



United States
Department of
Agriculture

Grain Inspection,
Packers and Stockyards
Administration

Stop 3630
1400 Independence Ave., SW
Washington, DC 20250-3630

January 20, 2010

Reference # 227

TO: FGIS POLICY BULLETIN BOARD

FROM: Robert Lijewski, Acting Director /s/ *Robert Lijewski*
Field Management Division

SUBJECT: Sample Size Requirement DON testing-Corn

ORIGINATING OFFICE: Policies, Procedures and Market Analysis Branch

1. PURPOSE

This memorandum provides notification of a new minimum sample size requirement for DON (vomitoxin) testing analysis for corn only.

2. BACKGROUND

GIPSA's Technical Services Division's (TSD) recent review of DON testing results on corn, and continuing efforts to improve testing service necessitates a change in sample size requirements. TSD has recommended that all field office(s) and Official Agencies grind **1,000 grams** of corn for DON testing analysis, before obtaining their **50 gram** test sample portion for analysis.

Presently, 100 grams of any grain is ground for DON testing. The increase in sample size is based on the premise that 1,000 grams of corn has approximately the same number kernels as 100 grams of wheat. Thus, increasing the sample size will increase testing confidence level and reduce the variability in test results.

3. POLICY

The basis of determination for official DON testing on corn is set at 1,000 grams of **corn** as a whole (with broken corn and foreign material included) for all types of carriers (see the exception for trucklots below). A similar size sample is **recommended**, but not required for submitted samples.

From the ground portion, official personnel must maintain a 250 gram file sample for review inspection purposes. If review inspections are not requested, and DON test results satisfy the contract requirements of the applicant for service, and the sample is not required for monitoring purposes, official personnel may discard the file sample portion.

NOTE: Since the Aflatoxin Handbook specifies only a minimum of a two pound sample for the analysis of aflatoxin on a trucklot, DON testing of corn on trucklots will also be set at a minimum of two pounds.

Obtain samples according to the guidelines in the Grain Inspection Handbook, Book I, "Grain Sampling."

- a. From the 1,000 gram ground work portion, divide (using a Boerner or Riffle divider) out a sub-portion of 50 grams for DON testing and weigh on an FGIS-approved type scale with a minimum division size of 0.1 gram. Save 250 grams of the ground work portion as a file sample for review inspections.
- b. If the applicant for service requests testing of official samples for multiple mycotoxins (i.e. aflatoxin, zearalenone, fumonisin, or ochratoxin) a larger sample size, up to 10 pounds, may be necessary. Official lot type requested by applicant (i.e. railcars, barges, and sublots) for other mycotoxin testing will determine whether a larger sample size is needed.
- c. In this case, grind the entire larger sample and cut out the amount required for the various mycotoxin tests.
- d. Testing locations that receive submitted samples that are less than the recommended minimum sample size must grind the entire sample as submitted. For submitted samples that are 1,000 grams or more, a minimum of 1,000 grams must be ground for testing purposes.

4. FILING INSTRUCTIONS

Retain a copy of this memo with the DON Handbook until the handbook is revised.

5. QUESTIONS

Direct any questions concerning this policy to Carl Jackson, Policies, Procedures and Market Analysis Branch, at (202) 720-8286, or email at carl.j.jackson@usda.gov.