LCB File No. T045-99

ADOPTED TEMPORARY REGULATION OF THE DIVISION OF AGRICULTURE OF THE DEPARTMENT OF BUSINESS AND INDUSTRY

(Effective May 25, 1999)

Added text: Underlined
Deleted text: Strikeout type

Authority: NRS 587.077

NAC 587 is hereby amended to read as follows:

STANDARDS FOR CERTIFICATION OF SEEDS GENERALLY

587.222 Definitions.

587.224 "Breeder seed" defined.

587.226 "Certified seed" defined.

587.2265 "Conditioning" defined.

587.228 "Foundation seed" defined.

587.230 "Interagency certification" defined.

587.231 “None” or “Zero” defined.

587.232 "Off-type" defined.

587.2335 "Plant breeder" defined.

587.234 "Registered seed" defined.

587.235 "Variant" defined.

587.236 "Variety" defined.

587.237 Applicability.

587.2375 Noxious weed seeds.

587.238 Eligibility of varieties for certification.

587.239 Classes of certified seed.

587.240 Limitation on generations; exceptions.

587.242 Evidence required of class and source of seed.

587.243 Requirements for land.

587.244 Field inspection; grounds for rejection of seed crop.

587. Movement of seed after harvest.

587.247 Inspections and testing after harvest; use of lot numbers or certified field numbers.

587.248 Blending of seed lots.

587.250 Labeling and sealing: Requirements.

587.251 Labeling: Compliance with national and state law.

587.252 Methods and standards of interagency certification.

587.254 Certification: Application; annual registration of perennial crops; fees.

587.256 Conditioners: Responsibilities; duration of approval.

STANDARDS FOR CERTIFICATION OF ALFALFA SEED

587.258 Applicability.

587.260 Alfalfa regions in Nevada; limitations on age of stand and classes of seed. 25

587.262 Requirements for land.

587.263 Requirements for isolation.

587.267 Fields of alfalfa: Inspections; control of contamination.

587.269 Fields of alfalfa: Maximum tolerances.

587.274 Minimum standards for classes of alfalfa seed.

~~587.278 Requirements for movement of seed.~~

STANDARDS FOR CERTIFICATION OF BARLEY, OAT, RYE, TRITICALE AND WHEAT SEED

587.282 Applicability.

587.283 Requirements for land.

587.284 Requirements for isolation.

587.285 Inspection of seed crops; control of contamination.

587.286 Fields of small grain: Maximum tolerances.

587.288 Minimum standards for classes of small grain.

STANDARDS FOR CERTIFICATION OF BEAN SEED

587.291 Applicability.

587.2925 Requirements for land; use of sprinkler irrigation.

587.294 Fields of beans: Maximum tolerances.

587.296 Minimum standards for classes of bean seed.

STANDARDS FOR CERTIFICATION OF CLOVER

587.297 Applicability.

587.299 Requirements for land.

587.301 Requirements for isolation.

587.302 Fields of clover: Inspections; control of contamination.

587.304 Fields of clover: Maximum tolerances.

587.305 Limitations on age of stand.

587.309 Minimum standards for classes of clover.

STANDARDS FOR CERTIFICATION OF GRASS SEED

587.320 Applicability of various standards.

587.321 Requirements for land.

587.323 Requirements for isolation.

587.325 Fields of grass seed: Inspections; control of contamination.

587.327 Fields of grass seed: Maximum tolerances.

587.329 Minimum standards for classes of grass seed.

STANDARDS FOR CERTIFICATION OF RAPESEED

587.331 Applicability.

587.333 Requirements for land.

587.335 Requirements for isolation.

587.337 Field inspections; control of contamination.

587.3375 Fields of rapeseed: Maximum tolerances.

587.339 Minimum standards for classes of rapeseed.

PRE-VARIETY GERMPLASM CERTIFICATION STANDARDS

Section 1. Applicability.

Sec. 2. Eligibility requirements for species.

Sec. 3. Germplasm Types.

Sec. 4. Designation of seed generations.

Sec. 5. Limitation of generations.

Sec. 6. Unit of certification.

Sec. 7. Land requirements.

Sec. 8. Isolation.

Sec. 9. Production of Seed.

Sec. 10. Labeling.

Sec. 11. Sampling and testing.

STANDARDS FOR CERTIFICATION OF SEEDS GENERALLY

587.222 Definitions. As used in NAC 587.222 to 587.810, inclusive, unless the context otherwise requires, the words and terms defined in NAC 587.224 to 587.236, inclusive, have the meanings ascribed to them in those sections.

(Supplied in codification; A by Dep´t of Agriculture, 12-3-90)

587.224 "Breeder seed" defined. Breeder seed" means seed which is:

1. Directly controlled by the plant breeder or person who originated or sponsored the seed; and

2. The source for the production of seed of the other classes of certified seed.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.226 "Certified seed" defined. "Certified seed" means the progeny of breeder, foundation or registered seed, except as otherwise provided in NAC 587.240, which has been handled to maintain satisfactory genetic purity and identity and has been approved by the division.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.2265 "Conditioning" defined. "Conditioning" means the mechanical handling of seed from harvest until marketing.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.228 "Foundation seed" defined. "Foundation seed" means seed which is:

1. The progeny of breeder or foundation seed produced under control of the person who originated or sponsored the seed; and

2. A class of certified seed that is produced under procedures established by the division for the purpose of maintaining genetic purity and identity.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.230 "Interagency certification" defined. "Interagency certification" means the participation of two or more member agencies of the Association of Official Seed Certifying Agencies in performing the services required to certify the same lot of seed.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80)

587.231 "None" or "zero" defined. "None" or "zero" means none found during the normal inspection or testing procedure.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.232 "Off-type" defined. "Off-type" means any seed or plant that is not a part of the variety because it deviates in one or more characteristics from the variety as described. The term includes:

1. A seed or plant of another variety;

2. A seed or plant not a variety;

3. A seed or plant resulting from cross-pollination by another kind or variety;

4. A seed or plant resulting from uncontrolled self- pollination during production of hybrid seed; or

5. Segregates from any of the seeds or plants listed above.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.2335 "Plant breeder" defined. "Plant breeder" means a person actively engaged in the breeding and maintenance of varieties of plants.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.234 "Registered seed" defined. "Registered seed" means the progeny of breeder or foundation seed which has been handled to maintain satisfactory genetic purity and identity and has been approved by the division.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.235 "Variant" defined. "Variant" means a seed or plant, other than an off-type, that is:

1. Distinct within the variety and occurs naturally in the variety;

2. Stable and predictable with a degree of reliability comparable to other varieties of the same kind within recognized tolerances if the variety is reproduced or reconstituted; and

3. A part of the variety as originally released.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.236 "Variety" defined. "Variety" means a subdivision of a kind which is distinct, uniform and stable. As used in this section:

1. "Distinct" means that the variety can be differentiated by one or more identifiable morphological, physiological or other characteristics from all other known varieties.

2. "Uniform" means that variations in essential and distinctive characteristics may be described.

3. "Stable" means that the variety remains unchanged to a reasonable degree of reliability in its essential and distinctive characteristics and its uniformity if reproduced or reconstituted as required by the different categories of varieties.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.237 Applicability. ~~These general standards are applicable to all crops, and together with those specified for individual crops, constitute the minimum standards of the division for the certification of seeds.~~ The requirements and procedures for the certification of seed which have been approved by the Association of Official Seed Certifying Agencies are hereby adopted by reference and constitute the minimum standards for the production of certified seed in Nevada. A copy of the publication containing these requirements and procedures may be obtained from the division on for request at a cost of $40 per copy. These standards may be modified by NAC 587.222 to , inclusive.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80)

587.2375 Noxious weed seeds. For the purposes of NAC 587.222 to 587.339, inclusive, the following plant seeds and any propagating parts thereof are noxious weed seeds:

Camelthorn (*Alhagi ~~camelorum~~ maurorum*)

Fieldcress, Austrian (*Rorippa austriaca*)

Goatgrass, barb (*Aegilops triuncialis*)

Goatgrass, jointed (*Aegilops cylindrica*)

Halogeton (*Halogeton glomeratus*)

Horsenettle, Carolina (*Solanum carolinense*)

Klamath weed (*Hypericum perforatum*)

Knapweed, Russian (*Acroptilon* ~~*Centaurea*~~ *repens*)

Medusahead (*Taeniatherum caput-medusae* ~~*asperum*~~) subsp. *caput-medusae*

Peaweed, Austrian (~~*Swainsona*~~ *Sphaerophysa salsula*)

Quackgrass (~~*Agropyron*~~ *Elytrigia repens*)

Skeletonweed, rush (*Chondrilla juncea*)

Sorghum species, perennials; including Johnson grass (*Sorghum halepense*), *Sorghum almum* and perennial sweet ~~Sudan grass~~ sudangrass

Sowthistle, perennial (*Sonchus arvensis*)

Spurge, leafy (*Euphorbia esula*)

Starthistle, Iberian (*Centaurea iberica*)

Starthistle, purple (*Centaurea calciptrapa*)

Starthistle, yellow (*Centaurea solstitialis*)

Thistle, Canada (*Cirsium arvense*)

Toadflax, Dalmatian (*Linaria dalmatica*)

Whitetop or Hoarycress (*Cardaria chalepensis, C. draba, C. pubescens*)

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.238 Eligibility of varieties for certification.

1. A variety is eligible for certification by the division only if it has been approved as meriting certification by at least one certifying agency or by an appropriate national variety review board.

2. Before a variety will be considered for certification, the originator, developer, owner or agent must request certification and provide the following information:

(a) The name of the variety, which must be the established name if the variety has been previously marketed.

(b) A statement of the variety's origin and the breeding procedure used in its development.

(c) A detailed description of the morphological, physiological and other important characteristics of plants and seed, including variants, that distinguish it from other varieties.

(d) Evidence of performance, including comparative yield data, insect and disease resistance and other factors supporting the identity of the variety.

(e) A statement on the plans and procedures for the maintenance of classes of stock seed, including the number of generations through which the variety may be multiplied.

(f) A statement delineating the geographic area of adaptation of the variety.

(g) A description of the manner in which the variety is constituted if the particular cycle of reproduction or multiplication is specified.

(h) Any additional restriction on the variety specified by the breeder with respect to geographic area of seed production, age of stand and other factors affecting genetic purity.

(i) A sample of seed representative of the variety as marketed. The size of the sample is that required for a submitted sample in the current issue of the Rules for Testing Seeds published by the Association of Official Seed Analysts and available at cost from the division.
(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.239 Classes of certified seed. The following classes of certified seed are recognized in the certification of seed: breeder, foundation, registered and certified. These classes of seed must meet the standards of the division for the respective crops.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.240 Limitation on generations; exceptions. The number of generations through which a variety may be multiplied must be limited to that specified by the originating breeder or owner of a variety, but may not exceed two generations beyond foundation seed, with the following exceptions:

1. Recertification of the certified class may be permitted for older varieties of crops if foundation seed is not being maintained.

2. The production of an additional generation of the certified class may only be permitted on a 1-year basis when an emergency is declared by the certifying agency, stating that the supply of foundation and registered seed is not adequate to plant the needed certified acreage of the variety. The permission of the originating or sponsoring breeder or owner of the variety, if existent, must be obtained. The additional generation of certified seed to meet the emergency need is ineligible for recertification.
(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.242 Evidence required of class and source of seed. The division must be supplied with satisfactory evidence of the class and source of seed used to plant each crop being considered for certification. A certification tag from each lot of seed planted must accompany the application for certification. If no tags are available, a sales record or other documentation must be provided that identifies the source of seed.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.243 Requirements for land. The following requirements for land must be met in addition to those specified in the standards for individual crops:

1. The unit of certification must be a clearly defined area of land which may be divided subject to regulations for specific crops.

2. A field history must be provided to the division which states the crops planted in previous years as required by the standards for each crop.

3. The division may approve a modification of land history if a cultural practice is proven successful. As used in this subsection, "cultural practice" includes mechanical means for preparation of a seed bed, such as deep plowing, and chemical means, such as the use of fumigants or other materials. The materials and method that are used must be reported to the division. The method used must be approved by the division and adequate to maintain varietal purity. To aid in distinguishing between volunteers and the crop seeded, the seed must be planted in distinct rows but the spacing of the rows may vary.

4. The time interval for land history must not be less than the requirement stated in the Federal Seed Act, 7 C.F.R. §§ 201 et seq., for the specified crop and appropriate certified generation. A copy of the Federal Seed Act may be obtained from the Superintendent of Documents, U.S. Government Printing Office, Washington, D.C. 20402, at a cost of $18.

5. The division may approve reseeding of a field but will not allow reseeding after a field has produced a seed crop.

6. Manure or other contaminating amendments must not be applied the year before seeding or during the established productive life of the stand.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.244 Field inspection; grounds for rejection of seed crop. One or more field inspections will be made each time a seed crop of any certified class is to be harvested and when genetic purity and identity, or any other factor affecting seed certification can best be determined. The division may reject a seed crop if any condition, such as excessive weediness, poor stand or disease, prevents adequate inspection of a field.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587. Requirements for movement of seed.

1. All seed, cleaned or uncleaned, moving out of the state in bulk containers must be accompanied by an interstate transfer of seed certificate. Cleaned seed moving within the state in bulk containers must also be accompanied by this certificate.

2. The certificate will be issued by the department, or its designated representative, and must be completed before the seed is moved.

587.247 ~~Inspections~~ Conditioning and testing after harvest; use of lot numbers or certified field numbers.

1. Harvested lots of seed from inspected fields may be inspected at any time by the division. Evidence that any lot of seed has not been protected from contamination which affects genetic purity, or is not properly identified, is cause for rejection of certification.

2. Conditioners processing seed eligible for certification must apply to the division for approval and meet the following conditions:

(a) Facilities must be available to perform conditioning without introducing mixtures;

(b) The identity of the seed must be maintained at all times;

(c) Records of all operations relating to certification must be complete and adequate to account for all seed lots from arrival at the plant to final disposition;

(d) Permit inspection by the division of all records pertaining to certified seed; and

(e) Conditioners must designate an individual who will be responsible to the division for performing duties necessary to meet certification requirements.

3. Approval of conditioners will be on an annual basis.

~~2.~~ 4. Lot numbers or certified field numbers must be:

(a) Placed on each container or bag of seed; and

(b) Visible during the process of conditioning.

~~3.~~ 5. A representative sample of each lot of seed must be taken before final certification to determine whether the seed meets the standards for purity, germination or other specific requirement for certification. All samples must be taken and tested in accordance with the current edition of the Rules for Testing Seeds published by the Association of Official Seed Analysts and available at cost from the division.

~~4.~~ 6. All seed or plant samples taken for determination of certification eligibility must be tested by the division or in a laboratory approved by the division.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.248 Blending of seed lots. Seed lots of the same variety and seed variety and seed class may be blended and the seed class retained. If lots of different classes are blended, the lowest class must be applied to the resultant blend. Such blending must be authorized by the division.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.250 Labeling and sealing: Requirements.

1. Seed of all certified classes, when offered for sale in bags or other containers, must have an official certification label, properly affixed to each container, clearly identifying the certifying agency, kind, variety, lot number and class of seed. In the case of seed sold in bulk, the invoice must include the same information as required for the label on seed sold in containers. Certification labels on seed mixtures and seed in containers of 5 pounds or less are not required to bear the name of the kind and variety of each component provided the name of the kind or kind and variety is shown elsewhere on container.

2. The official certification label may be printed directly on the container if accounting for the use of such containers is maintained by the division.

3. Certification labels will meet the color and other specifications approved by the Association of Official Seed Certifying Agencies.

~~3.~~ 4. Requirements for labeling for certification and sealing depend upon the crop and methods of handling, but in all cases labels must be attached to containers in a manner that prevents removal and reattachment.

5. The seller is responsible for analysis labeling requirements under the law of the country, state or province into which the seed is shipped or sold.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

~~587.251 Labeling: Compliance with national and state law. The seller is responsible for compliance with the requirements for labeling seed under the law of the country, state or province into which the seed is shipped or sold.~~

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80)

587.252 Methods and standards of interagency certification.

1. The methods and standards employed in each step of interagency certification are those used when certification is completed by a single agency with the exception that seed for which final certification is completed in Nevada must meet the minimum requirements for the crop and variety as specified by the Association of Official Seed Certifying Agencies.

2. To be recognized for interagency certification, seed must be received in containers carrying official certification labels or evidence of its eligibility from another certifying agency, including the following information:

(a) Variety and kind;

(b) Amount of seed in pounds or bushels;

(c) Class of certified seed; and

(d) Inspection or lot number traceable to the previous certifying agency´s records.

3. In addition to complying with NAC 587.250, each label used in interagency certification must be serially numbered, or carry the certification identity number and clearly identify the certifying agencies involved and the variety, kind and class of seed, except for lawn and turf seed mixtures, and vegetable seed in containers of 5 pounds or less, for which the labels need not bear the name of the kind or kind and variety, provided the name of the kind or kind and variety and agencies involved are shown elsewhere on the containers.

4. When a container of certified is opened and relabeled, all procedures must be with the approval of the certifying agency.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.254 Certification: Application; annual registration of perennial crops; fees.

1. Application for certification must be made on a form obtained from the division.

2. To maintain certification, a perennial crop must be registered each year, including the seedling year, whether or not a seed crop is harvested during that year.

3. Applications must be accompanied by ~~an application fee of $15 per field~~ the acreage fees and are due on the following dates:

(a) Alfalfa, grass, clover and rapeseed, May 1.

(b) Small grain and beans, June 1.

(c) ~~Registration for the first time of any perennial crop that is planted after May 1,~~ Crops planted after the above deadlines must be registered within 30 days after planting.

(d) Seed fields or orchards of the selected, tested or source identified class, 30 days prior to planting.

(e) Natural stands of the tested or selected class and source identified class stands, 15 days prior to first harvest in a designated area.

4. The division will charge the following fees:

(a) Field crops

	~~Application (Per field)~~	Acreage (Per acre)	Production (Clean seed)
Alfalfa	~~$15~~	[$1] $2.50	[$.25/cwt] $.15/cwt
Beans	~~15~~	[2] 3.50	.15/cwt
Clover	~~15~~	[1] 2.50	[.25/cwt] .15/cwt
Grass	~~15~~	[1] 2.50	[.25/cwt] .15/cwt
Rapeseed	~~15~~	[1] 2.50	[.25/cwt] .15/cwt
Small grains	~~15~~	[1] 2.50	.10/cwt

(b) Pre-variety germplasm

Tested Class

Seed fields or orchards - $2 per acre plus $.10 per tag if tags are requested
Natural stands - $30 per site plus $.10 per tag if tags are requested

Selected Class

Seed fields or orchards - $2 per acre plus $.10 per tag if tags are requested
Natural stands - $30 per site plus $.10 per tag if tags are requested

Source Identified Class - $30 per site plus $.10 per tag if tags are requested

The division will charge an acreage fee of at least ~~$10~~ $25 per field.

5. Application and acreage fees must be submitted with the application. The division will bill production fees after the seed is cleaned and only if the lot meets certification standards.

6. The division will collect ~~application and~~ acreage fees on all perennial crops in the year of ~~seedling~~ seeding and in each calendar year thereafter.
7. The division will refund the acreage fee:

(a) For all crops, if the application is withdrawn in writing before a field inspection.

(b) For a perennial crop for any year, except the seedling year, if the division is notified that the crop is not intended to produce seed. The division must be notified in writing before the field is inspected.

8. The production fee will be collected only on seed for which final certification is made by the division.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.256 Conditioners: Responsibilities; duration of approval.

1. Conditioners requiring certification services must apply to the division.

2. To condition seed eligible for certification, a conditioner must meet the following requirements:

(a) Facilities must be available to perform the conditioning without introducing admixtures;

(b) Identity of the seed must be maintained at all times;

(c) Records of all operations relating to certification must be complete and adequate to account for all incoming seed and final disposition of seed; and

(d) Conditioners must permit inspection by the division of all records of the kind of seed certified, including both certified and noncertified seed.

3. Approved conditioners shall designate a person responsible to the division for performing such duties as are required.

4. Approval of conditioners is on an annual basis.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

STANDARDS FOR CERTIFICATION OF ALFALFA SEED

587.258 Applicability. The general standards for certification of seed as adopted by the division and NAC 587.260 to 587.278, inclusive, govern the standards for the certification of alfalfa seed.

(Added to NAC by Dep´t of Agriculture, eff. 5-1-79; A 12-3-90)

587.260 Alfalfa regions in Nevada; limitations on age of stand and classes of seed.

1. The northern alfalfa region in Nevada consists of the area north of the 40th parallel.

2. The central alfalfa region in Nevada consists of the area south of the 40th parallel.

3. Limitations on the age of stand and classes of seed through which a variety may be multiplied for both inside and outside of the region of adaptation may be specified by the originator or owner of the seed. Production of certified seed outside of the region of adaptation must not exceed 6 years unless otherwise specified by the originator or owner.

(Added to NAC by Dep´t of Agriculture, eff. 5-1-79; A 12-3-90)

587.262 Requirements for land.

1. Land intended for the production of foundation, registered or certified classes of seed must not have been planted with any variety of alfalfa and must be free from volunteer alfalfa plants for 4, 3 and ~~2~~ 1 years, respectively, preceding the establishment of the stand.

2. The application must indicate the crops grown for the previous 4, 3 and ~~2~~ 1 years on the land intended for the production of the foundation, registered or certified classes of seed, respectively.

3. At least 2 years must elapse between the destruction of varieties of dissimilar adaptation (varieties which differ by 4 or more points on a dormancy rating scale as reported by the National Alfalfa Variety Review Board) and establishment of a new stand for the production of seed for certification.

4. During the year immediately prior to the seeding of any class of seed, the land shall be free from volunteer plants. No manure or other contamination amendments shall be applied the year previous to seeding or during the established and productive life of the stand.

(Added to NAC by Dep´t of Agriculture, eff. 5-1-79; A 12-3-90)

587.263 Requirements for isolation.

1. Except as otherwise provided in subsections 2 and 3, the minimum distance a field of alfalfa must be from a different variety or a field of the same variety of alfalfa that does not meet the requirements for varietal purity for certification is:

Class produced	Field of less than 5 acres	Field of 5 acres or more
Foundation	900 feet	600 feet
Registered	450 feet	300 feet
Certified	165 feet	165 feet

2. Requirements for isolation for the certified class are based on the size of the field and the percentage of the field within 165 feet from another variety of alfalfa. If 10 percent or less of the certified field is within 165 feet, no isolation is required, but a definite separation must be

maintained. If more than 10 percent of the field is within 165 feet, that part of the field must not be harvested as certified seed. The zone of isolation is calculated by multiplying the length of the common border with other varieties of alfalfa by the average width of the certified alfalfa field falling within the requirement of a distance of 165 feet isolation.

3. The distance of isolation between classes of the same variety may be reduced to 10 feet, regardless of the class or size of a field.

4. If a portion of a field meets the requirements for isolation, a clear line of demarcation must be established between the certified and noncertified portions of the field.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-80; A 12-3-90)

587.267 Fields of alfalfa: Inspections; control of contamination.

1. The division will make the following inspections of a field of alfalfa:

(a) A seedling inspection will be made in the year the crop is planted; and

(b) A seed crop inspection will be made when the crop is in bloom.

2. The division may reject or reclassify a seed field if volunteer plants are found.

3. All fields entered for certification must show evidence of control of:

(a) Contaminating crops and varieties; and

(b) Objectionable and noxious weeds.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.269 Fields of alfalfa: Maximum tolerances. A field of alfalfa must meet the following tolerances to be eligible for certification:

	Maximum permitted in each class		
Factor	Foundation	Registered	Certified
Other varieties, including off-type plants	0.1%	0.25%	1.0%
Red Clover	none	0.10%	0.5%
Sweetclover (plants per acre)	none	5	5

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.274 Minimum standards for classes of alfalfa seed.

1. Each lot of seed entered for certification must be sampled and meet the minimum standards for the class of seed produced. Samples will be drawn by a representative of the division pursuant to NAC 587.180 and 587.190, and must meet the following standards:

Standards for Each Class

Factor	Foundation	Registered	Certified
Pure seed (minimum)	99.5%	99.5%	99.5~~0~~%
Other crop (maximum)	0.1%	0.1%	0.25%
Sweetclover (maximum)	none	45/lb	90/lb
Weed seed (maximum)	0.1%	0.2%	0.25%
Noxious weed seed (maximum)	none	none	none
Objectionable weed seed (maximum)	none	none	none
Inert matter (maximum)	0.5%	0.5%	0.5~~0~~%
Germination and hard seed (minimum)	80.0%	~~80.0%~~ 85.0%	85.0~~0~~%

2. For the purposes of this section, "objectionable weed seed" includes field bindweed (*Convolvulus arvensis*), dodder (*Cuscuta* spp.) and dogbane (*Apocynum cannabinum*).

(Added to NAC by Dep´t of Agriculture, eff. 5-1-79; A 6-11-80; 12-3-90)

~~587.278 Requirements for movement of seed.~~

~~1. All seed, cleaned or uncleaned, moving out of the state in bulk containers must be accompanied by a moving permit. Cleaned seed moving within the state in bulk containers must also be accompanied by a permit.~~

~~2. A permit for moving seed will be issued by the division and must be obtained before the seed is moved.~~

~~(Added to NAC by Dep´t of Agriculture, eff. 5-1-79)~~

STANDARDS FOR CERTIFICATION OF BARLEY, OAT, RYE, TRITICALE AND WHEAT SEED

587.282 Applicability. The general standards for certification of seed of the division and NAC 587.283 to 587.288, inclusive, govern the certification of barley, oat, rye, triticale and wheat seed.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.283 Requirements for land.

1. A small grain crop that is grown for certification must not be planted on land on which the last crop grown was of the same kind, unless the last crop grown was of the same variety and met all certification requirements for the same or higher class.

2. The application for certification must indicate the crops grown the previous year on the land.
(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.284 Requirements for isolation.

1. A field of wheat, oats, barley or triticale must be separated by a strip of ground adequate to prevent mechanical mixtures.

2. A field producing any class of rye must be isolated by at least 660 feet from a fields of any other variety or a fields of the same variety that ~~does~~ do not meet the varietal purity requirements ~~for certification~~ of the class of seed inspected and ~~same or higher class of the crop being grown~~ is of the same chromosome number.

3. If a portion of a field meets the requirements for isolation, a clear line of demarcation must be established between the certified and noncertified portions of the field.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.285 Inspection of seed crops; control of contamination.

1. The division will make an inspection of a seed crop of small grain after seed heads are produced.

2. A field of small grain entered for certification must show evidence of control of:

(a) Contaminating crops and varieties; and

(b) Objectionable and noxious weeds.
(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.286 Fields of small grain: Maximum tolerances.

1. Except as otherwise provided in subsection 2, a field of small grain must meet the following tolerances to be eligible for certification:

Maximum permitted in each class (Ratio of plants)

Factor	Foundation	Registered	Certified
Other varieties	none	1:5,000	1:2,000
Other small grain	none	1:10,000	1:3,000
Wild oats	none	1:10,000	1:3,000
Smut	1:10,000	1:10,000	1:1,000

2. Rye ~~or triticale~~ is not permitted in barley, oats, triticale or wheat.

3. Triticale is not permitted in barley, oats, rye or wheat.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.288 Minimum standards for classes of small grain.

1. The following standards are established for foundation, registered and certified classes of small grain:

Factor	Foundation	Registered	Certified
Pure seed (minimum)	98.00%	98.00%	98.00%
Other crop (maximum)	none	0.03%	0.05%
Other small grain (maximum)	none	2/lb	4/lb
Weed seed (maximum)	0.01%	0.01%	0.03%
Noxious weed seed (maximum)	none	none	none
Objectionable weed seed (maximum)	none	none	none
Inert matter (maximum)	2.00%	2.00%	2.00%
Ergot (maximum)	0.05%	0.05%	0.05%

Germination (minimum)	85.00%	85.00%	85.00%

2. Rye ~~or triticale~~ is not permitted in barley, oats, triticale or wheat.

3. Triticale is not permitted in barley, oats, rye or wheat.

~~3.~~ 4. As used in this section:

(a) "Objectionable weed seed" includes wild oats (*Avena fatua*).

(b) "Other crop" does not include other small grain.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

STANDARDS FOR CERTIFICATION OF BEAN SEED

587.291 Applicability. The general standards for certification of seed as adopted by the division and NAC 587.291 to 587.296, inclusive, govern the standards for certification of bean seed.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.2925 Requirements for land~~; use of sprinkler irrigation~~.

1. A field of beans planted for the production of foundation, registered or certified classes of seed must not have been planted to or grown a crop of beans for 1 year unless the previous crop was:

(a) Eligible for certification;

(b) The same variety; and

(c) The same or higher class.

2. A field of beans:

(a) On which bacterial blight has been found is eligible to grow certified beans if it has been planted to a crop other than beans for 2 years.

(b) Must be separated from other beans that are planted by at least 10 feet.

~~3. The division may grant permission for sprinkler irrigation upon request.~~

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.294 Fields of beans: Maximum tolerances.

1. A minimum of 2 field inspections will be made during the growing season, with at least one during the windrow stage.

~~1.~~ 2. A field of beans must meet the following tolerances to be eligible for certification:

Maximum permitted in each class

Factor	Foundation	Registered	Certified
Other varieties	none	0.05%	0.1%
Other crops (inseparable)	none	0.05%	0.1%
Anthracnose, bacterial bean blights, wilt and brown spot	none	none	none
Bean common mosaic virus	none	0.50%	~~0.5%~~ 1.0%
Inseparable noxious weeds ~~seed~~	none	none	none

~~2. As used in this section, "other crops" includes inseparable other crops, other varieties and distinct off-types.~~

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.296 Minimum standards for classes of bean seed.

1. The division will examine a sample of the cleaned seed lot for:

	Permitted in each class		
Factor	Foundation	Registered	Certified
Pure seed (minimum)	99.00%	99.00%	99.00%
Other crop (maximum)	none	00.01%	~~00.02%~~ 0.00125%
~~Other varieties (maximum seeds/lb)~~	~~none~~	~~0.50%~~	~~0.50%~~
Weed seed (maximum)	none	none	0.10%
Noxious weed seed (maximum)	none	none	none

Objectionable weeds[1]	none	none	none
Inert matter (maximum)	1.00%	1.00%	1.00%
Germination (minimum)	85%	85.00%	85.00%

[1] Objectionable weeds include: Poverty weed (*Iva axillaris*), Fanweed (*Thlaspi arvense*), *Rumex* spp., Wild Oats (Avena fatua), or Nightshade Berries

2. The following are the maximum percentage of defects that are allowed for all classes of bean seed:

(a) Splits and cracks, 1 percent;

(b) Badly discolored, 1 percent; and

(c) Total defects plus inert matter, 2 percent~~; and~~.

~~(d) Inert matter, 0.5 percent.~~

3. Seed must:

(a) Be well screened and graded;

(b) Have a bright color; and

(c) Have a good appearance.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

STANDARDS FOR CERTIFICATION OF CLOVER

587.297 Applicability. The general standards for seed certification of the division and NAC 587.299 to 587.309, inclusive, govern the certification of alsike, arrowleaf, crimson, red, strawberry, sweet and white clovers.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.299 Requirements for land.

1. A crop of the same kind must not have been grown or planted on the land for 5 years before stand establishment for the production of foundation seed, 3 years for registered seed and 2 years for certified seed.

2. The application must indicate the crops grown for the previous 5, 3 or 2 years on land intended for the production of foundation, registered or certified classes of seed, respectively.

3. During the year before seeding, the land must be free from volunteer plants of that crop. Reseeding varieties of crimson clover may be allowed to volunteer back year after year on the same ground. When a new reseeding variety is planted where another variety once grew, the field history requirements prevail.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.301 Requirements for isolation.

1. Except as otherwise provided in subsection 2, the minimum distance in feet from a different variety of the same kind or a field of the same variety that does not meet the varietal purity requirements for certification is as follows:

Class	Fields of less than 5 acres	Fields of more than 5 acres
Foundation	~~1,320~~ 900	~~1,320~~ 600
Registered	~~660~~ 450	~~330~~ 300
Certified	~~330~~ 165	165

2. The distance of isolation between classes of the same variety may be reduced to ~~25 percent of that listed in subsection 1~~ 10 feet, regardless of class or size of the field.

3. The isolation between diploids and tetraploids shall be at least 15 feet.

~~3.~~ 4. If a portion of the field meets requirements for isolation, a clear line of demarcation must be established between the certified and noncertified portions of the field.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.302 Fields of clover: Inspections; control of contamination.

1. The division will make the following inspections of a field of clover:

(a) A seedling inspection will be made in the year the crop is planted; and

(b) A seed crop inspection will be made when the crop is in bloom.

2. The division may reject or reclassify a seed field if volunteer plants are found. This does not apply to crimson clover unless a new variety is being planted where another variety once grew.

3. A field of clover entered for certification must show evidence of control of:

(a) Contaminating crops and varieties; and

(b) Objectionable and noxious weeds.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.304 Fields of clover: Maximum tolerances.

1. A field of clover must meet the following tolerances to be eligible for certification:

	Maximum permitted in each class (ratio of plants)		
Factor	Foundation	Registered	Certified
Other varieties ~~(maximum)~~	none	1:500	1:200

2. As used in this section, "other varieties" includes off-type plants.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.305 Limitations on age of stand.

1. A stand of red clover is not eligible to produce any class of certified seed after two seed crops which are produced either in the same or consecutive years.

2. For white and alsike clover:

(a) A foundation or registered field may produce only two successive seed crops following seeding except that each may be reclassified to the next lower class after being harvested for seed for 2 years. A stand will not be eligible to produce any class of seed after four consecutive seed crops immediately following the year of establishment.

(b) A certified field on which a stand of perennial plants is maintained may produce ~~seed for~~ no more than 4 seed crops ~~years~~ immediately following ~~the year of~~ establishment.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.309 Minimum standards for classes of clover.

1. The following seed standards are established for foundation, registered and certified classes of clover:

	Arrowleaf and Crimson	Red	Strawberry	Sweet	White and Alsike
FOUNDATION					
Pure seed (minimum)	98.00%	99.00%	99.00%	99.50%	99.00%
Other crop (maximum)	0.10%	0.10%	0.10%	0.10%	0.10%
Sweetclover (maximum)	none	none	none	-----	none
Weed seed (maximum)	0.20%	0.15%	0.20%	0.10%	0.10%
Inert matter (maximum)	2.00%	1.00%	1.00%	1.00%	1.00%
Noxious weed seed (maximum)	none	none	none	none	none
Objectionable weed seed (maximum)	none	none	none	none	none
Germination (minimum)	85.00%	85.00%	85.00%	85.00%	85.00%

	Arrowleaf and Crimson	Red	Strawberry	Sweet	White and Alsike
REGISTERED					
Pure seed (minimum)	98.00%	99.00%	99.00%	99.50%	99.00%
Other crop (maximum)	0.25%	0.25%	0.25%	0.10%	0.25%
Sweetclover (maximum)	90/lb	45/lb	45/lb	-----	90/lb
Weed seed (maximum)	0.25%	0.15%	0.02%	0.02%	0.25%
Inert matter (maximum)	2.00%	1.00%	1.00%	1.00%	1.00%
Noxious weed seed (maximum)	none	none	none	none	none
Objectionable weed seed (maximum)	none	none	none	none	none
Germination (minimum)	85.00%	85.00%	85.00%	85.00%	85.00%

	Arrowleaf and Crimson	Red	Strawberry	Sweet	White and Alsike
CERTIFIED					
Pure seed (minimum)	~~90.00%~~ 98.00%	99.00%	99.00%	99.50%	99.00%

Other crop (maximum)	0.04%	0.25%	0.25%	0.25%	0.25%
Sweetclover (maximum)	180/lb	90/lb	90/lb	-----	180/lb
Weed seed (maximum)	0.50%	0.25%	0.20%	0.25%	0.50%
Inert matter (maximum)	2.00%	1.00%	1.00%	1.00%	1.00%
Noxious weed seed (maximum)	none	none	none	none	none
Objectionable weed seed (maximum)	none	none	none	none	none
Germination (minimum)	85.00%	85.00%	85.00%	85.00%	85.00%

2. As used in this section:

(a) "Germination" includes hard seed.

(b) "Objectionable weed seed" includes the following and is permitted in seed with a maximum content as listed below:

	Foundation	Registered	Certified
Convolvulus arvensis	none	none	none
Cuscuta spp.	none	none	none
Plantago spp.	none	45/lb	90/lb
Rumex spp.	none	45/lb	90/lb

(c) Foundation class red clover must be free of *Brassica* spp.
(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

STANDARDS FOR CERTIFICATION OF GRASS SEED

587.320 Applicability of various standards.

1. The general standards of the division for certification of seed, together with the standards of NAC 587.320 to 587.329, inclusive, govern the standards for the certification of grass seed.

2. All classes of certified seed may be produced from planting stock which was vegetatively propagated according to the procedure specified by the originator, but in such cases the standards for the vegetative propagation of grasses apply.
(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.321 Requirements for land.

1. Foundation seed must be produced on land on which the same species was not seeded or grown during the previous 5 crop years.

2. Registered seed must be produced on land on which the same species was not seeded or grown during the previous 2 crop years.

3. Certified seed must not be produced on land on which the same species was seeded or grown during the previous year unless the last crop grown is of the same variety and meets all requirements for certification of the same or higher class.

4. The application must indicate the crops grown for the previous 5, 2 or 1 years on the land intended for the production of foundation, registered or certified classes of seed, respectively.

(Added to NAC by Dep´t of Agriculture, eff. 6-11-80; A 12-3-90)

587.323 Requirements for isolation.

1. ~~Except as otherwise provided in subsection 2, a field of grass seed must meet the following requirements for isolation to be eligible for certification~~ The following isolation requirements must be met when any other strain or strains of the species is in bloom at the same time except that the minimum isolation for all seed classes of tetraploids shall be 15 feet from diploids of the same species:

		Minimum isolation		
Type of reproduction	Border to be removed	Foundation	Registered	Certified
Cross-pollinated	0 feet	900 feet	~~200~~ 300 feet	165 feet
	9 feet	600 feet	225 feet	100 feet
	15 feet	450 feet	150 feet	75 feet
Strains at least 80 percent apomictic and highly self-fertile species	0 feet	60 feet	30 feet	15 feet
	9 feet	30 feet	15 feet	15 feet

2. If different classes of the same variety, which must also meet certification requirements, are being grown on the same or adjacent fields, the requirement for isolation may be reduced to 25 percent of that shown in the table in subsection 1.

3. Border removal ~~is permitted when the minimum distance of isolation, shown at the right of a "0" in the first column of the table in subsection 1, cannot be provided~~ applies only to fields of 5 acres or more. Where a border is to be removed, such removal must not occur until pollination of the crop to be certified is completed. The distance is the minimum isolation required for each class of seed after border removal.

4. For the purposes of this section, varieties within species with both cross-pollinated and apomictic type of reproduction are considered highly apomictic for minimum isolation unless otherwise specified for that variety.

~~5. As used in this section, "border removal" means the removal, after flowering, of a portion of the seed field adjacent to a contaminating source and applies only to a field of 5 acres or more.~~

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.325 Fields of grass seed: Inspections; control of contamination.

1. The division will make the following inspections of a field of grass seed:

(a) A seedling inspection will be made in the year the crop is planted; and

(b) A field inspection will be made after heading and before harvesting.

2. The division may reject or reclassify a field of grass seed if volunteer plants or noxious weeds are found in or around the borders of a field.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.327 Fields of grass seed: Maximum tolerances.

1. A field of grass seed must meet the following tolerances to be eligible for certification:

	Maximum permitted in each class		
Factor	Foundation	Registered	Certified
Other varieties	none	0.5%	~~1.0%~~ 2.0%

2. As used in this section, "other varieties" includes off- type plants and plants that can be differentiated by the varietal description from the variety being inspected.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.329 Minimum standards for classes of grass seed.

1. The following standards for grass seed apply to the foundation and registered classes:

Species	Type of reproduction1	Percent pure seed (minimum)	Percent other crop (maximum)	Percent weed seed (maximum)2	Percent inert matter (maximum)	Percent germination (minimum)
~~Bentgrass~~ ~~*Agrostis* spp.~~	~~C~~	~~96%~~	~~0.2%~~	~~0.1%~~	~~4%~~	~~85%~~
Bluegrass, Kentucky *Poa* ~~spp.~~ *pratensis*	C,A	95%	0.1%	~~0.1%~~ 0.3%	5%	75%
Bromegrass, Meadow *Bromus biebersteinii*	C	95%	0.1%	0.1%	5%	85%
Bromegrass, Smooth *Bromus inermis* subsp. *inermis*	C	95%	0.1%	0.1%	5%	85%
Fescue, Chewings *Festuca rubra* subsp. *commutata*	C	98%	0.1%	0.1%	2%	85%
Fescue, Hard *Festuca longifolia*	C	95%	0.1%	0.1%	5%	85%
~~Fescue, Idaho~~ ~~*Festuca idahoensis*~~	~~C~~	~~95%~~	~~0.1%~~	~~0.1%~~	~~5%~~	~~85%~~
Fescue, Meadow *Festuca pratensis*	C	95%	0.1%	0.1%	5%	85%
Fescue, Red *Festuca rubra* subsp. *rubra*	C	98%	0.1%	0.1%	2%	85%
Fescue, Sheep *Festuca ovina*	C	98%	0.1%	0.1%	2%	85%
Fescue, Tall *Festuca arundinacea*	C	98%	0.1%	0.3%	2%	85%
Indian Ricegrass *Oryzopsis hymenoides*	C	95%	0.5%	0.3%	5%	80%
Orchardgrass *Dactylis glomerata*	C	90%	0.1%	0.3%	5%	85%
Ryegrass *Lolium* spp.	C	96%	0.2%	0.2%	4%	85%
~~Tall Oatgrass~~ ~~*Arrhenatherum*~~						

~~*elatius*~~	~~C~~	~~90%~~	~~0.5%~~	~~0.3%~~	~~10%~~	~~70%~~
Timothy *Phleum pratense*	C	97%	0.1%	0.1%	3%	80%
Wheatgrass, Crested *Agropyron cristatum*, *A. desertorum*	C	95%	0.1%	0.1%	5%	80%
~~Wheatgrass, Beardless~~ ~~*Agropyron inerme*~~	~~C~~	~~90%~~	~~0.1%~~	~~0.1%~~	~~5%~~	~~80%~~
~~Wheatgrass, Bluebunch~~ ~~*Agropyron spicatum*~~	~~C~~	~~90%~~	~~0.1%~~	~~0.1%~~	~~5%~~	~~80%~~
Wheatgrass, Intermediate ~~*Agropyron intermedium*~~ *Elytrigia intermedia* subsp. *intermedia*	C	95%	0.1%	0.1%	5%	80%
~~Wheatgrass, Pubescent~~ ~~*Agropyron trichophorum*~~	~~C~~	~~95%~~	~~0.1%~~	~~0.1%~~	~~5%~~	~~80%~~
Wheatgrass, Siberian *Agroyron ~~sibiricum~~* *fragile* subsp. *sibericum*	C	95%	0.1%	0.1%	5%	80%
Wheatgrass, Streambank ~~*Agropyron riparium*~~ *Elymus lanceolatus* subsp. *lanceolatus*	C	90%	0.1%	0.1%	10%	80%
Wheatgrass, Tall ~~*Agropyron elongatum*~~ *Elytrigia elongata*	C	95%	0.1%	0.1%	5%	85%
Wildrye, Basin ~~*Elymus cinereus*~~ *Leymus cinereus*	C	90%	0.1%	0.1%	5%	80%
Wildrye, Canada *Elymus canadensis*	S	85%	0.1%	0.1%	15%	70%
Wildrye,-Russian ~~*Elymus junceus*~~ *Psathyrostachys juncea*	C	90%	0.1%	0.1%	5%	80%

2. The following standards for grass seed apply to the certified class:

Species	Type of repro-duction1	Percent pure seed (minimum)	Percent other crop (maximum)	Percent weed seed (maximum)2	Percent inert matter (maximum)	Percent germination (minimum)

~~Bentgrass~~ ~~*Agrostis* supp.~~	~~C~~	~~96%~~	~~0.3%~~	~~0.25%~~	~~4%~~	~~85%~~
Bluegrass, Kentucky *Poa* ~~supp.3~~ *pratensis*	C,A	95%	~~0.5%~~ 0.25%	0.30%	5%	75%
Bromegrass, Meadow *Bromus biebersteinii*	C	95%	0.5%	0.30%	5%	85%
Bromegrass, Smooth *Bromus inermis*	C	95%	0.5%	0.30%	5%	85%
Fescue, chewings *Festuca rubra* subsp. *commutata*	C	97%	0.5%	0.30%	3%	85%
Fescue, Hard *Festuca longifolia*	C	97%	0.5%	0.30%	3%	85%
~~Fescue, Idaho~~ ~~*Festuca idahoensis*~~	~~C~~	~~97%~~	~~0.5%~~	~~0.30%~~	~~3%~~	~~85%~~
Fescue, Meadow *Festuca pratensis*	C	97%	0.5%	0.30%	3%	85%
Fescue, Red *Festuca rubra* subsp. *rubra*	C	97%	0.5%	0.30%	3%	85%
Fescue, Sheep *Festuca ovina*	C	98%	0.5%	0.30%	2%	85%
Fescue, Tall *Festuca arundinacea*	C	98%	0.5%	0.30%	2%	85%
Indian Ricegrass *Oryzopsis hymenoides*	C	90%	1.0%	0.50%	10% 8	0%
Orchardgrass *Dactylis glomerata*	C	90%	0.5%	0.50%	10%	85%
Ryegrass *Lolium* spp.	C	97%	0.5%	0.50%	3%	85%
~~Tall Oatgrass~~ ~~*Arrhenatherum elatius*~~	~~C~~	~~90%~~	~~1.0% 0.~~	~~50%~~	~~10%~~	~~70%~~
Timothy *Phleum pratense*	C	97%	0.5%	0.30%	3% 8	0%
Wheatgrass, Crested *Agropyron cristatum,* *A. desertorum*	C	95%	0.5%	0.30%	5%	80%

~~Wheatgrass, Beardless~~ ~~*Agropyron inerme*~~	~~C~~	~~90%~~	~~0.5%~~	~~0.30%~~	~~10%~~	~~80%~~
~~Wheatgrass, Bluebunch~~ ~~*Agrophron spicatum*~~	~~C~~	~~90%~~	~~0.5%~~	~~0.30%~~	~~10%~~	~~80%~~
Wheatgrass, Intermediate ~~*Agropyron intermedium*~~ *Elytrigia intermedia* subsp. *intermedia*	C	95%	0.5%	0.30%	5%	80%
~~Wheatgrass, Pubescent~~ ~~*Agropyron trichophorum*~~	~~C~~	~~95%~~	~~0.5%~~	~~0.30%~~	~~5%~~	~~80%~~
Wheatgrass, Siberian ~~*Agropyron sibiricum*~~ *fragile* subsp. *sibericum*	C	95%	0.5%	0.30%	5%	80%
Wheatgrass, Streambank ~~*Agropyron riparium*~~ *Elymus lanceolatus* subsp. *lanceolatus*	C	90%	0.5%	0.30%	10%	80%
Wheatgrass, Tall ~~*Agropyron elongatum*~~ *Elytrigia elongata*	C	95%	0.5%	0.30%	5%	85%
Wildrye, Basin ~~*Elymus cinereus*~~ *Leymus cinereus*	C	90%	0.5%	0.30%	10%	80%
Wildrye, Canada *Elymus canadensis*	S	85%	0.5%	0.30%	15%	70%
Wildrye, Russian ~~*Elymus junceus*~~ *Psathyrostachys juncea*	C	90%	0.5%	0.30%	10%	80%

1 Type of reproduction: C = Cross pollinated, S = Self-pollinated, A = Apomictic

2 Noxious weed seed listed in NAC 587.2375 has a zero tolerance in grass crops along with the following: dodder (*Cuscuta* spp.), wild garlic (*Allium vineale*) and field bindweed (*Convolvulus arvensis*). The following weed seeds are permitted with a maximum tolerance of 27 seeds per pound: docks (*Rumex* spp.) and fanweed (*Thlaspi arvense*).

3 The variety Merion may contain a minimum of 92 percent pure seed, a maximum of 8 percent inert matter and a maximum of 3 percent other Kentucky bluegrass varieties. Kentucky bluegrass varieties other than Merion may contain a maximum of 2 percent other bluegrass varieties. Canada bluegrass may contain a maximum of 3 percent Kentucky bluegrass.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

STANDARDS FOR CERTIFICATION OF RAPESEED

587.331 Applicability. The general standards for certification of seed as adopted by the division and NAC 587.331 to 587.339, inclusive, govern the standards for certification of rapeseed.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.333 Requirements for land.

1. A field of rapeseed planted for the production of:

(a) Foundation seed must not have been planted to or grown a crop of rapeseed during the previous 5 years.

(b) Registered seed must not have been planted to or grown a crop of rapeseed during the previous 4 years.

(c) Certified seed must not have been planted to or grown a crop of rapeseed during the previous 3 years.

2. The application for certification must indicate the crops grown for the previous 5, 4 or 3 years on the land intended for the production of foundation, registered or certified classes of seed, respectively.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.335 Requirements for isolation.

1. Except as otherwise provided in subsections 2 and 3, the minimum distance that a field of rapeseed must be from a different variety or field of the same variety of rapeseed which does not meet the varietal purity requirements for certification is as follows:

Class produced	Fields of cross-pollinated varieties	Fields of self-pollinated varieties
Foundation	1,320 feet	660 feet
Registered	1,320 feet	660 feet
Certified	660 feet	330 feet

2. A distance of 3 miles for the production of foundation or registered seed and 2 miles for the production of certified seed is required if isolating fields of different oil or glucosinolate

content.

3. The distance of isolation between classes of the same variety may be reduced to 15 feet.

4. If a portion of a field meets the requirement for isolation, a clear demarcation must be established between the certified and noncertified portions of the field.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.337 Field inspections; control of contamination.

1. The division will make a field inspection of rapeseed when the crop is in the early flowering stage.

2. The division may reject or reclassify a seed field if volunteer plants or noxious weeds are found in or around the borders of a field of rapeseed.
(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.3375 Fields of rapeseed: Maximum tolerances.

1. A field of rapeseed must meet the following tolerances to be eligible for certification:

	Maximum permitted in each class		
Factor	Foundation	Registered	Certified
Other varieties	none	none	0.1%

2. As used in this section, "other varieties" includes off- type plants and plants that can be differentiated from the variety being inspected.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

587.339 Minimum standards for classes of rapeseed.

1. A field of rapeseed must meet the following standards for purity and germination of seed.

Factor	Foundation	Registered	Certified
Pure seed (minimum)	99.00%	99.00%	99.00%
Other crop (maximum)	0.01%	0.01%	0.25%
Weed seed (maximum)	0.01%	0.01%	0.25%

Noxious weed seed (maximum)	none	none	none
Objectionable weed seed (maximum number of seed)	1	1	2
Inert matter (maximum)	1.00%	1.00%	1.00%
Germination (minimum)	85.00%	85.00%	85.00%

As used in this subsection, "objectionable weed seed" includes the maximum number of seed permitted of *Brassica* ~~nigra~~ spp., *Sinapis arvensis*~~, *Brassica juncea*~~ or *Raphanus raphanistrum*, singly or collectively, in the amount of seed examined for noxious weed seed.

2. Erucic acid and glucosinolate content must be within the tolerances described by the plant breeder for each variety.

3. All seed lots must be assayed and shown to be 99.99 percent free from Phoma lingam.

(Added to NAC by Dep´t of Agriculture, eff. 12-3-90)

Chapter 587 of NAC is hereby amended by adding thereto the provisions set forth as sections 1 to 11, inclusive, of this regulation.

Authority: NRS 587.077

PRE-VARIETY GERMPLASM CERTIFICATION STANDARDS

Section 1. Applicability. The general standards for certification of seed as adopted by the division and NAC 587. to 587. , inclusive, govern the certification of pre-variety germplasm.

Sec. 2. Eligibility requirements for species.

1. Eligible species include indigenous or non-indigenous trees, shrubs (including vines), and herbaceous plants (forbs and grasses).

2. These standards apply to seed, seedlings, and other propagating materials of species, selections, clones, intraspecific hybrids, etc. (collectively referred to as germplasm types) which have not been released as a variety.

3. The Nevada Division of Agriculture should be contacted before the planting of any species to ensure the eligibility of seedstock and that all other conditions of certification can be met.

Sec. 3. Germplasm Types. The following germplasm types are recognized for certification.

1. Tested Class. Tested propagating materials shall be the progeny of plants whose parentage has been tested and has proven genetic superiority or possesses distinctive traits for which the heritability is stable but for which a variety has not been named or released. This seed must be produced so as to assure genetic purity and identity from either:

(a) Rigidly controlled and isolated natural stands or individual plants, or

(b) Seed fields or orchards.

2. Selected Class. Selected propagating materials shall be the progeny of phenotypically selected plants of untested parentage that have promise but not proof of genetic superiority or distinctive traits, produced so as to ensure genetic purity and identity from either:

(a) Rigidly defined natural stands or seed production areas, or

(b) Seed fields or orchards. (Section 2. (b) is equivalent to the OECD "Untested Seed Orchard" category and may be labeled as such by special tag if required.)

3. Source Identified Class. Source identified propagating materials are seed, seedlings, or other propagating materials where no selection or testing of the parent population has been made, produced so as to ensure genetic purity and identity from either:

(a) Rigidly defined natural stands or seed production areas, or

(b) Seed fields or orchards.

Sec. 4. Designation of seed generations. Generations of seed production within any of the germplasm classes shall be classified by generation number beginning with zero (the equivalent of the breeder class for named varieties). The generation naming system used with named varieties (breeder, foundation, registered, and certified) does not apply to pre-variety germplasm.

Sec. 5. Limitation of generations.

1. Limitation of generations for all germplasm types, when grown in seed fields or orchards, may be specified by the division for each species.

2. No limitation of generations is defined for any germplasm types collected from natural stands; such seed or other propagating materials is designated Generation 0 (G0).

3. Both sexual (seed) and asexual (cuttings, rhizomes, grafting, etc.) means of reproduction and establishment are addressed by the limitation of generations, with one asexual generation being equivalent to one sexual generation.

Sec. 6. Unit of certification. An individual plant, clone, or stand of plants (or field or orchard) may be certified in producing Tested, Selected, or Source Identified seed. Seed production zones and breeding zones may be defined as a unit of certification for Selected or Source Identified seed.

Sec. 7. Land requirements.

1. For natural stands of the Tested germplasm type, the exact geographical location of the parent plants and the stand history must be known. Location (designated by section or comparable land survey unit) and elevation (nearest 500 ft.) of the site of seed production must be shown on the tag.

2. The location where Selected or Source Identified seed was collected from natural stands shall be defined by means of administrative, geographic, latitudinal, or other appropriate boundaries or descriptions judged to be significant by the division. State, county, seed production area or geographic zone, and elevation (nearest 500 ft.) are the minimum required to be shown on the tag.

3. For all germplasm types where seed or other propagating materials are produced in artificially established fields or orchards, the specific geographic origin of the parent material must be known and may be shown on the tag. The location printed on the tag shall be the location (state, county, seed production area or geographic zone) of the field or orchard.

Sec. 8. Isolation.

1. For Tested or Selected germplasm types, an adequate isolation zone shall be maintained free of off-type plants and other cross pollinating species. The isolation distance shall be set for each species by the division.

2. There shall be no isolation requirements for Source Identified seed.

Sec. 9. Production of Seed.

1. For Tested seed collected from natural stands, at least one field inspection shall be made prior to pollination. At this time, any requirements for the roguing of undesirable plants or for meeting isolation requirements will be established. For Tested and Selected classes of seed, an inspection will be made just prior to seed maturity or during harvest.

2. For Source Identified seed collected from natural stands, an inspection will be made to verify the location of the collection site, identification of the species and the amount of seed collected. A "Certified Seed Site Identification Log", available from the division, must be completed by the collector from each site during each harvest.

3. Any germplasm type grown in a seed field or orchard must comply with certification requirements established for that specific type. Germplasm types for which no standards have

been established may be produced under the requirements of a similar type on approval of the division.

Sec. 10. Labeling.

1. The following tag or label colors shall be used to designate the classes of seed produced:

(a) Tested Class - Blue

(b) Selected Class - Green

(c) Source Identified Class - Yellow

2. Tags will be issued by the division for seed eligible for certification upon request.

3. Label format.

(a) The seed germplasm type (Tested, Selected, or Source Identified) will appear on the top line across the tag or label.

(b) Information describing the seed lot (generation, species, selection number, lot number, location, elevation, site index, seed zone and/or breeding zone, etc.) of the seed will be shown in the center of the tag.

(c) Seed from Selected Class seed orchards shall be tagged with a pink tag with "UNTESTED SEED ORCHARD" printed on the top line if compliance with the OECD seed scheme is required.

Sec. 11. Sampling and testing. For seed of species not covered by the rules for testing seeds of the Association of Official Seed Analysts, the analysis shall be in accordance with the rules of the International Seed Testing Association or appropriate state or federal laboratories as determined by the division.

NAC 587 is hereby amended to read as follows:

Added text: Underlined
Deleted text: Strikeout type

Authority: NRS 561.315

587.220 Fees for analysis and testing. The following provisions establish the fees which the division will charge for analysis and testing of samples of seed:

1. As used in this section, “mixture” means a seed sample which contains two or more kinds of seed, where each kind:

(a) Constitutes more than 5 percent of the sample; or
(b) Is declared on the label to be part of the mixture.

~~2. The division will examine samples submitted for a purity test for weed seed which is designated noxious in Nevada at no additional charge. An examination for weed seed which is designated noxious in any other state may be substituted by request at no additional charge.~~

~~3.~~ 2. The fee for any kind of seed not listed will be based on the fee for the listed kind of seed which is most similar to the seed being tested.

~~4.~~ 3. If special attention or a priority in examination is requested for a seed sample, the charge will be the fee listed plus 50 percent.

~~5.~~ 4. The charge for a sample requiring an unusual amount of time, such as an excessively dirty sample, a complicated mixture, or a sample requiring special tests, will be ~~$20~~ $35 per hour.

~~6. The basic fees for analysis of purity and testing for germination are:~~

~~Kind of Seed~~	~~Purity Analysis~~	~~Germination Test~~	~~Combined~~
~~Alfalfa, clovers, timothy, flax and cereals~~	~~$6~~	~~$6~~	~~$10~~
~~Wheatgrass, bromegrass, fescue and ryegrass~~	~~8~~	~~7~~	~~13~~
~~Bentgrass, bluegrass and orchardgrass~~	~~9~~	~~7~~	~~15~~
~~Vegetable seeds~~	~~6~~	~~6~~	~~10~~
~~Flower seeds~~	~~8~~	~~7~~	~~12~~
~~Mixture, two or three kinds~~	~~12~~	~~10~~	~~18~~
~~Mixture, four or more kinds~~	~~16~~	~~13~~	~~25~~

5. Service testing fees for purity, germination, and noxious weed seed:

Kind	Purity	Germination
Alfalfa	$14.00	$12.00
Beans	12.00	12.00
Bluegrass	22.00	15.00
Bromegrass	23.00	12.00
Cereal grains	15.00	12.00
Clover	15.00	12.00
Fescue	22.00	12.00

Flax	21.00	14.00
Flowers	16.00	16.00
Indian Ricegrass	17.00	16.00
Onion	14.00	12.00
Orchardgrass	25.00	14.00
Peas	14.00	13.00
Ryegrass	22.00	12.00
Sainfoin	14.00	13.00
Saltbush	16.00	14.00
Small Burnet	15.00	14.00
Sudangrass	17.00	14.00
Sunflower	21.00	12.00
Timothy	17.00	12.00
Trees/Shrubs	14.00	15.00
Vegetables not listed	14.00	12.00
Vetches	15.00	12.00
Wheatgrasses	34.00	15.00
Wildrye	21.00	12.00

~~7.~~ 6. Except as otherwise provided in subsection 2, the fees for examination of a sample of seed for noxious weed seed are:

(a) ~~For weed seed which is designated noxious in~~ Nevada noxious weed seed, ~~$4~~ 6.

(b) ~~For weed seed which is designated noxious in any other state~~ All states noxious weed seed, ~~$5~~ $10.

[Dep't of Agriculture, eff. 8-6-80]—(NAC A 9-19-90)

NOTE: For further clarification of the proposed changes in this regulation please contact Randy Bradley at (775) 688-1182 extension 244.

Chapter 587 of NAC is hereby amended by adding thereto the provisions set forth as sections 1 to 11, inclusive, of this regulation.

SOD QUALITY SEED STANDARDS

Authority: NRS 587.077

Section 1. Eligibility of seed. For seed of the species or varieties shown in section 3, 3 to be labeled as "Nevada Sod Quality Seed" the following requirements must be met:

1. The seed must have been produced in Nevada; and

2. All requirements for seed certification (NAC 587.222 through NAC 587.339, inclusive) and sections 1 through 5 must be met for the seed lot being labeled.

Sec. 2. Procedures for qualification.

1. Any person desiring to have seed qualify as "Nevada Sod Quality Seed" must complete and submit a request form to the division.

2. Requests for qualification may be submitted at any time.

3. Seed samples for sod quality eligibility will be taken by the division or an authorized representative of the division.

4. If only a portion of a seed lot harvested will be designated "Nevada Sod Quality Seed" then the seed sample drawn must represent only that portion of seed. That portion must be clearly marked with a new lot number before sampling.

Sec. 3. Seed Standards.

1. A sample of seed to be qualified for sod quality must be tested in a laboratory approved by the division prior to testing.

2. The seed analysis report for the lot to be qualified must be supplied to the division before tags will be issued. The person requesting the qualification of seed shall be responsible for having the report sent to the division.

3. Seed lots must meet the following standards to be eligible for qualification:

Kind	Minimum Purity	Minimum Germination	Maximum [1] Other Crop	Maximum Weed Seed
Perennial Ryegrass	98%	90%	0.1% [2]	0.02%

Merion Kentucky Bluegrass	95%	80%	0.1% [3]	0.02%
Other varieties of Kentucky Bluegrass	97%	80%	0.1% [3]	0.02%
Red Fescue	98%	90%	0.1%	0.02%
Chewings Fescue	98%	90%	0.1%	0.02%
Bentgrass	98%	85%	0.1% [4]	0.10%
Tall Fescue	98.5%	85%	0.1%	0.02%

[1] Must be free of ryegrass, orchardgrass, timothy, bentgrass, big bluegrass, *poa triviali* smooth bromegrass, reed canarygrass, tall fescue and clover.

[2] Certification fluorescence levels and appropriate calculations will be applied when determining levels of other crop.

[3] Maximum other varieties of Kentucky bluegrass allowed is 2%; maximum allowed Canada bluegrass is .02%.

[4] A 500 seed count will be used to determine other species of *Agrostis*.

[5] Must be free of dock (*Rumex* spp.), chickweed (*Cerastium* spp.) and *Stellaria media*, crabgrass (*Digitaria* spp.), plantain (*Plantago* spp.), black medic (*Medicago lupulina*), annual bluegrass (*Poa annua*), velvetgrass (*Holcus* spp.) and other "All State" noxious weed seed, except Hawaii.

4. The analysis for noxious weed seed, other crop seed and weed seed must be based on a 25 gram sample for bluegrass (exception for a 10 gram *Poa annua* search), 30 gram sample for fine fescue, 50 gram sample for ryegrass and tall fescue, and a 2 ½ gram sample for bentgrass. Testing shall be discontinued when results of the tests exceed the maximum limits set forth in Section 3., 3.

Sec. 4. Labeling requirements.

1. Labels will be issued by the division on request for seed lots meeting all requirements for sod quality and must be permanently attached to each container. As used in this rule "permanent" means until delivery of the seed to the ultimate purchaser.

2. Label format will be specified by the division and will contain, as a minimum, the following information:

(a) Serial number;

(b) Kind and variety;

(c) Lot number; and

(d) Date of issuance.

3. Additionally, a seed certification tag must be attached to each container of seed as prescribed in NAC 587.222 through NAC 587.339, inclusive.

4. All labels must be attached to the container in a manner that prevents removal and reattachment.

Sec. 5. Fees.

1. Fees charged to the division for seed sampled out of state shall be charged to the applicant at the same rate.

2. A fee of $.15 per tag will be charged by the division to the applicant for tags issued.

NOTE: For further clarification of this proposed regulation please contact Randy Bradley at (775) 688-1182 extension 244.

ADOPTED TEMPORARY REGULATION OF THE DIVISION OF AGRICULTURE OF THE DEPARTMENT OF BUSINESS AND INDUSTRY

INFORMATIONAL STATEMENT

The following statement is submitted for adopted temporary amendments to Nevada Administrative Code (NAC) Chapter 587.

1. A public workshop was held on March 16, 1999 at the Humboldt County Cooperative Extension Office, Fairgrounds, Winnemucca, NV.

   A public hearing was held on April 5, 1999 at the Humboldt County Cooperative Extension Office, Fairgrounds, Winnemucca, NV.

   Notice of workshop and notice of hearing were posted at all six Division offices, the Nevada State Library in Carson City, and all Nevada County Libraries. Copies could be requested from the Nevada Division of Agriculture by writing to 350 Capitol Hill Avenue Reno, Nevada 89502, calling (702) 688-1180, contacting all other Division offices, the Nevada State Library in Carson City, and all Nevada County Libraries. All persons who have requested to be notified of amendments were notified by mail.

2. Workshop held March 16, 1999-Winnemucca
   0 people attended
   no written statements were submitted

   Hearing held April 5, 1999-Winnemucca
   There were no business or public attendees
   no written statements were submitted

3. Comments were solicited from business and the public by posting in public locations and thru direct mail notices as outlined in #1 above. There were no oral or written comments submitted. A copy of the comments may be obtained by calling the Nevada Division of Agriculture office, (702) 688-1180.

4. Due to no objections received, the amendments were adopted without change by the Nevada Board of Agriculture on May 14, 1999.

5. The economic effects of the adopted amendments on the business which it is to regulate;

   Adverse effects:

There will be an increase in the cost to individuals and companies requesting seed testing services and for participating in seed certification programs.

Beneficial effects:
The increase in seed testing fees will support seed testing services in Nevada. There are no other private or government testing facilities

Immediate and long term economic effects:
The economic effects are both immediate and long term.

The economic effects of the adoption of the amendments on the Public:

Adverse effects:
None

Beneficial effects:
The public will benefit from the prevention of the entry of this pest which if it became established would cause severe economic and environmental losses to occur.

Immediate and long term effects:
The economic effects are both immediate and long term

6. Economic cost to the agency for the enforcement of the regulation:

   There will not be any additional cost to the agency to enforce the amendment adopted.

7. There are no other state or federal agency regulations which the adopted amendments overlap or duplicate.

8. The amendments adopted do not include any provisions more stringent than any federal regulation which the same activity.

9. This regulation does not establish or increase any fees.