PROPOSED REGULATION OF THE DIRECTOR

OF THE STATE DEPARTMENT OF AGRICULTURE

LCB File No. R043-00

March 27, 2000

EXPLANATION - Matter in *italics* is new; matter in brackets formitted material is material to be omitted.

AUTHORITY: §§1-24, NRS 587.077 and 587.083.

- **Section 1.** Chapter 587 of NAC is hereby amended by adding thereto the provisions set forth as sections 2 to 6, inclusive, of this regulation.
- Sec. 2. "Certified seed garlic" means garlic that meets all requirements for certified stock produced in accordance with the provisions of NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation.
- Sec. 3. "Nursery increase block" means a planting of garlic that has been established using foundation stock or registered stock for the production of registered stock.
- Sec. 4. "Participant" means any person or legal entity whose application has been submitted to and accepted by the department.
- Sec. 5. "Program" means the seed garlic registration and certification program administered by the department pursuant to NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation.
- Sec. 6. 1. Participation in the program is voluntary, and a participant may withdraw from the program at any time.
- 2. The department or its authorized agent will conduct any approval, supervision, inspection, sampling determination, registration and certification for the program.

- 3. The department will approve registration or certification of garlic based on planting sites accepted by the department, laboratory examinations and visual inspections.
- 4. The department may approve foundation stock or registered stock as a source of propagative material if the foundation stock or registered stock has been tested and found free of stem and bulb nematode of the Allium species (Ditylenchus dipsaci) and has been inspected and found free of white rot fungus (Sclerotium cepivorum).
- 5. The department may certify garlic as "Nevada Certified Seed Garlic" if the garlic has been inspected and found free of white rot fungus and has met all other requirements for qualification as certified stock.
- 6. A participant may use official tags issued by the department or other means of labeling to identify garlic that meets the requirements of NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation.
- 7. Except as otherwise provided in NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation, certification of garlic is based solely on a sample of garlic from each planting entered in the program.
 - **Sec. 7.** NAC 587.640 is hereby amended to read as follows:
- 587.640 As used in NAC 587.640 to 587.810, inclusive, *and sections 2 to 6, inclusive, of this regulation*, unless the context otherwise requires, the words and terms defined in NAC 587.650 to 587.710, inclusive, *and sections 2 to 5, inclusive, of this regulation* have the meanings ascribed to them in those sections.
 - **Sec. 8.** NAC 587.650 is hereby amended to read as follows:
- 587.650 "Certified block" means a planting of garlic which [is maintained to produce] has been established using registered stock for the production of certified stock.

- **Sec. 9.** NAC 587.660 is hereby amended to read as follows:
- 587.660 "Certified stock" means [plants or cloves of garlic which are:
- 1. The progeny of registered stock; or
- 2. The progeny of certified stock produced in a certified block.] garlic that:
 - 1. Has been produced in a certified block; or
- 2. Is produced from a nursery increase block if the entire planting meets the requirements of a nursery increase block for at least 3 years after the date that the participant enters the program.
 - **Sec. 10.** NAC 587.680 is hereby amended to read as follows:
- 587.680 "Foundation block" means a planting of garlic which is *planted with seed stock*from a source approved by the department and maintained to produce foundation stock.
 - **Sec. 11.** NAC 587.690 is hereby amended to read as follows:
- 587.690 "Foundation stock" means [the progeny of nuclear stock.] garlic produced in a foundation block.
 - **Sec. 12.** NAC 587.700 is hereby amended to read as follows:
- 587.700 "Garlic" means the plants, plantlets, bulbs, cloves or any part of Allium sativum

 1.1 or its cultivars.
 - **Sec. 13.** NAC 587.710 is hereby amended to read as follows:
- 587.710 "Registered stock" means [the progeny of foundation stock.] garlic produced in a nursery increase block.
 - **Sec. 14.** NAC 587.720 is hereby amended to read as follows:

- 587.720 NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation govern the standards for the registration of stock used for planting and certification of garlic. [seed.]
 - **Sec. 15.** NAC 587.725 is hereby amended to read as follows:
- 587.725 1. [To obtain certification of garlie seed, a grower] A participant must submit to the department an application [for certification] for each separate planting of stock on a form obtained from the department.
- 2. Each application must include all information requested for the [class of seed to be produced in the] planting site and the stock used for planting, including documentation that verifies the eligibility of the stock for the class of seed to be produced, and must be accompanied by [the fee established in] any fee required pursuant to NAC 587.810.
- 3. Applications must be received by the department by [December 1 or within 2 weeks after planting for fields planted after December 1.
- 4. The director August 1 of the year immediately preceding planting for approval of the planting site. A final application for any planting must be submitted by February 15 of the year in which the planting will occur and must be accompanied by any fee required pursuant to NAC 587.810.
- 4. The department may accept applications after the deadline if the planting site complies with the requirements of NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation, and the department is able to inspect the additional acreage and analyze the plants in the laboratory.
 - **Sec. 16.** NAC 587.727 is hereby amended to read as follows:

- 587.727 [Before accepting a planting of nuclear stock for certification of the seed, the director or a person designated by the director will inspect each field used for the planting for:

 1. White rot (Schlerotium cepivorum), at least once during each growing season, by making a visual inspection during the stage of growth when white rot can most easily be detected and analyzing the plants suspected of carrying white rot after the visual inspection in the laboratory.

 2. Stem and bulb nematode of the Allium species (Ditylenchus dipsaci), at least once during each growing season, by collecting samples of plants of all classes of seed, including seed that is the progeny of the certified stock, in the pattern of a grid at approximately 20 foot intervals throughout the field and analyzing each sample in the laboratory. The director or the person designated by the director will number and index each sample according to the row in the field from which it was taken.]
 - 1. The department shall conduct:
- (a) At least one field inspection of garlic during the growing season for white rot fungus (Sclerotium cepivorum); and
- (b) A laboratory examination of a sample of garlic for stem and bulb nematode of the Allium species (Ditylenchus dipsaci) where the sample is collected in the pattern of a grid at approximately:
 - (1) Twenty-foot intervals for a foundation block or nursery increase block; and
 - (2) Forty-foot intervals for a certified block if the participant requests the testing.
 - 2. The department may require additional inspections or tests if:
- (a) Seasonal conditions or other factors tend to obscure the symptoms of disease or make adequate inspections difficult; or

- (b) White rot fungus, stem and bulb nematode of the Allium species or other serious pests are suspected.
- 3. The department may sample garlic from any planting site or storage facility to inspect or test the garlic.
 - 4. The participant shall furnish any such sample without charge.
 - **Sec. 17.** NAC 587.730 is hereby amended to read as follows:
- 587.730 1. The [director or a person designated by the director must approve nuclear stock before the seed grown from the stock may be certified. The director or a person designated by the director] department may approve [selected] stock or propagative material [as nuclear stock] for registration or certification based on [his inspection or may approve stock that has been certified by the proper official of another state if the grower demonstrates that the stock is genuine. The grower may demonstrate that the stock is genuine by submitting:
- (a) Certification tags that are attached to individual bags or containers;
- (b) Invoices that identify the seed lot; or
- (c) Other certification documents that are satisfactory to the director or a person designated by the director.

If approved, the nuclear stock must be planted in a foundation block for the production of foundation seed.

2. The director may approve propagative material as registered or certified stock if the grower demonstrates that the original stock was free from white rot and stem and bulb nematode and that the methods used to produce the propagative material would not allow contamination by these organisms during the growing period.

- 3. At any stage in the growing process, the director or a person designated by the director may certify that seed is foundation, registered or certified seed and that the seed is free of any white rot or stem and bulb nematodes.
- 4. The director may accept stock certified by another state as certified seed if the requirements for certification in that state are met and the director determines that those requirements are similar to the requirements of this state.] inspection and testing pursuant to NAC 587.727 or any other reliable method, including, without limitation, approving stock that meets the standards of another program approved by the department which has standards at least as strict as the standards set forth in NAC 587.640 to 587.810, inclusive, and sections 2 to 6, inclusive, of this regulation.
- 2. Garlic that has been exposed to white rot fungus (Sclerotium cepivorum) or stem and bulb nematode of the Allium species (Ditylenchus dipsaci) is not eligible for registration or certification.
 - 3. For a foundation block to be eligible for planting, the garlic must be:
 - (a) Garlic from a planting approved by the department; or
 - (b) Produced using laboratory techniques to eliminate diseases.
 - 4. For a nursery increase block to be eligible for planting, the garlic must be:
 - (a) Foundation stock; or
 - (b) Registered stock.
 - 5. For a certified block to be eligible for planting, the garlic must be registered stock.
- 6. A participant must provide to the department evidence that the stock is eligible for the class of seed to be produced, including, without limitation:
 - (a) Tags issued by a certification agency that is recognized by the department; or

- (b) Invoices that describe the stock.
- **Sec. 18.** NAC 587.740 is hereby amended to read as follows:
- 587.740 The [director] department will refuse to register or certify or will cancel the registration or certification of a planting, or any portion of a planting, of garlic or harvested [bulbs or cloves of] garlic if:
- 1. The planting, bulbs or cloves are found to be infested *or infected* with stem and bulb nematode of Allium species (*Ditylenchus dipsaci*) or white rot (*Sclerotium cepivorum*), or any other pest of garlic, unless the [director] *department* determines the infestation *or infection* to be one of minor economic importance which can be rogued, delimited or treated;
- 2. Excessive growth of weeds, damage from pests or any other condition prevents adequate inspection of the [field; or
- 3. The grower] planting;
- 3. The participant has failed to comply with any provisions of NAC 587.640 to 587.810, inclusive [-], or sections 2 to 6, inclusive, of this regulation;
 - 4. The participant has failed to pay any fee required pursuant to NAC 587.810;
- 5. For any reason, the identity of the garlic becomes uncertain or has not been maintained;
 - 6. The certification seal or tags are misused; or
- 7. The stock is materially misrepresented even if the participant did not know of the misrepresentation.
 - **Sec. 19.** NAC 587.750 is hereby amended to read as follows:
 - 587.750 [Fields for the production of any class of certified garlic seed must be located:
- $\frac{1. At}{}$

- 1. Except as otherwise provided in subsections 2 and 3, each planting site must be:
- (a) In a geographic area where contamination by white rot fungus (Sclerotium cepivorum) or stem and bulb nematode of the Allium species (Ditylenchus dipsaci) is unlikely to occur from any means, including, without limitation, drainage, flooding or irrigation;
- (b) On land on which no Allium species has grown for the 5 years immediately preceding the date on which the garlic is planted;
 - (c) On land that is not known to be infested with white rot fungus; and
- (d) Isolated by at least 500 feet from any [planting of stock which has not been approved for production of certified seed and from any planting of onions or any other Allium species.
- 2. At least 12 feet from any other planting of stock which has been approved for production of certified seed.

These distances may be reduced if a barrier exists that would prevent the contamination of a field for the production of certified garlic seed by water or soil from another field.] Allium species that is not entered in the program.

- 2. The department may waive the requirements set forth in paragraphs (a), (b) and (c) of subsection 1 if the:
 - (a) Planting site is a facility approved by the department; or
- (b) Land or soil has been treated in a manner approved by the department to eliminate soilborne pests.
- 3. The department may waive the requirements set forth in paragraph (d) of subsection 1 if:
- (a) There is a sufficient natural barrier between the planting site and any Allium species not entered in the program; or

- (b) The garlic not entered in the program has an equivalent history.
- 4. Each planting of a foundation block, nursery increase block or certified block shall be deemed to be a separate planting of garlic. Each such planting site must be isolated by at least 6 feet or by at least one empty planting bed from another planting site or from other varieties within a planting site unless suitable precautions are taken to maintain the identity of the garlic.
 - 5. Each planting site is subject to inspection by the department.
 - **Sec. 20.** NAC 587.780 is hereby amended to read as follows:
 - 587.780 A [grower of garlic] participant shall:
 - 1. Keep pests and weeds under control;
- 2. Use suitable precautions when cultivating, irrigating, or moving or using equipment to prevent the spread of soil-borne pests;
- 3. Ensure that [all bins or other containers] any bin or other container and any equipment to be used for the movement or storage of [certified garlic seed are] garlic is free of any dirt and residues from garlic, onions or other Allium species;
- 4. Maintain the identity of [the garlic by ensuring that all plants in a field are of the same variety and class; and] any garlic entered in the program;
- 5. Keep records on each [field] planting site that document the amount of seed produced, the certification number [,] and the tags used to identify the containers of seed [and the locations where the seed is or will be distributed.] on an inventory sheet supplied by the department, unless otherwise specified by the department in writing;
- 6. Submit the records required pursuant to subsection 5 to the department annually after the close of the season for the sale or distribution of seed stocks;

- 7. Ensure the proper use of certification seals and tags provided by the department;
- 8. Mark on each tag the name of the participant, the month and year of the harvest, the variety of garlic and the block number assigned by the department; and
 - 9. Notify the department of:
- (a) The date of any pest control treatment used in plantings for which inspections or other departmental activities are scheduled;
 - (b) The products used in the pest control treatment;
 - (c) The dosage of the products used; and
 - (d) Any applicable requirements for reentry or worker safety.
 - **Sec. 21.** NAC 587.790 is hereby amended to read as follows:
- 587.790 1. [Certified garlic seed] Garlic from a planting must be handled in a manner that prevents mixing with or contamination by other lots of garlic [that are not certified] during harvesting, transporting, cracking and storage.
- 2. Equipment used for harvesting and containers used for transporting, *processing* and storing garlic [seed] must be free from soil or other contaminating material before use.
- 3. Containers used for transporting and storing garlic [seed] must identify the [field] planting site in which the seed originated.
 - **Sec. 22.** NAC 587.800 is hereby amended to read as follows:
- 587.800 A [grower must obtain a certificate for the interstate transfer of garlie seed from]

 participant must notify the department in writing at least 1 week before transporting garlic to another state [garlie seed that is eligible for certification or that is certified, if:
- The seed is being transported for processing or treatment and will be returned to this state
 for planting; or

- 2. The state of destination, or an area within the state of destination, requires certification information pertaining to the seed.] for storage or processing to maintain eligibility for future registration or certification of that garlic. The notification must include the:
 - 1. Number assigned to the planting site by the department;
 - 2. Date that the garlic is transported;
 - 3. Amount of garlic that is transported; and
 - 4. Destination of the garlic.
 - **Sec. 23.** NAC 587.810 is hereby amended to read as follows:
- 587.810 1. The department will charge [and collect \$34 per acre or part of an acre of a field of garlic for the inspection of the crop and the certification of the seed produced on the acre.] the following fees for the registration and certification of garlic:

- 2. A participant must pay any fees set forth in this section no later than February 15 of the year in which the garlic is planted.
 - 3. Any check must be payable to the Nevada State Department of Agriculture.
- 4. The department will refund any fees paid for services that are not rendered less any direct costs incurred by the department.
 - **Sec. 24.** NAC 587.705, 587.723 and 587.760 are hereby repealed.

TEXT OF REPEALED SECTIONS

587.705 "Nuclear stock" defined. "Nuclear stock" means any seed stock or propagative material approved by the director for use as stock to produce certified seed.

587.723 Classes recognized in certification of seed. The following classes of seed are recognized in the certification of garlic seed:

- 1. Foundation;
- 2. Registered; and
- 3. Certified.

587.760 Approval of field for production of certified seed. A grower must obtain approval of a field on which he intends to produce certified garlic seed from the director before he begins to plant on the field. The director will not approve a field for production of any class of certified garlic seed if:

- 1. White rot has ever been detected in plants grown in the field; or
- 2. Garlic, onions or any other host plant of stem and bulb nematode of the Allium species has been grown in any of the immediately preceding 3 years before planting for certification.