox"/> Tissue Culture Plants Certification.
	<input type="checkbox"/> Germplasm certification.
	<input type="checkbox"/> Biological control agents/beneficial organisms certification

10. Details of Assessment

Criteria	Yes	No	Comments
Whether the officer seeking authorization has at least post graduate degree in agriculture with specialisation in any field of plant protection namely entomology/nematology/plant pathology?			
Whether he has adequate knowledge regarding international agreements/standards/SOPs and managerial skills for export inspection and phytosanitary certification ?			
Whether technical personnel in-charge of of entomology/plant pathology/nematology/molecular diagnostic laboratories has post graduate qualification in specialized field of agriculture with adequate skills and technical competency and specialized training in pest diagnosis and identification?			

Whether inspecting personnel have graduate qualification in agriculture with adequate skills and competency and training in undertaking inspection and sampling of consignments for phytosanitary certification?			
Whether the officer seeking authorization has exclusive office room provided with telephone/fax/computer facility with printer and UPS and internet connectivity?			
Whether a separate inspection room with well lighted inspection table with white sunmica surface for carrying out inspection?			
Whether adequate laboratory facilities for undertaking entomological/ nematological/ plant pathological/molecular diagnosis testing for pest detection and identification?			
Whether separate controlled temperature/ light incubation facility for carrying out seed-health testing?			
Whether separate room for storage of samples & records related to export inspection & phytosanitary certification?			
Whether the facility has adequate equipments to carry out inspection/ sampling/laboratory testing & supervision fumigation/treatment?			
Whether the concerned agency has documentation and maintenance of records in line with standard operating procedures for export inspection & phytosanitary certification?			
Whether the concerned agency will meet all the requirements as listed above for authorization for undertaking export inspection?			
Corrective Action, if any required to be under taken	Time schedule		

<p>_____</p> <p>(Signature/Name of officer to be authorised/date)</p>	<p>1. _____</p> <p>(Signature/Name of Expert Auditor/date)</p> <p>2. _____</p> <p>(Signature/Name of Auditor/date)</p>
<p>Corrective actions have been undertaken & verified.</p> <p>_____</p> <p>(Signature/Name of verifying expert/date)</p>	

Document Developed by Dr. O.R. Reddy, Joint Director (PQ) Retd, under the Consultancy Programme with MANAGE, Rajendranagar, Hyderabad-500030, A.P.