Land Requirements:

A. A field will not be eligible to produce certified seed potatoes if Root-Knot Nematode, or Corky Ring Spot has been proven to exist in the field or in potatoes grown in that field.

B. A field will not be eligible to produce certified seed potatoes if noncertified potatoes or potatoes that have been confirmed to be Bacterial Ring Rot infected by a laboratory test were grown in this field the previous two growing seasons.

C. A field must have been farmed with a crop other than potatoes immediately following the growing season in which potatoes were disqualified for Bacterial Ring Rot.

Isolation Requirements:

A. Potatoes entered for certification must be planted at least 20 feet from potatoes not entered for certification.

B. Seed lots must be separated from each other by at least one row left unplanted or planted to some other crop.

Field Requirements:

A. Two inspections shall be made for each field entered.

B. Field Inspection tolerances for 1st and 2nd Inspections

Table 1 - Percentages allowed for 1st inspection[1]

Factor[2]	Field Year					
	FY1	FY2	FY3	FY4	FY5	FY6/7
Varietal mixture	0.00	0.00	0.02	0.10	0.25	0.50
Well defined Mosaic	0.00	0.00	0.5	1.00	1.50	2.00
Potato Leafroll	0.00	0.00	0.03	0.05	0.10	0.20
Blackleg[3]	0.00	0.10	0.50	1.00	2.00	..[4]
Total Virus[5]						2.00

Table 2 - Percentages allowed for 2nd inspection[1]

Factor[2]	Field Year					
	FY1	FY2	FY3	FY4	FY5	FY6/7
Varietal mixture	0.00	0.00	0.01	0.05	0.10	0.20
Well defined Mosaic	0.00	0.00	0.25	0.50	0.75	1.00
Potato Leafroll	0.00	0.00	0.02	0.03	0.08	0.20
Blackleg[3]	0.00	0.10	0.50	1.00	2.00	..[4]
Total Virus[5]						1.00

[1]Field inspections of FY1 and FY2 seed lots are advisory and all factors are required to be rogued when found in order to maintain the tolerance of 0.00%.

[2]Some diseases may be present in a seed potato lot and not exhibit symptom expression in plants or tubers at the time of a regular inspection.

[3]Determination of blackleg disease is based on a visual plant symptom of an inky black stem originating from the seed tuber. Visible blackleg has no tolerance in FY6 and FY7 and therefore is not a disqualification factor.

[4]Visible blackleg will not be a disqualification factor in FY6 or FY7.

[5]Total is the combined percentage of potato leafroll, calico, well defined mosaic and all other viral, viroid and phytoplasmas (including Candidatus Liberibacter).

Seed Lot Disqualifying Conditions:

1. Seed lots or portions thereof may be disqualified for certification because of any condition that interferes with the inspection of the potato plants.

2. Bacterial ring rot, corky ring spot and root-knot nematode are zero tolerance factors. Any seed lot, regardless of generation, shall be rejected from certification at any time when any of these factors is confirmed by laboratory testing.

3. Evidence of failure to remove daughter tubers from rogued hills.

Recertification Requirements:

A. All contact lots on a farming operation shall be ineligible for recertification if any lot of seed on that farming operation is rejected for certification because of bacterial ring rot.

B. Out-of-state potato stocks to be entered for certification must meet the same requirements as Idaho grown seed stocks.

C. Seed lots with more than 0.1% Potato Leafroll Virus in either the 1st or 2nd inspection shall not be eligible for recertification.

D. FY1, FY2, or FY3 seed lots disqualified for certification in the post harvest test because of seed-borne chemical injury may only be recertified by the original applicant(s) during the next growing season.

Post Harvest Testing Requirements:

A. Each seed lot must be post harvest tested. Lots, or portions thereof, which are shipped prior to post harvest testing, will be certified based on the two (2) summer field inspections and a shipping point inspection.

B. Only seed lots that have passed the equivalent of a 2nd field inspection will be eligible for post harvest testing.

C. Seed lots are disqualified for certification if seed-born chemical injury in excess of 5% is found during post harvest testing.

D. Seed lots are not eligible for recertification if any of the following factors are found during post harvest testing at a percentage greater than:

Potato Leafroll Virus	0.8%
Well defined Mosaic	2.0%

Bacterial Ring Rot Testing Requirements:

A random sample of stems or tubers obtained from all seed lots entered for certification, FY2 or higher, shall be laboratory tested for bacterial ring rot.

Pre-nuclear Class Production Requirements

A. Pre-nuclear Materials

1. Pre-nuclear materials consist of *in vitro* propagative materials, e.g., tissue culture plantlets and micro-tubers, maintained under aseptic conditions.
2. *In vitro* propagative materials may originate from the following sources:
   a. The introduction of any potato plant part, including stems and tubers, into *in vitro* culture using aseptic technique.
   b. Existing *in vitro* materials obtained from another recognized tissue culture facility.

B. Record Keeping

1. Tissue culture facilities shall maintain records of the origin and date of acquisition of all pre-nuclear materials.
2. The tissue culture facility shall assign a unique identifying code to each individual clone that will be used to track its multiplication and test history. A new identification code shall be assigned to each clone or sub-clone when:

a. Plant materials are introduced into in vitro culture.
b. *In vitro* material is received from another recognized tissue culture facility.

C. Required Testing

1. All testing of pre-nuclear material must be performed by, or under the supervision of, the ICIA Seed Certification Laboratory.
2. **Introductory Testing.**
   a. Introductory pathogen testing must be performed when:
      i. Plant materials are introduced into in vitro culture.
      ii. *In vitro* material is received from another recognized tissue culture facility.
   b. A minimum of two plantlets for each clone must be tested and found free from the following pathogens:
      i. Viruses: PVA, PVS, PVM, PVY, PVX, PLRV, PotLV, PMTV, TRV
      ii. Viroid: PSTVd
      iii. Bacteria: *Clavibacter sepedonicus (*formerly known as *Clavibacter michiganensis* subsp. *Sepedonicus)*, *Pectobacterium* spp.
   c. Materials that test positive for any of these pathogens are ineligible for certification.
3. **Testing Prior to Multiplication.**
   a. Pre-nuclear material must be tested within 12 months preceding multiplication. A minimum of two plantlets per clone must be tested and found free from the following pathogens:
      i. Viruses: PVA, PVS, PVM, PVY, PVX, PLRV
      ii. Viroid: PSTVd
      iii. Bacteria: , *Pectobacterium* spp., *Clavibacter sepedonicus (*formerly known as *Clavibacter michiganensis* subsp. *Sepedonicus)*
   b. Materials that test positive for any of these pathogens are ineligible for certification.

Nuclear Class Production Requirements

A. Nuclear Materials

1. Nuclear materials are the progeny of pre-nuclear materials produced in a protected environment, e.g., a greenhouse or growth chamber.
2. Approved Planting stocks:
   a. Nuclear materials must be produced utilizing pre-nuclear stocks meeting the requirements described in § X. Pre-nuclear Production Requirements.
   b. First generation nuclear class mini-tubers produced in the grower's own protected environment facility may be used as planting stocks with the prior approval of the Idaho Crop Improvement Association, Inc. A representative sample consisting of 1% of the plants/tubers, with a minimum of 5 and a maximum of 50 plants/tubers, must have been laboratory tested prior to planting and found to be free from the pathogens listed in § C(3)(a).
3. Nuclear Stock class propagative material must be planted in a soil-free medium. New or sterilized growth media shall be used for each planting.

4. No plants other than those listed on the Application for Certification may be present in the individual units of a protected environment being used for the production of nuclear class materials.
5. Nuclear materials must be physically separated to maintain seed lot integrity and purity at all times. Nuclear seed lots that are comingled shall be combined, downgraded, or rejected, as appropriate, using the tolerances specified in Table 2, Field Inspection Requirements.

B. Inspections.

1. Nuclear crops must be entered for certification within 14 business days of the planting of the crop.
2. The responsibility of notifying the Idaho Crop Improvement Association, Inc. of readiness for inspection of greenhouse Pre-nuclear crops shall rest with the grower.
3. A minimum of two inspections shall be performed on each nuclear seed lot entered for certification.

C. Required Testing

1. Nuclear crops must test free of the following pathogens:
   a. Viruses: Potato Virus A, X, Y, PLRV
   b. Bacteria: *Clavibacter sepedonicus (*formerly known as *Clavibacter michiganensis* subsp. *Sepedonicus)*
2. Testing must be done on a representative sample consisting of 1% of the plants or tubers with a minimum of five plants or tubers sampled per lot.
3. If there is potential exposure to disease-vectoring insects, or if such insects are observed in the protected environment, testing must be done on a representative sample consisting of 2% of the plants or tubers.
4. Units or lots in greenhouse production found to be infected with any of the organisms indicated above shall be downgraded or rejected, as appropriate, using the tolerances specified in Table 2, Field Inspection Requirements.

Clonal Line Selections:

1. One tuber from each plant selected shall be submitted to ICIA for laboratory testing.

2. FY1 plots planted from clonal line selections shall be planted in hill units.

3. All seed in a clonal line selection plot automatically advances to FY2 the following season except for those hills selected for clonal selections.

Storage Inspection Requirements:

A. Storage inspection will be conducted on all storages containing seed potatoes eligible for certification.

B. Storages where sprout nip or similar materials were used the previous season are

not eligible to store seed potatoes eligible for certification.

C. Seed potatoes must not be stored, graded or handled in storage warehouses or subdivisions thereof in which potatoes that have not been field inspected, or are laboratory confirmed to have Bacterial Ring Rot, Root-Knot Nematode or Corky Ring Spot are stored or handled.

D. For a seed lot to remain eligible for certification, seed lot identity must be maintained in storage.

Shipping Point Inspection Grade Requirements:

A. Idaho Certified Blue Tag Seed Potatoes

The blue tag shall be equivalent to U.S. No. 1 seed potato grade with the following exceptions. There is a 1% tolerance for late blight.

1. Scab - shall not cover more than one-fifth of the surface area.

2. Adhering dirt - a maximum of 50% of the tuber surface may be covered with caked dirt.

3. Loose dirt and/or foreign material - included in total external tolerance.

4. Clipping or trimming not allowed.

5. Freshly broken off second growth - shall not be damaged.

6. Wireworm and/or grub - damaged by waste.

7. Tolerances: For total defects 10%. Three percent (3%) for potatoes which are affected by freezing injury. One percent (1%) for potatoes which are affected by soft rot, wet breakdown or are frozen. The limitations for external and internal defects shall apply as written in the U.S. No. 1 seed potato grade.

6. An additional 10% may be damaged, but not seriously, by shape.

B. Idaho Certified Green Tag Seed Potatoes

The green tag grade shall be equivalent to the U.S. No. 2 grade with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.

2. Wireworm and/or grub - serious damage by waste. Permit an additional six percent (6%) serious damage by waste.

3. Scab - shall not cover more than one-fifth (1/5) of the surface area.

4. Hollowheart - no requirements.

5. Adhering dirt - no requirements.

6. Loose dirt and/or foreign material - included in total external tolerance.

7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.

8. Clipping - shall not be clipped or trimmed.

9. Second growth - shall not be seriously damaged.

10. Sunburn and light greening - no requirements.

11. Appearance - discoloring of tubers caused by immaturity or the characteristic checking of tubers that occurs under normal conditions shall not disqualify them.

12. Growth cracks - not to exceed a maximum of 10% serious damage.

13. Mechanical injury - shall not be damaged by waste.

14. Air cracks - damage by waste.

15. Serious damage by dry or moist type tuber rot - 2%.

16. Sprouts – no requirements.
17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.

C. Idaho Certified Yellow Tag Seed Potatoes

The yellow tag grade shall be equivalent to the U.S. No. 2 grade with the following exceptions. There is a 1% tolerance for late blight.

1. Maximum and minimum size shall be specified by the grower.

2. Wireworm and/or grub - no requirements.

3. Scab - no requirements.

4. Hollowheart - no requirements.

5. Adhering dirt - no requirements.

6. Loose dirt and/or foreign material - included in total external tolerance.

7. Varietal purity - not more than 0.2% of other tuber identifiable varieties.

8. Clipping - shall not be clipped.

9. Second growth - shall not be seriously damaged.

10. Sunburn and light greening - no requirements.

11. Appearance - no requirements except second growth.

12. Growth cracks - no requirements.

13. Mechanical injury - shall not be seriously damaged by waste.

14. Six percent (6%) serious damage by internal discoloration. Percentages higher than six percent (6%) allowed with Idaho Crop Improvement Association, Inc. approval if laboratory tests show the internal discoloration is not of pathogen origin.

15. Serious damage by dry or moist type tuber rot - 2%.

16. External discoloration – no requirements.

17. Flattened depressed and sunken discolored areas showing no underlying flesh discoloration – no requirements.

18. Rhizoctonia – no requirements

19. Sprouts – no requirements.