REQUIREMENTS FOR GROWING AND SHIPPING TABLE-STOCK POTATOES TO KOREA

In September 2017, an agreement was reached between the governments of the US and Korea to reopen the Korean table-stock market for Pacific Northwest potatoes. This agreement came into effective as of December 11, 2017, to be applied to the 2018 growing season crop. The following description of the requirements are intended to assist PNW growers and shippers of table-stock potatoes to Korea.

I. General Rules

- These requirements apply to fresh table-stock potatoes only.
- These requirements are to be utilized during the raising and shipping of the 2018 crop.

II. Areas That Can Ship

- Table-stock potatoes shipped to Korea must be grown in **approved states**. The approved states are:
  - Idaho
  - Oregon
  - Washington.

III. Approved Seed

- Table stock potatoes exported to Korea must be grown using certified seed from an approved state. These include the Pacific Northwest states, along with several other states, most of which do not produce seed potatoes. The **approved seed states** are:

Alabama	Georgia	Iowa	New Jersey	Vermont
Alaska	Hawaii	Kentucky	Oregon	Virginia
Arkansas	Idaho	Louisiana	Rhode Island	Washington
Connecticut	Illinois	Massachusetts	South Carolina	
Florida	Indiana	Missouri	Tennessee	

- For PNW seed to be used for growing table-stock potatoes for export to Korea the seed must not exceed the new LSO/Zebra Chip tolerance now in the seed certification regulations for these three states.

IV. Registration of Export Facilities

- Facilities that wish to export table-stock potatoes to Korea must be **registered** with APHIS. Aspects of the registration process are still being finalized by the US and Korean governments and further details will be provided when available.

V. Implementation of Integrated Pest Management (IPM) Guidelines

- Table-stock potatoes to be exported to Korea must be grown according to IPM guidelines for Insects and Mites in Pacific Northwest Potatoes.

- Growers must **trap** for potato psyllid – four traps per 50-hectare production field (at least 10 traps per field if zebra chip was detected in the year prior). For field sizes greater than 50 hectares, growers must place one additional trap for every 10 hectares.
- The **traps must be replaced on a weekly basis**. Records of trap monitoring should be kept and provided to APHIS in accordance with the Northwest Potato Research Consortium's 'Insect Trapping Guide.' This is the standard trapping guide used by growers. Please contact Andy Jensen for details: ajensen@potatoes.com.
- In the case that vectors are found, growers should apply insecticide in accordance with the IPM guidelines.
- All vectors must be sent to a laboratory to test for the presence of zebra chip. If the tests confirm the presence of zebra chip, the associated field will be excluded from exporting to Korea during that export season.
- **If growers have a positive zebra chip find for a field destined for Korea, they are encouraged to contact their potato commission and/or the National Potato Council for guidance.**
- If zebra chip is confirmed in a field, there are also significant additional requirements for contiguous fields that are destined for Korea. A contiguous field is a field that is touching another field. (Fields on other sides of roads are not considered contiguous.)
- For fields contiguous to a positive field, 17 traps per 50 hectares must be placed in four directions within the field until the end of the export season. If the field exceeds 50 hectares, four additional traps (one for each direction) per 20 hectares must be placed. Surveillance shall be implemented through leaf sampling and vacuum sampling per the IPM guidelines in 10 points at the edge of the contiguous fields where ZC pathogen was detected in vectors. Please see Attachment 2 for a diagram of the trapping and sampling locations for fields contiguous to a positive field.

VI. Sprout Inhibition

- Growers must apply an approved **sprout inhibitor** on table-stock potatoes to be exported to Korea. There is currently one approved sprout inhibitor: Chlorpropham (CIPC). Application should follow the approved treatment schedule and treatment should be certified with a Packer Affidavit.

Chemical	Type	Active ingredient	Dosage
Chlorpropham (CIPC)	Oil emulsion	1%	1 quart per 2,000LBS of potato

The sprout inhibition Packer Affidavit form can be found in the attachment at the end of this memo.

VII. Surveying of Production Areas

- During the initial 2018 export season, Korea will send inspectors to conduct an on-site survey to assess the potato export program. Subsequent visits may be conducted every five years.
- Growers should maintain records of surveillance and control measures, and of laboratory tests. These are subject to request by APHIS and Korean inspectors.

VIII. Inspection and Certification of Potatoes Prior to Export

- APHIS will **sample** consignments of table-stock potatoes during export inspection. The samples will be cut, visually inspected and subject to a fry test (at 191° Celsius for three minutes) to check for symptoms of zebra chip. Sampling standards can be found below. Growers should be prepared to provide a fryer for use during export inspection.

Sampling Standards:

Composition of consignment	Amount of sample collection	Amount of sample collection for conducting frying test (5%)
Composed of 1 container	300 potato tubers	15 potato tubers
Composed of more than 1 container	200 potato tubers per container	10 potato tubers per container

- Growers must allow 21 days between vine kill and visual inspection/fry test.
- If zebra chip is found within the sample, exports of potatoes from the entire field will be suspended for the remainder of the export season.
- A **Phytosanitary Certificate** (PC) is required for shipment. The PC must include the following **Additional Declarations**:
  "The potatoes in this consignment were grown from certified seed potatoes meeting the seed potato certification standard in the State of____"
  and:
  "This consignment has been inspected and found to be free from zebra chip disease through visual inspection and the frying test of cut tubers."

IX. Import Inspection

- Shipments of table stock-potatoes will be subject to an import inspection at the port of entry in Korea.
- If the causal agent of zebra chip (*Candidatus Liberibacter Solanacearum*) is detected during import inspection, the shipment will be rejected or destroyed and the import of potatoes from the entire **state** will be suspended, pending further investigation and appropriate action to address the issue. If the detection of ZC disease continues, the import requirements for PNW potatoes may be suspended and reviewed.
- If other quarantine pests are detected, they shall be subject to Korea's Plant Protection Act.

Attachment 1

(Shipper Letterhead)

EXPORT TO KOREA

This shipment of potatoes from the State of _____ has been treated with sprout inhibitor at the recommended rate

Packer Affidavit

I certify that the potatoes submitted for inspection for export to Korea have been treated with (*one quart of 1% active ingredient emulsion of chlorpropham per 2000lbs of potatoes*) before shipping.

Packer: _____

Signature: _____

Date: _____

Phytosanitary No.: _____

_____ _____

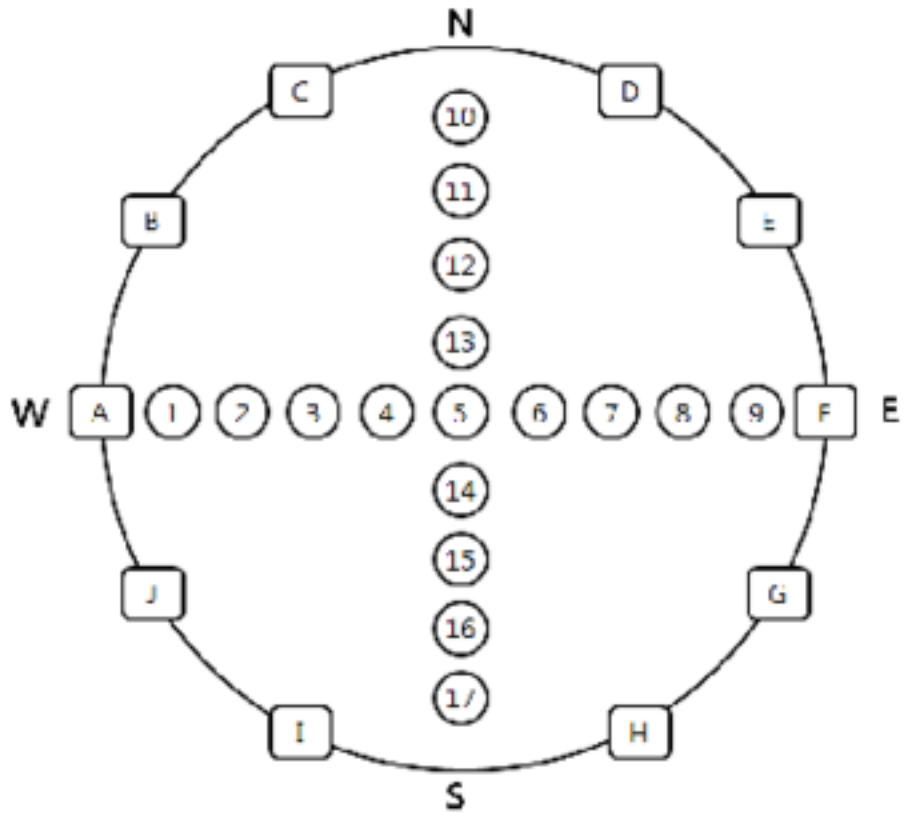
Inspector **Date**

Commodity Inspection Division

Attachment 2

Trapping and Sampling Locations for Contiguous Fields

The diagram below details the trapping and sampling locations **for fields contiguous to a field that has tested positive for zebra chip**. (Note: Fields on other sides of roads are not considered contiguous.)



- Circle 1~17(17points): Locations for yellow sticky traps
- Square A~J(10points): Locations for leaf and vacuum sampling