

## 301.89 KARNAL BUNT

### Federal Domestic Quarantine

**A. Pest.** Karnal bunt, is a plant disease caused by the fungus *Tilletia indica* (Mitra) Mundkur.

### B. Regulated Articles.

1. **Conveyances**, including trucks, railroad cars, and other containers used to move wheat, durum wheat, or triticale;
2. **Grain elevators/equipment/structures** used for storing and handling wheat, durum wheat, and triticale;
3. **Milling products or byproducts**, except flour;
4. **Plants, or plant parts**, including grain, seed, or straw of all varieties of the following species: wheat (*Triticum aestivum*), durum wheat (*Triticum durum*), and triticale (*Triticum aestivum* x *Secale cereale*);
5. **Root crops with soil**;
6. **Soil from areas where field crops are produced**;
7. **Manure from animals** that have fed on wheat, durum wheat, or triticale;
8. **Used bags, sacks and containers**;
9. **Used farm tools**;
10. **Used mechanized cultivating equipment**;
11. **Mechanized harvesting equipment** (i.e., mechanized harvesting equipment used in the production of wheat, durum wheat, and triticale that test positive for Karnal bunt);
12. **Used seed conditioning equipment** (i.e., equipment that has been used in the production of wheat, durum wheat, and triticale);
13. **Used mechanized soil-moving equipment**; and
14. **Any other product, article or means of conveyance** when:
  - a. An inspector determines that it presents a risk of spreading Karnal bunt due to its proximity to an infestation of Karnal bunt; and
  - b. The person in possession of the product, article, or means of conveyance has been notified that it is regulated.

### C. Quarantined Areas.

The following areas are designated as quarantined areas:

#### Arizona

Maricopa County                      Portions of the county.

Pinal County                          Portions of the county.

Current Karnal bunt regulated areas are posted on the United States Department of Agriculture Animal and Plant Health Inspection Service website:

[National Karnal Bunt 2025 Map](#)

### D. Restrictions on Seed for Planting.

Wheat, durum wheat, and triticale may be planted in all fields within a regulated area. All wheat seed, durum wheat seed, and triticale seed that originates within a regulated area must be tested and found free from spores and bunted wheat kernels before it may be planted within a regulated area.

No wheat, durum wheat, or triticale that originates within a regulated area may be used for planting outside a regulated area.

### E. Interstate Movement of Regulated Articles from Quarantined Areas.

1. **Any regulated article** may be moved interstate from a quarantined area into or through an area that is not quarantined only if moved under the following conditions:

- a. With a certificate or limited permit;
- b. Without a certificate or limited permit, provided that each of the following conditions is met:
  1. The regulated article was moved into the quarantined area from an area that is not quarantined.
  2. The point of origin is indicated on a waybill accompanying the regulated article;
  3. The regulated article is moved through the quarantined area without stopping, or has been stored, packed, or handled at locations approved by an inspector as not posing a risk of contamination with Karnal bunt, or has been treated in accordance with approved methods or procedures while in or moving through any quarantined area; and,
  4. The article has not been combined or commingled with other articles so as to lose its individual identity.
- c. Without a certificate or limited permit: provided the regulated article is a soil sample being moved to a laboratory approved by the Administrator to process, test, or analyze soil samples; or is straw/stalks/seed heads for decorative purposes that have been processed or manufactured prior to movement and are intended for use indoors.

2. **When an inspector has probable cause** to believe a person or means of conveyance is moving a regulated article in interstate commerce, the inspector is authorized to stop the person or means of conveyance to determine whether a regulated article is present and to inspect the regulated article. Articles found to be infected by an inspector, and articles not in compliance may be seized, quarantined, treated, subjected to other remedial measures, destroyed, or otherwise disposed of.

### F. Issuance of a Certificate or Limited Permit.

1. **An inspector or person operating under a compliance agreement** will issue a certificate for the interstate movement of a regulated article if he or she determines that the regulated article:

- a. Is eligible for unrestricted movement under all other applicable federal domestic plant quarantines and regulations;
  - b. Is to be moved in compliance with any conditions deemed necessary by the Administrator to prevent the artificial spread of Karnal bunt; and,
  - c. Is free of Karnal bunt infestation, based on laboratory results of testing, and history of previous infestation; has been grown, produced, manufactured, stored, or handled in a manner that would prevent infestation or destroy all life stages of Karnal bunt; or has been treated in accordance with the prescribed methods and procedures.
2. To be eligible for movement under a certificate, grain from a field within a regulated area must be tested prior to its movement from the field or before it is commingled with other grains and must be found free from bunted kernels. If bunted kernels are found, the grain will be eligible for movement only under a limited permit issued in accordance with **paragraph 3**.

**No wheat, durum wheat, or triticale moved out of a regulated area under a certificate may be used for planting outside the regulated area.**

**3. An inspector or a person operating under a compliance agreement will issue a limited permit for the interstate movement of a regulated article not eligible for a certificate if the inspector determines that the regulated article:**

- a. Is to be moved interstate to a specified destination for specified handling, utilization, or processing (the destination and other conditions to be listed in the limited permit and/or compliance agreement), and this interstate movement will not result in the artificial spread of Karnal bunt because Karnal bunt will be destroyed or the risk mitigated by the specified handling, utilization, or processing;
- b. Is to be moved interstate in compliance with any additional emergency conditions the Administrator may impose to prevent the artificial spread of Karnal bunt; and,
- c. Is eligible for interstate movement under all other federal domestic plant quarantine and regulations applicable to the regulated article.

**4. An inspector shall issue blank certificates and limited permits** to a person operating under a compliance agreement or authorize reproduction of the certificates or limited permits on shipping containers, or both, as requested by the person operating under the compliance agreement. These certificates and limited permits may then be completed and used, as needed, for the interstate movement of regulated articles that have met all of the requirements of paragraphs **F (1), (2), or (3)**.

**G. Compliance Agreements.**

Persons who grow, handle, or move regulated articles interstate may enter into a compliance agreement if such persons review with an inspector each stipulation of the compliance agreement, have facilities and equipment to carry out disinfection procedures or application of chemical materials, and meet applicable state training and certification standards under the Federal Insecticide, Fungicide, and Rodenticide Act, as amended (7 U.S.C.

136b). Any person who enters into a compliance agreement with APHIS must agree to comply with all the provisions of the compliance agreement and the regulation.

**H. Cancellation of a Certificate, Limited Permit, or Compliance Agreement.**

Any certificate, limited permit, or compliance agreement may be canceled orally or in writing by an inspector whenever the inspector determines that the holder of the certificate or limited permit, or the person who has entered into the compliance agreement, has not complied with all regulatory requirements. If the cancellation is oral, the cancellation will become effective immediately and the cancellation and the reasons for the cancellation will be confirmed in writing as soon as circumstances allow, but within 20 days after oral notification of the cancellation. Any person whose certificate, limited permit, or compliance agreement has been canceled may appeal the decision, in writing, within 10 days after receiving the written cancellation notice.

**I. Assembly and Inspection of Regulated Articles.**

Persons requiring certification or other services must request the services from an inspector at least 48 hours before the services are needed. The regulated articles must be assembled at the place and in the manner the inspector designates.

**J. Attachment and Disposition of Certificates and Limited Permits.**

**The consignor** must ensure that the certificate or limited permit authorizing interstate movement of a regulated article is, at all times during interstate movement, attached to:

1. The outside of the container encasing the regulated article;
2. The article itself, if it is not in a container; or
3. The consignee's copy of the accompanying waybill provided that the descriptions of the regulated article on the certificate or limited permit, and on the waybill, are sufficient to identify the regulated article; and the carrier must furnish the certificate or limited permit authorizing interstate movement of a regulated article to the consignee at the shipment's destination.

**K. Costs and Charges.**

The services of the inspector during normal business hours will be furnished without cost to persons requiring the services. The user will be responsible for all costs and charges arising from inspection and other services provided outside of normal business hours.

**L. Cleaning and Disinfection.**

Mechanized harvesting equipment and seed conditioning equipment that has been used to harvest host crops that test positive for Karnal bunt and seed conditioning equipment that has been used in the production of any host crops must be cleaned and disinfected in accordance with the Federal Quarantine, (see Sec. 301.89-13(a) prior to movement from a regulated area).

**M. Treatments.**

1. All conveyances, mechanized harvesting equipment, seed-conditioning equipment, grain elevators and structures used for storing and handling wheat, durum

wheat, or triticale required to be cleaned and disinfected under this subpart must be cleaned by removing all soil and plant debris and disinfected by one of the methods specified below, unless a particular treatment is designated by an inspector. An inspector must specify the treatment used if that treatment is deemed most effective in a given situation: [USDA Treatment Manual](#) on page 5-8-26

- a. Wetting all surfaces to the point of runoff with a solution of sodium hypochlorite mixed with water applied at the rate of 1 gallon of commercial chlorine bleach (1.5 percent sodium hypochlorite) mixed with 2.5 gallons of water - and letting stand for 15 minutes. The equipment or site should be thoroughly washed down after 15 minutes to minimize corrosion;
  - b. Applying steam to all surfaces until the point of runoff, and so that a critical temperature of 170°F is reached at the point of contact;
  - c. Cleaning with a solution of hot water and detergent, under high pressure (at least 30 pounds per square inch), at a minimum temperature of 180°F.; or
  - d. Fumigating with methyl bromide at the dosage of 15 pounds/1000 cubic feet for 96 hours.
- 2. Soil** must be wet to a depth of 1 inch by water (irrigation or rain) just prior to treatment and must be treated by fumigation with methyl bromide at the dosage of 15 pounds/1000 cubic feet for 96 hours.

**3. Mill feed** must be treated with a moist heat treatment of 170°F for at least 1 minute if the mill feed resulted from the milling of wheat, durum wheat, or triticale that tested positive for Karnal bunt.

See Section D for Restrictions on Seed for Planting

**4. Seed used for germplasm or for research purposes** must be treated with a 1.5 % aqueous solution of sodium hypochlorite (=30% household bleach) containing 2 ml of Tween 20 per liter agitated for 10 minutes at room temperature followed by a 15-minute rinse with clean, running water and then by drying, and then with one of the following:

- a. 6.8 fluid oz. of Carboxin thiram (10% + 10%, 0.91 + 0.91 lb. ai./gal.) flowable liquid and 3 fluid ounces of pentachloronitrobenzene (2.23 lb. ai./gal.) per 100 lbs. of seed; or
- b. 4.0 fluid ounces of Carboxin thiram (1.67 + 1.67 lb. ai./gal.) flowable liquid and 3 fluid ounces of pentachloronitrobenzene (2.23 lb. ai./gal.) per 100 pounds of seed.

#### N. Compensation.

To claim compensation, the individuals named below must complete and submit to an inspector whichever of three USDA forms is/are applicable (i.e., ASCS Form 574, ASCS Form 578, and/or FCI Form 73), as determined by the inspector plus a copy of any wheat contracts to which the individual has agreed. As detailed in 7 CFR 301.89 and summarized here, the following individuals are eligible to receive compensation

from the USDA for losses or expenses incurred because of the Karnal bunt quarantine and emergency actions:

- 1. Growers in New Mexico and Texas who have destroyed crops.**
- 2. Growers and handlers, whether contracted or not contracted, who sell non-propagative wheat grown in the quarantined area.**
- 3. Growers and handlers of non-propagative wheat that is not sold but buried in a sanitary landfill.** A disposal receipt is required in addition to the USDA form(s).
- 4. Owners of grain storage facilities** that have been decontaminated pursuant to an Emergency Action Notification (PPQ Form 523) issued by an inspector are eligible to be compensated, on a one time only basis, provided they submit all documents relating to the decontamination process.
- 5. Flour millers** who, in accordance with a compliance agreement with APHIS, heat-treat mill feed made from wheat produced in the quarantined area are eligible to be compensated. Copies of their limited permit to move the wheat and bill of lading accompanying that movement must be submitted to the inspector.