

# Loss Adjustment Procedures for Aflatoxin

*Revised December 2008*

Aflatoxin is a fungus that is most commonly found in corn, cotton, peanuts, and tree nuts. Moisture, insects, and high temperatures can cause aflatoxin crop damage. Aflatoxin growth is most commonly found when a period of drought is followed by a period of high humidity. Aflatoxin can also attack crops during storage or if drying is delayed. Rodents and insects can also cause contamination. The Food and Drug Administration (FDA) has set contamination guidelines for food and feed.

If you think your crop has been damaged by aflatoxin, notify your insurer. Aflatoxin contamination should be covered as long as representative samples of grain were taken before the grain was moved into commercial or on-farm storage. Crop insurance generally ends at harvest, so it is important that your insurer samples the crop prior to storage.

An insurance adjuster will take a crop sample to be tested at an approved testing facility. Only approved testing facilities can provide aflatoxin testing.

Approved testing facilities:

- a) Must be able to do quantitative tests on grain and itemize the results in parts per billion (ppb). USDA's Grain Inspection, Packers & Stockyards Administration must certify the test kits.
- b) Must be a recognized commercial, governmental, or university testing lab that uses industry-recognized sample sizes, equipment, and procedures for testing aflatoxin.
- c) Must not have any interest in the grain being tested.

There are four possible test results: no discounts/damage, mild discounts, severe discounts, or a destruction order if aflatoxin is discovered. Since the FDA does not have advisory levels or use restrictions for crops with 0 to 20 ppb of aflatoxin, crop insurance

policy provisions do not provide quality adjustments for levels 20 ppb or below.

FDA may require crops with more than 300 ppb (500 ppb in Texas) to be destroyed. Crop insurance policy provisions consider crops having more than 300 ppb of aflatoxin as having zero value, provided the crop is destroyed in a manner acceptable to the insurer, and will pay a full loss.

## 2008 Crop Year Only

If the crop tests over 20 ppb up to the State maximum, the crop qualifies for quality adjustment using the actual reduction in value (RIV).

For example: 1,000 bushels of corn with 45 ppb of aflatoxin is being sold; the local market discount (RIV) for 45 ppb is \$0.75 per bushel; the local market (spot cash) price is \$1.80 per bushel. In this example:  $\$0.75 \text{ (RIV)} \div \$1.80 = 0.417$ . 0.417 is the discount factor (DF). The quality adjustment factor (QAF) is  $1.000 - 0.417$ , or 0.583. For quality adjustment, here is how to calculate the production:  $1,000 \text{ bushels} \times 0.583 \text{ QAF} = 583 \text{ bushels production to count}$ .

Adjustments can also be made to crops that have levels of aflatoxin in excess of the maximum amounts in the Special Provisions of Insurance (SPOI). The SPOI has additional information, such as quality adjustment, loss procedures, and loss payment factors that are not contained in the insurance policy. These claims will not be settled until such production is sold to a third party who holds no claim on the crop's loss payments, fed, used, or destroyed.

For example: 1,000 bushels of corn is sold to a disinterested third party with 320 ppb aflatoxin, the local market discount (RIV) for 320 ppb is \$1.50 per bushel, and the local market (spot cash) price is \$1.80 per bushel. In this example:  $\$1.50 \text{ (RIV)} \div \$1.80 = 0.833$ . 0.833 is the discount factor (DF). The quality

adjustment factor (QAF) is  $1.000 - 0.833$ , or  $0.167$ . For quality adjustment, here is how to calculate the production:  $1,000 \text{ bushels} \times 0.167 \text{ QAF} = 167$  bushels production to count.

### Starting with the 2009 Crop Year

If the crop tests over 20 ppb up to the State maximum, the crop qualifies for quality adjustment using the actual reduction in value (RIV).

For example: 1,000 bushels of corn with 45 ppb of aflatoxin is being sold; the local market discount (RIV) for 45 ppb is \$1.50 per bushel; the local market (spot cash) price is \$1.80 per bushel. In this example:  $\$1.50 \text{ (RIV)} \div \$1.80 = 0.833$ . 0.833 is the discount factor (DF). The quality adjustment factor (QAF) is  $1.000 - 0.833$ , or  $0.167$ . For quality adjustment, here is how to calculate the production:  $1,000 \text{ bushels} \times 0.167 \text{ QAF} = 167$  bushels production to count.

Adjustments can also be made to crops that have levels of aflatoxin in excess of the maximum amounts in the SPOI. These claims will not be settled until such production is sold to a third party who holds no claim on the crop's loss payments, fed, used, or destroyed.

For example: 1,000 bushels of corn is sold to a disinterested third party with 220 ppb aflatoxin. The *discount factor chart* shows the DF is 0.400. The QAF is  $1.000 - 0.400$ , or  $0.600$ . For quality adjustment, here is how to calculate the production:  $1,000 \text{ bushels} \times 0.600 \text{ QAF} = 600$  bushels production to count.

Producers concerned about placing aflatoxin-infected grain in storage or efforts to reduce the spread of aflatoxin within grain storage facilities

should contact local agricultural experts. Policyholders should contact their crop insurance agent or insurance company if they have questions about their crop insurance coverage or responsibilities.

For additional information, please contact the Risk Management Agency.

United States Department of Agriculture  
Risk Management Agency  
1400 Independence Ave., SW, Stop 0801  
Washington, D.C. 20250-0801  
**TEL:** (202) 690-2803  
**FAX:** (202) 690-2818  
**EMAIL:** rma.mail@rma.usda.gov

### Download Copies from the Web

Visit our online publications/fact sheets page at:  
<http://www.rma.usda.gov/pubs/2005/aflatoxinfactsheet.pdf>

The U.S. Department of Agriculture (USDA) prohibits discrimination in all its programs and activities on the basis of race, color, national origin, age, disability, and where applicable, sex, marital status, familial status, parental status, religion, sexual orientation, genetic information, political beliefs, reprisal, or because all or a part of an individual's income is derived from any public assistance program. (Not all prohibited bases apply to all programs.) Persons with disabilities who require alternative means for communication of program information (Braille, large print, audiotape, etc.) should contact USDA's TARGET Center at (202) 720-2600 (voice and TDD).

To file a complaint of discrimination write to: USDA, Director, Office of Civil Rights, 1400 Independence Avenue, S.W., Washington, D.C. 20250-9410 or call (800) 795-3272 (voice) or (202) 720-6382 (TDD). USDA is an equal opportunity provider and employer.