Subject: APHIS Amends Karnal Bunt (*Tilletia indica*) Regulated Areas in La Paz, Maricopa, and Pinal Counties in Arizona

To: State and Territory Agricultural Regulatory Officials

Effective immediately, the Animal and Plant Health Inspection Service (APHIS) is amending the Karnal bunt regulated areas in La Paz, Maricopa, and Pinal Counties in Arizona.

APHIS is removing seven fields (199 acres) from the list of regulated areas. One field has been regulated for twenty-one years, four fields for twenty-three years, and two fields for twenty-four years. Thirty-seven (37) acres in La Paz County are on the Colorado River Indian Reservation of the Colorado River Indian Tribes; 32 acres are non-tribal land in Maricopa County; and 130 acres in Pinal County are on the Gila River Indian Reservation of the Gila River Indian Community.

In 1999, APHIS regulated four fields in Pinal County, not because they were positive for Karnal bunt, but because they were planted with non-fungicide treated wheat seed. On February 5, 2003, APHIS published a final rule removing the requirement that host seed be fungicide-treated before planting. Therefore, APHIS is removing these four fields from regulation because the fields never tested positive for Karnal bunt and seed treatment is no longer a requirement in 7 C.F.R. § 301.89.

A recent APHIS analysis concluded that the likelihood of any teliospores of *T. indica* remaining viable in three additional fields (one each in La Paz, Maricopa, and Pinal counties) is negligible because: they had a low initial population of *T. indica* when first regulated, a sustained host-free period (more than twenty years) after their first planting, and a record of both tillage and irrigation that enhances population reduction through suicidal germination of teliospores in the soil. Accordingly, APHIS is deregulating these seven fields (199 acres). However, other portions of La Paz, Maricopa, and Pinal Counties remain regulated.

APHIS regulates Karnal bunt because many trading partners require that U.S. wheat be certified as grown in areas free of this plant disease. APHIS will follow this emergency action by publishing a notice in the *Federal Register*.

More information on Karnal bunt is available at the following website:

http://www.aphis.usda.gov/plant-health/kb

For additional information about the Karnal bunt program, please call National Policy Manager, Lynn Evans-Goldner, at (301) 851-2286.

Dr. Mark L Davidson
Deputy Administrator
Plant Protection and Quarantine

Attachment: Federal Order
This Federal Order amends the Karnal bunt regulated areas in La Paz, Maricopa, and Pinal Counties in Arizona and reduces the overall regulated area in Arizona.

This Federal Order is issued pursuant to the authority provided by the Plant Protection Act of June 20, 2000, Section 412(a), 7 U.S.C. 7712(a). The Act authorizes the Secretary of Agriculture to prohibit or restrict the movement in interstate commerce of any plant, plant part, or article if the Secretary determines the prohibition or restriction is necessary to prevent the dissemination of a plant pest within the United States. The regulatory authority provided by 7 U.S.C. 7754 allows the Secretary to issue orders to carry out this provision of the Plant Protection Act. This Federal Order is likewise issued pursuant to the regulations promulgated under the Plant Protection Act found at 7 CFR 301.89 et seq.

Section 7 CFR § 301.89-3(b) allows the designation of less than an entire state as a Karnal bunt regulated area only when the Administrator of the Animal and Plant Health Inspection Service (APHIS) has determined, as in this case, that the designation is adequate to prevent the interstate spread of Karnal bunt. In addition, 7 CFR § 301.89-3(b)(1)(i) requires that in order for less than an entire state to be designated that the Administrator find that the state is enforcing an intrastate Karnal bunt quarantine that is equivalent to federal Karnal bunt regulations. The Arizona State Plant Regulatory Official has confirmed the establishment of an intrastate quarantine area for Karnal bunt that mirrors the federal regulatory requirements as specified in 7 CFR § 301.89.


APHIS is reducing the Karnal bunt regulated area in La Paz, Maricopa, and Pinal Counties in Arizona by removing seven fields (199 acres) from the list of regulated areas. One field has been regulated for twenty-one years; four have been regulated for twenty-three years; and two have been regulated for
twenty-four years. One field (37 acres) in La Paz County is on the Colorado River Indian Reservation of the Colorado River Indian Tribes; one field (32 acres) in Maricopa County is not on tribal land; and five fields (130 acres) in Pinal County are on the Gila River Indian Reservation of the Gila River Indian Community.

In 1999, APHIS regulated four fields (73 acres) in Pinal County on the Gila River Indian Reservation, not because they were positive for Karnal bunt, but because they were planted with non-fungicide treated wheat seed. On February 5, 2003, APHIS published a final rule (Docket No. 01–118–2) that removed the requirement that *T. indica* hosts, wheat and triticale seed, be treated with a fungicide before being planted within a Karnal bunt regulated area. For twenty-two years, two of these fields were abandoned and left fallow, and two were planted continuously to non-host perennial crops. In addition, each field was also tilled and irrigated at least once. These factors would inhibit the ability of *T. indica* teliospores to survive, even if they were initially present. Therefore, APHIS is removing these four fields (73 acres) from regulation because the fields never tested positive for Karnal bunt; a fungicide seed treatment is no longer a requirement in 7 C.F.R. § 301.89; and the fields have not been planted to host crops for decades.

Based on the findings of an APHIS analysis, APHIS is removing an additional three fields (126 acres) from the list of regulated areas. The analysis concluded that the likelihood of any teliospores of *T. indica* remaining viable in these fields is negligible. The initial *T. indica* populations in these fields was predicted to be extremely low (0.002 to 0.006 percent) based on the bunted kernel counts from a 4-pound wheat seed sample, which contains approximately 45,400 seeds (7 CFR §201.46). The analysis found that a sustained period with no host crops and a record of both tillage and irrigation would further reduce the population of *T. indica*. The likelihood of any teliospores remaining viable in these fields, which were not planted with host crops for more than 20 years, is negligible. Teliospores decline over time through disintegration in the soil; and tillage and irrigation enhances population reduction through suicidal germination. Therefore, APHIS is removing three fields (126 acres) from regulation.

Accordingly, there are no more restrictions on the interstate movement of Karnal bunt regulated articles from these seven fields (199 acres). However, other portions of La Paz, Maricopa, and Pinal Counties remain regulated.

**Regulated areas § 301.89-3 (g).**

The Table below lists the seven individual fields in Arizona that are deregulated for Karnal bunt.
Individual Fields in Arizona Deregulated for Karnal bunt (*Tilletia indica*)

<table>
<thead>
<tr>
<th>Field</th>
<th>Acres</th>
<th>County</th>
<th>Tribe</th>
</tr>
</thead>
<tbody>
<tr>
<td>LP1</td>
<td>37</td>
<td>La Paz</td>
<td>Colorado River Indian Tribes of the Colorado River Indian Reservation</td>
</tr>
<tr>
<td>M1</td>
<td>32</td>
<td>Maricopa</td>
<td>None</td>
</tr>
<tr>
<td>P1</td>
<td>57</td>
<td>Pinal</td>
<td>Gila River Indian Community of the Gila River Indian Reservation</td>
</tr>
<tr>
<td>P2</td>
<td>36</td>
<td>Pinal</td>
<td>Gila River Indian Community of the Gila River Indian Reservation</td>
</tr>
<tr>
<td>P3</td>
<td>18</td>
<td>Pinal</td>
<td>Gila River Indian Community of the Gila River Indian Reservation</td>
</tr>
<tr>
<td>P4</td>
<td>10</td>
<td>Pinal</td>
<td>Gila River Indian Community of the Gila River Indian Reservation</td>
</tr>
<tr>
<td>P5</td>
<td>9</td>
<td>Pinal</td>
<td>Gila River Indian Community of the Gila River Indian Reservation</td>
</tr>
</tbody>
</table>

Arizona – additional regulated portions of the State:

La Paz County. Beginning at the northeast corner of sec. 36, T. 8 N., R. 21 W.; then south to the southeast corner of sec. 1, T.7 N., R. 21 W.; then east to the northeast corner of sec. 7, T. 7 N., R. 20 W.; then south to the southeast corner of sec. 19, T. 7 N., R. 20 W.; then west to the southwest corner of sec. 19, T. 7 N., R. 20 W.; then south to the southeast corner of sec. 36, T. 7 N., R. 21 W.; then west to the southwest corner of sec. 32, T. 7 N., R. 21 W.; then north to the northwest corner of sec. 32, T. 7 N., R. 21 W.; then west to the southwest corner of sec. 30, T. 7 N., R. 21 W.; then north from that point to the Colorado River; then northeast along the Colorado River to the northern boundary of sec. 32 T. 8 N., R. 21 W.; then east to the point of beginning.

Maricopa County. (1) Beginning at the southeast corner of sec. 21, T. 1 N., R. 1 E.; then west to the southwest corner of sec. 24, T. 1 N., R. 1 W.; then north to the southeast corner of sec. 14, T. 1 N., R. 1 W.; then west to the southwest corner of sec. 14, T. 1 N., R. 1 W.; then north to the northwest corner of sec. 35, T. 2 N., R. 1 W.; then east to the northeast corner of sec. 35, T. 2 N., R. 1 W.; then north to the northwest corner of sec. 25, T. 2 N., R. 1 W.; then east to the southwest corner of sec. 20, T. 2 N., R. 1 E.; then north to the northwest corner of sec. 20, T. 2 N., R. 1 E.; then east to the northeast corner of sec. 21, T. 2 N., R. 1 E.; then south to the southeast corner of sec. 21, T. 2 N., R. 1 E.; then east to the northeast corner of sec. 27, T. 2 N., R. 1 E.; then south to the southeast corner of sec. 15, T. 1 N., R. 1 E.; then south to the point of beginning.

(2) Beginning at the southeast corner of sec. 4, T. 1 S., R. 1 W.; then west to the northeast corner of sec. 7, T. 1 S., R. 1 W.; then south to the southeast corner of sec. 7, T. 1 S., R. 1 W.; then west to the southwest corner of sec. 9, T. 1 S., R. 2 W.; then north to the northwest corner of sec. 9, T. 1 S., R. 2 W.; then west to the southwest corner of sec. 5, T. 1 S., R. 2 W.; then north to the northwest corner of sec. 5, T. 1 S., R. 2 W.; then east to the southwest corner of sec. 33, T. 1 N., R. 2 W.; then north to the northwest corner of sec. 21, T. 1 N., R. 2 W.; then east to the northeast corner of sec. 22, T. 1 N., R. 2 W.; then north to the northwest corner of sec. 14, T. 1 N., R. 2 W.; then east to the northeast corner of sec. 14, T. 1 N., R. 2 W.; then south to the southeast corner of sec. 14, T. 1 N., R. 2 W.; then east to the northeast corner of sec. 20, T. 1 N., R. 1 W.; then south to the northeast corner of sec. 14, T. 1 N., R. 1 W.; then east to the northeast corner of sec. 28, T. 1 N., R. 1 W.; then south to the point of beginning.

(3) Beginning at the southeast corner of sec. 35, T. 2 N., R. 5 E.; then west to the northeast corner of sec. 4, T. 1 N., R. 5 E.; then south to the southeast corner of sec. 4, T. 1 N., R. 5 E.; then west to the
southwest corner of sec. 4, T. 1 N., R. 5 E.; then south to the southeast corner of sec. 17, T. 1 N., R. 5 E.; then west to the southwest corner of sec. 17, T. 1 N., R. 5 E.; then north to the northwest corner of sec. 17, T. 1 N., R. 5 E.; then west to the southwest corner of sec. 12, T. 1 N., R. 4 E.; then north to the northwest corner of sec. 12, T. 1 N., R. 4 E.; then east to northeast corner of sec. 12, T. 1 N., R. 4 E.; then north to the northwest corner of sec. 18, T. 2 N., R. 5 E.; then east to the northeast corner of sec. 14, T. 2 N., R. 5 E.; then south to the point of beginning.

(4) Beginning at the southeast corner of sec. 32, T. 2 N., R. 1 W.; then west to the southwest corner of sec. 34, T. 2 N., R. 2 W.; then north to the southeast corner of sec. 21, T. 2 N., R. 2 W.; then west to the southwest corner of sec. 21, T. 2 N., R. 2 W.; then north to the northwest corner of sec. 21, T. 2 N., R. 2 W.; then north to the northeast corner of sec. 21, T. 2 N., R. 2 W.; then south to the southwest corner of sec. 34, T. 3 N., R. 2 W.; then east to the northeast corner of sec. 32, T. 3 N., R. 1 W.; then south to the point of beginning.

(5) Beginning at the southeast corner of sec. 27, T. 1 S., R. 4 W.; then west to the southwest corner of sec. 27, T. 1 S., R. 5 W.; then north to the northwest corner of sec. 22, T. 1 S., R. 5 W.; then east to the northeast corner of sec. 22, T. 1 S., R. 5 W.; then north to the northwest corner of sec. 26, T. 1 N., R. 5 W.; then east to the northeast corner of sec. 29, T. 1 N., R. 4 W.; then south to the southeast corner of sec. 29, T. 1 N., R. 4 W.; then east to the northeast corner of sec. 33, T. 1 N., R. 4 W.; then south to the southeast corner of sec. 33, T. 1 N., R. 4 W.; then east to the northeast corner of sec. 3, T. 1 S., R. 4 W.; then south to the point of beginning.

Pinal County: (1) Beginning at the southeast corner of sec. 4, T. 6 S., R. 4 E.; then west to the southwest corner of sec. 4, T. 6 S., R. 4 E.; then south to the southeast corner of sec. 17, T. 6 S., R. 4 E.; then west to the southwest corner of sec. 16, T. 6 S., R. 3 E.; then north to the southeast corner of sec. 5, T. 6 S., R. 3 E.; then west to the southwest corner of sec. 6, T. 6 S., R. 3 E.; then north to the southeast corner of sec. 31, T. 5 S., R. 3 E.; then west to the southwest corner of sec. 31, T. 5 S., R. 3 E.; then north to the southeast corner of sec. 24, T. 5 S., R. 2 E.; then west to the southwest corner of sec. 24, T. 5 S., R. 2 E.; then north to the northwest corner of sec. 1, T. 5 S., R. 2 E.; then east to the southwest corner of sec. 31, T. 4 S., R. 3 E.; then north to the northwest corner of sec. 20, T. 4 S., R. 3 E.; then north to the northwest corner of sec. 20, T. 4 S., R. 3 E.; then east to the northeast corner of sec. 19, T. 4 S., R. 4 E.; then east to the northeast corner of sec. 32, T. 4 S., R. 4 E.; then east to the northeast corner of sec. 32, T. 4 S., R. 4 E.; then south to the northwest corner of sec. 21, T. 5 S., R. 4 E.; then east to the northeast corner of sec. 21, T. 5 S., R. 4 E.; then south to the northwest corner of sec. 4, T. 6 S., R. 4 E.; then east to the northeast corner of sec. 4, T. 6 S., R. 4 E.; then south to the point of beginning.

(2) Beginning at the intersection of the Maricopa/Pinal County line and the northeast corner of sec. 4, T. 3 S., R. 6 E.; then south to the southeast corner of sec. 28, T. 3 S., R. 6 E.; then west to the southwest corner of sec. 28, T. 3 S., R. 6 E.; then south to the southeast corner of sec. 32, T. 3 S., R. 6 E.; then west to the southwest corner of sec. 35, T. 3 S., R. 5 E.; then north to the northwest corner of sec. 26, T. 3 S., R. 5 E.; then west to the southwest corner of sec. 22, T. 3 S., R. 5 E.; then north to the northwest corner of sec. 3, T. 3 S., R. 5 E.; then east along the Maricopa/Pinal County line to the point of beginning.

APHIS appreciates the cooperative relationship with the state regulatory officials, Colorado River Indian Tribes of the Colorado River Indian Reservation, Ak-Chin Indian Community, Gila River Indian
Community of the Gila River Indian Reservation, the Salt River Pima Maricopa Indian Community, and
the wheat industry, in our effort to prevent the spread of Karnal bunt.

For more information on the Karnal bunt program, please call National Policy Manager, Lynn Evans-Goldner, at (301) 851-2286.