



# RULE-MAKING ORDER

(RCW 34.05.360)

CR-103 (7/10/97)

Agency: Department of Agriculture	<input checked="" type="checkbox"/> Permanent Rule
(1) Date of adoption: October 3, 2000	<input type="checkbox"/> Emergency Rule
	<input checked="" type="checkbox"/> Expedited Adoption
	<input type="checkbox"/> Expedited Repeal

(2) Purpose: To amend the existing rules which establish a seed potato certification process. The amendments bring Washington State rules into concurrence with other states' rules for seed potato certification, reflect current industry practices, and bring the rules into compliance with legislative mandates such as regulatory reform and use of clear and readable format.

(3) Citation of existing rules affected by this order:  
 Repealed: 16-324-394, 16-324-395, 16-324-397, 16-324-700, 16-324-710  
 Amended: 16-324-361, 16-324-370, 16-324-375, 16-324-381, 16-324-382, 16-324-391, 16-324-392, 16-324-393, 16-324-396, 16-324-398, 16-324-401, 16-324-402, 16-324-409, 16-324-431, 16-324-446, 16-324-720

(4) Statutory authority for adoption: RCW 15.14  
 Other Authority:

**PERMANENT RULE ONLY (Including EXPEDITED ADOPTION)**  
 Adopted under notice filed as WSR 00-16-111 on August 2, 2000 (date).  
 Describe any changes other than editing from proposed to adopted version: None

**EMERGENCY RULE ONLY**  
 Under RCW 34.05.350 the agency for good cause finds:  
 (a) That immediate adoption, amendment, or repeal of a rule is necessary for the preservation of the public health, safety, or general welfare, and that observing the time requirements of notice and opportunity to comment upon adoption of a permanent rule would be contrary to the public interest.  
 (b) That state or federal law or federal rule or a federal deadline for state receipt of federal funds requires immediate adoption of a rule.  
  
 Reasons for this finding:

**EXPEDITED REPEAL ONLY**  
 Under Preproposal Statement of Inquiry filed as WSR \_\_\_\_ on \_\_\_\_ (date)

(5.3) Any other findings required by other provisions of law as precondition to adoption or effectiveness of rule?:  
 Yes  No If Yes, explain:

(6) Effective date of rule:

<b>Permanent Rules or Expedited Repeal</b>	<b>Emergency Rules</b>
<input checked="" type="checkbox"/> 31 days after filing	<input type="checkbox"/> Immediately
<input type="checkbox"/> Other (specify) _____*	<input type="checkbox"/> Later (specify)

\*(If less than 31 days after filing, specific finding in 5.3 under RCW 34.05.380(3) is required)

Name (Type or Print)  
Jim Jesernig

Signature

Title  
Director

Date  
October 3, 2000

**CODE REVISER USE ONLY**

DATE  
OCT 3 2000

TIME  
9:44

FILE NO.  
00-20-070

**Note: If any category is left blank, it will be calculated as zero.  
No descriptive text.**

Count by whole WAC sections only, from the WAC number through the history note.  
A section may be counted in more than one category.

**The number of sections adopted in order to comply with:**

<b>Federal statute:</b>	New	Amended	Repealed
<b>Federal rules or standards:</b>	New	Amended	Repealed
<b>Recently enacted state statutes:</b>	New	Amended	Repealed

**The number of sections adopted at the request of nongovernmental entity:**

New	Amended	Repealed
-----	---------	----------

**The number of sections adopted in the agency's own initiative:**

New	<u>2</u>	Amended	<u>16</u>	Repealed	<u>5</u>
-----	----------	---------	-----------	----------	----------

**The number of sections adopted in order to clarify, streamline, or reform agency procedures:**

New	<u>2</u>	Amended	<u>16</u>	Repealed	<u>5</u>
-----	----------	---------	-----------	----------	----------

**The number of sections adopted using:**

<b>Negotiated rule making:</b>	New	Amended	Repealed			
<b>Pilot rule making:</b>	New	Amended	Repealed			
<b>Other alternative rule making:</b>	New	<u>2</u>	Amended	<u>16</u>	Repealed	<u>5</u>

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-361 Definitions.** (~~The definitions set forth in this section shall apply throughout this chapter, unless the context otherwise requires.~~)

(1) "Certification" means that the lot of seed potatoes was inspected and meets the requirements of this chapter.

(2) "Cull" means any lot of potatoes rejected for certification for any reason. (~~Seed lots failing to meet the minimum requirements of Washington state's rules and standards for certification shall be considered culls.~~)

(3) "Department" means the department of agriculture of the state of Washington.

(4) "Director" means the director of the department of agriculture or his/her duly appointed representative.

(5) "Disease tested" means tested for (~~potato viruses, PVA, PVM, PVS, PVX, PVY, leafroll,~~) and found free of all of the following diseases: Potato virus A (PVA), potato virus M (PVM), potato virus S (PVS), potato virus X (PVX), potato virus Y (PVY), potato leafroll virus (PLRV), potato spindle tuber viroid (spindle tuber), Erwinia carotovora ssp. carotovora (soft rot), Erwinia carotovora ssp. atroseptica (black leg) and Clavibacter michiganense ssp. sependonicum (ring rot).

(6) (~~"In vitro" means in an artificial environment outside the living organism.~~

~~(7))~~ "(7) "Micropropagated" means potato stock propagated using aseptic laboratory techniques and culture media to promote plant tissue growth.

~~((8))~~ "(8) "Microtubers" means tubers produced in vitro by a micropropagated plant or plantlet.

~~((9))~~ "(9) "Minitubers" means tubers produced under controlled greenhouse conditions.

~~((10))~~ "(10) "Nematode" means (~~a disease (infestation) of~~) plant parasitic nematodes (~~of~~) capable of infesting potatoes, including but not limited to the genus *Meloidogyne*.

~~((11))~~ "(11) "Nuclear stock" means plantlets, microtubers, minitubers, or seed potatoes produced from prenuclear stock, and grown in the field for the first time.

~~((12))~~ "(12) "Plot" means a seed potato planting that is 0.25 acre or less in size.

~~((13))~~ "(13) "Powdery scab" means the disease caused by the fungus *Spongospora subterranea*.

~~((14))~~ "(14) "Prenuclear" means micropropagated plants (~~in vitro~~) or tubers (~~in vitro. Also included are~~) and plants or minitubers produced in a greenhouse.

~~((15))~~ "(15) "Recertification" means the process of

certifying a seed lot that was certified the previous year.

~~((16)) "Ring rot" means the disease caused by the bacterium *Clavibacter michiganense* ssp. *sepedonicum*.~~

~~((17)) (15) "Rogue" means ((a method of removing undesired plant specimens from a lot whereby all plant parts including vines, tubers, and seed pieces are completely removed from a field. Roguing for plant disease shall also include removing all plants and their parts immediately adjacent to the diseased suspect plant)) removing diseased or undesirable plants, including all associated plant parts from a seed potato field.~~

~~((18)) (16) "Seed lot" means a field, in whole or in part, or a group of fields producing seed potatoes, or the potato tubers harvested from a seed potato field.~~

~~((19)) (17) "Seed potatoes" means vegetatively propagated tubers used for potato production ((that have been produced outside of or within the state of Washington and are being handled for seed purposes, propagation, or reproduction within the state of Washington)).~~

~~((20)) (18) "Seed source" means seed potatoes produced by an individual grower within a particular seed production area.~~

~~((21)) (19) "Trace" means a barely perceivable indication of plant disease that amounts to less than 0.001 percent of sample.~~

~~((22)) (20) "Tolerance" means the maximum acceptable percentage of potato plants or tubers ((~~exhibiting visual symptoms of disease or defect during inspection of a representative sample~~)) that is diseased, infected by plant pests, defective or off-type based on visual inspection or laboratory testing by the director or other authorized person.~~

~~((23)) (21) "Unit method" means a method of planting in which cut seed pieces from one tuber are dropped consecutively in a row, or in which all tubers from one plant are dropped consecutively in a row.~~

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-370 General guidance.** (1) Participation in this program ~~((shall be))~~ is voluntary, except as provided in chapter 15.15 RCW, and may be withdrawn at the option of the applicant. ~~((Farming and sanitation practices are the responsibility of the grower. Certification, approvals, determinations, and supervision mentioned herein shall be conducted by the department.~~

~~(2) Failure to comply with the requirements of these rules shall be cause for refusal or cancellation of approval of any planting or the certification of any seed as certified seed potatoes.~~

~~(3) The state of Washington department of agriculture makes no warranty, expressed or implied, or representation as to the freedom~~

~~from disease or quality of certified seed. Certification is based solely on visual inspections of sample plants and tubers of each lot which were found to meet tolerances prescribed in this chapter.)~~

(2) The department will refuse or cancel certification of any seed potato planting or seed potato lot that fails to comply with this chapter.

(3) Issuance of a certified state of Washington tag, stamp or other document under this chapter means only that the tagged, stamped or otherwise documented seed potatoes have been subjected to procedures and requirements described in this chapter and determined to be in compliance with its standards and requirements. The department disclaims all express or implied warranties, including without limitation implied warranties of merchantability and fitness for particular purpose, regarding all plants, plant parts, and plant materials under this chapter. Certification is based solely on compliance with this chapter.

(4) The department is not responsible for disease, genetic disorders, off-type, failure of performance, mislabeling or otherwise, in connection with this chapter. No grower, dealer, government official, or other person is authorized to give any expressed or implied warranty, or to accept financial responsibility on behalf of the department regarding this chapter.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-375 Application and withdrawal.** (1) ~~((Application shall be made on a))~~ To apply for certification, applicants must use the form provided by the department and furnish all information requested, including the date, name, signature and address of the applicant, lot number, seed source identification number, variety, class planted, acres, date planted, seed spacing at planting, average length of rows, year the field was last cropped to potatoes, along with their variety and lot number, and a map of the field location. Applications for certification ((shall)) must reach the ((state)) department ((of agriculture,)) on or before June 15 of each year, accompanied by the appropriate fee, field location maps and evidence of eligibility such as tags or certificates. Unless prior approval has been granted, late applications(, without prior approval,) will be assessed a late ((application)) fee of twenty dollars per application. ((Applications shall be accompanied by the appropriate fee, as well as tags, certificates or other evidence of eligibility.))

(2) ~~((Prospective growers entering the certification program for the first time shall be interviewed by the department before their applications are processed. This is in order that the applicant knows what is expected and what may be expected from the~~

~~certifying agency.~~

~~(3)) Separate applications ((shall be)) are required for each variety, seed source, and seed lot.~~

~~((4)) (3) Separate applications ((shall be)) are required for each ((seed source)) field location that is separated by more than one hundred feet.~~

~~((5) Applications shall be accompanied by a field location map so that any inspector can identify each lot and the lot location.~~

~~(6) Withdrawal of a seed lot from the certification program shall be made on a form provided by the department.) (4) Growers may withdraw a seed potato lot from certification for any reason by notifying the department in writing.~~

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-381 Certified seed potato stock--Fees.** (1) The seed potato certification fee ((s shall be)) is twenty-nine dollars per acre or fraction ((thereof)) of an acre.

(2) The certification fee for a field plot ((shall be)) is twenty dollars per application.

(3) The department may assess ((an)) additional fees ((charged on a)) for time and mileage ((basis)) pursuant to chapter 16-470 WAC.

(4) ((Applications shall be accompanied by)) Growers must submit a minimum of fifty percent of the total certification ((fee and payable on or before June 15 of each year. For purposes of certification fee assessment, acreage may be adjusted by no more than ten percent on or before July 15 of each year)) fees with the applications.

(5) Final payment of ((the)) certification fees is due and payable November 1 of each year((:— Provided, That fees for five acres or less must be paid in full at the time of application)).

(6) ((Refunds of the certification fee may be made only if the withdrawal form)) For the purpose of fee assessment, acreage may be adjusted by no more than ten percent prior to the first field inspection. The department will refund certification fees, if a written withdrawal notice is received by the department prior to the first field inspection.

(7) Growers are not required to pay the final half of the certification fee on lots rejected or withdrawn before the second inspection ((shall not be subject to the final one-half payment of the certification fee)).

(8) ((Certification fees shall not be refunded after two field inspections have been completed.

~~(9) Failure to pay fees when due shall result in removing the applicant from this program.~~

~~(10) No application from any grower owing the Washington state department of agriculture for previous fees may be considered.))~~  
The department will deny certification to any applicant who fails to pay fees when due.

(9) The department will not accept applications from any grower owing the department for previous fees.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-382 Seed potato classification.** (1) All seed potatoes entered for certification (~~(shall be)~~) are classified on the basis of production phases as follows:

(a) Prenuclear (PN) - (~~(Prefield seed stocks for laboratory and greenhouse production or direct field plantings.))~~  
Micropropagated potatoes or seed potatoes grown in a greenhouse or screenhouse under sanitary conditions free of insects, weeds that can harbor potato diseases or other sources of disease contamination.

- (b) Nuclear (N) - First field production year.
- (c) Generation 1 (G1) - Second field production year.
- (d) Generation 2 (G2) - Third field production year.
- (e) Generation 3 (G3) - Fourth field production year.
- (f) Generation 4 (G4) - Fifth field production year.
- (g) Generation 5 (G5) - Sixth field production year.

(2) (~~(The class of any seed lot shall be determined by its production phase as defined in subsection (1) of this section.))~~  
If a seed lot fails to meet the standards established in this chapter for its (~~(production phase))~~ class, then it (~~(shall))~~ will be reclassified to the (~~(next later))~~ earliest generation for which it meets established standards. (~~(If a seed lot fails to meet minimum standards established for G5, it shall be rejected from certification.))~~)

NEW SECTION

**WAC 16-324-385 Production requirements.** (1) A grower is not eligible to produce nuclear, generation 1, or generation 2 seed potatoes, if ring rot has been detected on his or her farm during the previous two years.

(2) Prenuclear class.

(a) Prenuclear seed lots must be derived from disease tested micropropagated plants. All testing methods and laboratories must be approved by the department.

(b) A minimum of one percent (and not less than twenty samples) of pre-nuclear seed produced in a greenhouse must be tested and found free of potato virus X (PVX), potato virus Y (PVY), potato virus S (PVS), potato leafroll virus (PLRV), *Erwinia carotovora* ssp. *carotovora* (soft rot), *Erwinia carotovora* ssp. *atroseptica* (black leg), and *Clavibacter michiganense* ssp. *sependonicum* (ring rot).

(c) The department will inspect all facilities used in the production of pre-nuclear class seed potatoes on a periodic basis. Department approval is necessary in order to utilize these facilities.

(3) Nuclear class.

(a) Nuclear class seed potatoes must be propagated entirely from pre-nuclear plants.

(b) Each nuclear class seed lot must be distinctly separated in storage and in the field.

(c) If a ground rig is used for spraying, wide enough spacing between rows must be left, so that tires will not touch plants during the growing season.

(d) Growers must plant cut seed and single drop seed separately, with single drop seed identified.

(4) Generations 1, 2, 3, 4 and 5.

(a) Growers must leave a distinct separation of at least six feet unplanted or planted to some other crop between lots of seed potatoes from different classes. A similar separation must be left between different varieties, unless the varieties are readily distinguishable by visual observation.

(b) When more than one lot of seed potatoes is planted in the same field, growers must stake or mark the identity of each lot.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-391 Eligibility requirements.** (1) ~~((Planting stocks shall be derived from seed stocks))~~ Only seed potatoes derived from plants that have been disease tested((7)) and certified by an official ((seed certifying)) certification agency ((and continued identity maintained in an approved manner)) are eligible for certification.

(2) ~~((To be eligible for recertification, a seed stock shall))~~ Only seed lots that meet or exceed the minimum requirements ((for field inspection, latent virus testing, and post harvest testing)) as established in this chapter are eligible for certification. A seed ~~((stock))~~ lot that has more than a trace amount of virus disease noted during any field inspection ~~((shall not be recertified))~~ is not eligible for recertification, unless it has been post harvest tested and meets the minimum standards established in WAC 16-324-420.



(3) (~~Planting stocks from other states or countries shall be eligible for current season certification if the planting stock meets or exceeds the minimum requirements of Washington standards for certification of seed potatoes and is~~) In order to be eligible for certification in Washington state, seed lots from other states or countries must be eligible for recertification in the state or country of origin.

(4) A seed lot (~~shall not be eligible for current season certification if it is~~) blended from two or more different sources of seed is not eligible for recertification.

(5) (~~Tubers culled out during the grading process shall not be~~) A seed lot infected with powdery scab is not eligible for recertification.

(6) (~~Seed stocks shall be eligible for current season certification for a maximum of six field production years.~~)

(~~7~~) Generation 5 (G5) (~~, shall not be~~) seed lots are not eligible for recertification.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-392 Isolation requirements.** (1) (~~Prenuclear stock shall be produced in a laboratory or greenhouse approved by the department.~~)

(~~2~~) The department must approve all nuclear and generation 1 (~~shall be produced only in~~) field locations (~~approved by the department~~).

(~~3~~) (2) Generation 2 through generation 5 (~~shall~~) must be isolated by at least three hundred fifty feet from (~~other~~) all noncertified potatoes (~~except seed potatoes entered for certification~~).

(~~4~~) (3) When ring rot is found in a field planted with more than one lot of seed potatoes, the department will reject entire field (~~shall be rejected~~) unless at least six feet between lots has been left unplanted or planted to some other crop.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-393 Land requirements.** (1) (~~Any land known to be~~) The department will not accept any field infested with (~~parasitic potato~~) nematodes (~~shall not be accepted~~).

(2) (~~Any land planted with seed potatoes found to have ring rot shall not be eligible for certified seed potato production for~~)

~~at least)) Detection of ring rot in a field will make that field ineligible for production of certified seed potatoes for three years. Presence of volunteer potato plants in a field with ring rot history ((shall)) will disqualify the current field crop for certification. Plants outside of the defined row ((shall be)) are considered volunteers. ((Exceptions to this may be approved by the department when cultural practice has been proven to be successful. Cultural practices may include, but are not limited to, mechanical means (such as deep plowing) and/or chemical means (such as fumigants or other material) for seed bed preparation. Materials and methods shall be recorded with the department. Whichever method is used, it shall be approved by the department and shall be adequate to maintain variety and disease purity.))~~

(3) Nuclear class ((shall)) seed potatoes must be produced ((on land)) in a field that has not been planted with potatoes for ((any of the previous)) at least six years. (New ground is preferred.)

(4) Generation 1 class ((shall)) seed potatoes must be produced ((on land)) in a field that has not been planted with potatoes for ((any of the previous)) at least four years.

(5) Generation 2, 3, 4, and 5 ((classes shall)) class seed potatoes must be produced ((on land)) in a field that has not been planted with potatoes during the previous year unless the prior potato crop was certified seed potatoes of ((a higher)) an earlier class ((and)) of the same variety. Volunteer plants from a previously planted seed potato crop ((that are present at the time of the field inspection shall)) will cause the ((designated)) class designation of the current crop to be changed to ((an)) the appropriate ((later)) generation ((designation)) of the volunteer plants.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-396 Sanitation requirements.** (1) Chemicals used in the sanitation of equipment ((shall)) should be those recommended by the *Pacific Northwest Plant Disease Control Handbook*. Vector control ((shall)) must be maintained throughout the growing season as recommended by the *Pacific Northwest Plant Disease Control Handbook*.

(2) Seed stocks entered for certification ((shall)) must be planted and harvested prior to handling any other seed stock. The earliest generation ((shall)) must be handled prior to lower classes within the program. ((All equipment used in the cutting, planting, digging, storage, and sorting process shall be sanitized between lots and varieties. When cutting nuclear stock, gloves and knives shall be sanitized between each tuber cut.

~~(3) Precautions shall be taken when roguing, irrigating, or~~

~~cultivating to prevent the spread of potato pathogens. Only sanitized footwear shall be allowed in the field.~~

~~(4)) (3) Only department-approved containers shall be used during the digging, storage, and packing process.~~

~~((5) Appropriate procedures for sanitizing shall include steam cleaning or use of a pressure washer to eliminate all dirt and dry matter, followed by application of an approved chemical to kill bacteria.))~~

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-398 Field inspection disease tolerance.** (1) Compliance with a 0.0% tolerance is not intended, nor ((shall)) should it be construed, to mean that the lot inspected is free from the disease. ((In case of ring rot, nematode, or powdery scab,)) It means that the disease was not ((identified)) detected during ((any)) visual inspections of the seed lot.

(2) First and second field inspection tolerances, expressed as percentages.

Factor	Nuclear		G 1		G 2		G 3		G 4		G 5	
	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd	1st	2nd
Varietal mixture	0.00	0.00	0.00	0.00	0.02	0.01	0.05	0.01	0.08	0.05	0.20	0.10
Mosaic	0.00	0.00	0.00	0.00	0.01	TR(*)	0.50	0.25	0.50	0.25	2.00	1.00
Leafroll	0.00	0.00	0.00	0.00	0.01	TR(*)	0.03	0.01	0.08	0.05	0.40	0.20
Total visible virus	0.00	0.00	0.10	0.00	0.50	0.50	2.00	1.00	2.00	1.00	2.00	2.00
Phytoplasmas	0.00	0.00	0.00	0.00	0.10	0.10	0.20	0.20	0.50	0.50	1.00	1.00
Black leg	0.00	0.00	0.10	0.10	0.50	0.50	1.00	1.00	2.00	2.00	4.00	2.00
Ring rot	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Nematode	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
Spindle tuber viroid	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.00
<del>((Powdery scab</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>	<del>0.00</del>

\*TR=Trace

NEW SECTION

**WAC 16-324-399 Field inspection.** (1) The department will visually inspect each seed lot at least two times during the growing season. The department may make additional inspections if the department deems it necessary.

(2) The department will reject all seed lots that do not

comply with minimum field inspection standards at the time of inspection.

(3) Growers must notify the department of unusual field conditions, which may cause premature dying from any cause prior to the final reading of the field.

(4) Post harvest testing is required for any seed lot with a field condition preventing adequate field evaluation at the time of the first field inspection.

(5) If the department is unable to perform the final field inspection of a seed potato lot for any reason at least one of the following actions will be taken:

- (a) The seed lot will be denied certification;
- (b) The seed lot will be denied recertification; and/or
- (c) The lot must be post harvest tested and found free of ring rot.

(6) The department will reject any seed lot in which ring rot is detected and will conduct additional inspections on all of the grower's remaining seed lots. The department will not recertify any seed lot associated with or planted after the rejected lot. The department will submit samples of ring rot detected during field inspections to an approved laboratory for confirmation.

(7) The department may require a post harvest test and withhold certification pending results of the post harvest test on seed potato lots exposed to any chemical that causes tuber-borne injury. Any seed potato lot showing five percent or greater tuber-borne chemical damage in the post harvest test will be rejected for certification.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-401 Latent virus testing requirements.** (1) PVX testing ~~((shall be))~~ is required for nuclear~~((7))~~ generation 1 and generation 2 class seed potatoes. PVX testing ~~((shall be))~~ is optional for all other classes.

(2) Growers must submit petiole samples ~~((shall be submitted by the grower in late August, or prior to vine kill,))~~ for latent virus testing to a laboratory approved by the department. The ~~((cost of))~~ applicant is responsible for laboratory testing ~~((shall be borne by the applicant))~~ fees.

(3) The minimum number of plants per seed lot to be sampled for ~~((latent virus determination shall be))~~ PVX testing is one hundred. For nuclear class, a minimum of ten percent of the total number of plants per lot ~~((shall))~~ must be sampled. For generation 1, a minimum of two percent of the total number of plants per lot ~~((shall))~~ must be sampled. For generation 2, a minimum of fifty leaves per acre ~~((shall))~~ must be sampled. ~~((For))~~ Generation 3, 4 and 5 ~~((, a minimum))~~ seed lots should be sampled at a rate of

twenty leaves per acre (~~shall be sampled. No more than five leaves shall be bulked per sample~~). The department may require additional testing.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-402 Latent virus tolerance.** (1) (~~Latent virus disease~~) PVX tolerances are listed in the table that follows and (~~shall~~) must be based on positive ELISA test results.

PVX TOLERANCE TABLE: PERCENT DISEASE

NUCLEAR	G1	G2	G3	G4	G5
0.00	0.50	1.00	3.00	4.00	5.00

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-409 Post harvest test requirements.** (1) Post harvest testing of all seed classes (~~shall be~~) is optional, except as required in WAC 16-324-399. Seed lots which fail the minimum requirements of the field inspection standards (~~shall~~) are not (~~be~~) eligible for post harvest testing.

(2) (~~The purpose of this test is to visually detect virus and virus-like plant symptoms in seed potato samples submitted by the grower. Diseases which cannot be observed visually at the time of inspection may be present.~~

~~(3))~~ A minimum of four hundred tubers (~~shall~~) must be submitted for each seed lot entered for post harvest testing. Seed lots less than one acre in size (~~shall~~) must submit a minimum of four tubers per total hundred weight with a minimum of fifty tubers. (~~The applicant shall have the option of submitting additional tubers greater than the minimum number.~~

~~(4))~~ (3) The applicant is responsible for the cost of post harvest testing (~~shall be borne by the applicant~~).

~~((5) Seed stocks represented)~~ (4) Seed lots in the post harvest test which fail to (~~meet~~) comply with the disease tolerance requirements set forth in (~~this chapter shall not be~~) WAC 16-324-420 are not eligible for recertification.

(a) The applicant (~~shall~~) must notify in writing all receivers of (~~a seed stock or~~) any seed lot that failed to (~~meet~~) comply with post harvest (~~test requirements~~) tolerances set forth in WAC 16-324-420.

(b) Acceptance of ~~((this))~~ a seed lot ~~((shall))~~ that fails to comply with the tolerances set forth in WAC 16-324-420 must be based on a written buyer/seller agreement. The grower must provide the department with a copy of the written ((notice and buyer/seller)) agreement ((shall be provided to the department as soon as practicable.

~~(6) Upon request of the applicant, the department shall submit samples of seed potatoes to an approved laboratory for ELISA testing to confirm a finding of visual virus disease symptoms. The applicant shall bear the cost of ELISA testing.~~

~~(7) In the event of a serious malfunction of the post harvest test facility, certification eligibility shall be based on field inspection readings)) within thirty days of receiving the post harvest results.~~

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-431 Digging, storage and premarketing.** (1) Each seed lot ~~((shall))~~ must be stored ((so as to maintain)) with its identity maintained. ~~((The storage bin or room (an area with a controlled access and enclosed by solid barriers) shall be so marked that any inspector not previously having been in the room or storage bin could identify each lot.))~~ All tubers from a unit planting method ~~((shall))~~ must be numbered and stored as an identifiable unit for the next year's planting.

(2) Each storage or room containing more than one seed lot ~~((shall))~~ must have a solid barrier between each lot ((that is not of the same seed source, variety or classification)).

(a) The ~~((presence of))~~ department will reject any seed lot in which ring rot or nematode ((in a seed lot that is stored with other seed lots shall be cause for rejection of all seed lots that are not isolated or separated)) by a solid barrier.

(b) ~~((Seed lots previously known or found to be infected with ring rot at time of storage or))~~ Noncertified potatoes ((shall)) must not be stored ((within)) in the same ((storage with)) facility as certified seed potatoes.

(3) The applicant ~~((shall))~~ must notify in writing receivers of ((a seed stock or receivers of a lot associated with a seed stock that has been)) any seed lot found to be infected with ring rot. The applicant ((shall)) must provide the department with a copy of this notification when it is sent to the receiver.

(4) All seed classes ~~((shall))~~ must be graded according to ((state of Washington standards for seed potatoes and)) the United States Standards for Grades of Seed Potatoes.

(5) Each container or sack ~~((shall))~~ must be identified with ((the)) an official Washington seed potato tag((s which shall show)) listing the grower's name, address, seed lot number, net

weight, variety and classification unless such information is printed on the sacks or containers.

(6) The department (~~shall~~) issues tags to the grower. The grower (~~shall~~) is required to comply with all of the following:

- (a) Tag the sack or container as the potatoes are sorted;
- (b) Allow inspection of graded seed potatoes at any time;
- (c) (~~if seed potatoes are out-of-grade,~~) Remove the tags from out-of-grade potatoes under the supervision of the (~~inspector~~) department; and
- (d) Return all unused tags to the (~~inspector~~) department.

(7) (~~Failure to comply with any of the requirements of this chapter shall be cause for the inspector to withhold the privilege of permitting the grower to tag at the grower's convenience.~~

~~(8) Failure to comply with subsection (6) (b) and (c) of this section shall be cause to reject a grower from the certification program.~~

~~(9) In order to maintain its certification status, a) The department may issue a compliance agreement authorizing the grower to tag seed potatoes.~~

(8) Bulk shipments must be identified with the information required in subsection (5) of this section.

AMENDATORY SECTION (Amending WSR 97-11-028, filed 5/14/97, effective 6/14/97)

**WAC 16-324-446 Grading inspection.** (1) (~~The quality of the~~) Grading of seed potatoes is the (~~full~~) responsibility of the grower. The department (~~shall~~) monitors grading activities for compliance with the United States Standards for Seed Potatoes and established state standards for seed potatoes.

(2) Upon request, the department provides shipping point inspections for seed potatoes (~~shall be performed by the department at the established rate for time and mileage. A federal-state inspection certificate shall be issued~~). Fees established in chapter 16-470 WAC apply to all shipping point inspections.

(3) Three colors of tags (~~shall be permitted~~) are authorized for use on certified seed potatoes.

(a) Blue tags (~~shall be~~) are used for seed potatoes which meet or exceed minimum requirements of United States Standards for US Number 1 grade of seed potatoes.

(b) Yellow tags (~~shall~~) indicate a contract grade between buyer and seller.

(c) White tags (~~shall be~~) are used for seed potatoes which meet or exceed minimum requirements of US Number 1 standards for grade of seed potatoes (~~Provided~~) except, that the size (~~shall~~) may not be less than one ounce or more than three ounces in weight.

~~((4) Compliance with the provisions of these standards shall not relieve the applicant or grower from responsibility for conforming with compliance agreements and applicable provisions of federal and state laws.))~~

AMENDATORY SECTION (Amending Order 4014, filed 10/22/92, effective 11/22/92)

**WAC 16-324-720 ((ELISA)) Laboratory testing ((for potato viruses)) -- Fees.** (1) ~~((The following fees shall apply to))~~ ELISA testing to determine the presence of ~~((Potato Virus A (PVA), Potato Virus M (PVM), Potato Virus S (PVS), Potato Virus X (PVX), Potato Virus Y (PVY), and Potato Leaf Roll Virus (PLRV))~~) potato viruses:

# Viruses	# Samples	Price/leaf sample	Price/tuber sample
1	1 to 10	\$1.00	\$1.10
	11 to 25	\$0.90	\$1.00
	over 25	\$0.80	\$0.90
2	1 to 10	\$1.50	\$1.60
	11 to 25	\$1.30	\$1.40
	over 25	\$1.10	\$1.20
3	1 to 10	\$2.00	\$2.10
	11 to 25	\$1.70	\$1.80
	over 25	\$1.40	\$1.50
4	1 to 10	\$2.50	\$2.60
	11 to 25	\$2.10	\$2.20
	over 25	\$1.70	\$1.80
5	1 to 10	\$3.00	\$3.10
	11 to 25	\$2.50	\$2.60
	over 25	\$2.00	\$2.10
6	1 to 10	\$3.50	\$3.60
	11 to 25	\$2.90	\$3.00
	over 25	\$2.30	\$2.40

(2) Spindle tuber viroid testing ~~((shall be))~~ is provided at the actual cost ~~((of time at twenty-five dollars per hour plus materials))~~ to the department.

~~((3) Other virus tests not listed in subsection (1) of this section may be provided at actual cost of time at twenty-five~~



dollars per hour plus materials.)

REPEALER

The following sections of the Washington Administrative Code are repealed:

WAC 16-324-394	Production requirements--Prenuclear class.
WAC 16-324-395	Production requirements--Field grown seed potatoes.
WAC 16-324-397	Field inspection.
WAC 16-324-700	Establishing the fee schedule.
WAC 16-324-710	Schedule of fees--Billing policies and procedures.