Commentors in support of the proposed action indicate that reporting TW to the nearest tenth pound per bushel will benefit both producers and the general corn market. Further, statistical information provided in the proposed action indicated that the reproducibility of TW results is similar to or better than the reproducibility of other factors reported to the nearest tenth. Therefore, the reproducibility of TW results was considered prior to the proposal.

Based on this information, comments received, and other available information, GIPSA is revising § 810.102, Definition of other terms, by revising section (d), Test weight per bushel, to report TW in corn to the nearest tenth of a pound per bushel.

## Stone Count

GIPSA proposed to eliminate the count limit on stones and reduce the U.S. Sample grade aggregate weight tolerance from more than 0.2 percent by weight to more than 0.1 percent by weight. Presently, eight or more stones with an aggregate weight in excess of 0.2 percent of the sample are required to assign the Sample Grade designation. This determination is performed before the removal of broken corn and foreign material.

Ten commentors supported the proposed change stating that eliminating the stone count limit and reducing the aggregate weight percent from 0.2 to 0.1 will not have a negative impact on growers, provides a positive signal to foreign buyers, addresses the needs of corn millers without adversely affecting corn farmers, and emphasizes the importance of quality by clearly showing that reducing contamination is desirable.

One opponent stated that elimination of stone count limits is undesirable because having one 15-gram stone in a 1,000-gram sample could make a lot "Sample Grade" and one stone is incidental and may be the only stone in the entire lot.

Stones have harmful effects on corn quality and millability. In addition, several corn industry representatives have requested that the count limit on stones be eliminated to encourage the delivery of high quality corn. GIPSA believes that eliminating the stone count limit and reducing the aggregate weight tolerance will facilitate the marketing of corn.

Based on this information, comments received, and other available information, GIPSA is revising § 810.404, Grades and grade requirements for corn, by revising the definition of U.S. Sample Grade by

eliminating the count limit on stones and reducing the aggregate weight criteria from more than 0.2 percent by weight to more than 0.1 percent by weight.

## Stress Crack Testing Service

GIPSA proposed to offer corn stress crack testing using the Illinois Crop Improvement Association, Identity Preserved Grain Laboratory (IPGL), method as official criteria under the authority of the Act and sought comments on the reporting method for results.

As described by the IPGL, stress crack tests are performed on random subsamples. The kernels are inspected visually on a backlighted lightboard and separated into four categories: no or zero stress cracks; one or single stress cracks; two or double stress cracks; and more than two or multiple stress cracks. The percentage of kernels falling into each category is used to calculate the percentage of total stress cracks and stress crack index as follows:

% TSC = [% single SC + % double SC

+ % multiple SC]
SCI = [(% single SC) + (% double SC ×
3) + (% multiple SC × 5)]
Where SC = stress cracks:

SCI = stress crack index; and TSC = total stress cracks.

The stress crack index is an indication of the multiplicity of stress cracks in each kernel. The weighting factors indicate that corn kernels with double and multiple stress cracks are more susceptible to breakage than kernels with single stress cracks.

This testing service will be optional and GIPSA will recover the cost of providing this service through the applicable inspection fees as set forth in § 800.71(a) of the regulations.

Corn which contains stress-cracked kernels tends to break apart and, as a result, is undesirable in the corn dry milling, wet milling, and food manufacturing processes. Also, stress cracked kernels indicate that corn has been dried at an excessively high temperature.

Starch recovery, which is an essential component of the wet milling process, is also lower from kernels possessing many stress cracks. To the food manufacturer, stress cracks are of concern because of the adverse effect on soaking, which is an essential component of the manufacturing process.

Cracked corn is also more difficult to store since it is more readily attacked by microorganisms and is difficult to aerate uniformly. Cracked corn can also contribute to increased elevator dust levels and, thus, negatively impact elevator safety and the environment.

Twelve commentors supported this proposal stating that GIPSA can make a significant contribution to market efficiency by offering a standardized stress crack testing service and testing could provide an incentive for improving drying methods which could improve corn quality.

Three commentors opposed this proposal stating that: it is not clear that stress crack testing will improve quality or enhance safety; direct correlation between stress cracks and end-use value have yet to be proven; inexperienced users could make misleading or inappropriate interpretations based on official results; corn processors and grain elevator managers will adopt new discount schedules; the test is currently available from private laboratories; processors are only interested in total stress cracks, not the four categories (single, double, multiple, and total); and GIPSA will not be able to recover the full cost of developing and offering the

Several commentors suggested that GIPSA provide educational efforts to inform affected producers, allow testing based on 50 kernels rather than 100 kernels, and permit applicants to specify certification of results to meet their needs.

GIPSA selected the IPGL test method because it meets the basic requirement for online testing. It is quick, easy, and cost effective. In addition, this method is well developed, has been in use successfully for several years, and will impose a minimal cost to the inspection system.

Based on comments received and other available information, GIPSA is offering stress crack testing as an official criteria under the authority of the Act. Total percent stress cracks will be reported. Upon request, stress crack categories (single, double, and multiple) will also be reported. This testing service will be optional. GIPSA will recover the cost of providing this service through the applicable inspection fees as set forth in § 800.71(a) of the regulations.

## Miscellaneous Changes

GIPSA proposed to revise the format of the grading chart in § 810.404, Grades and Grade Requirements for Corn, to improve the readability of the grading chart. However, information received from participants in GIPSA's quality control and proficiency training programs and employee suggestion hotline indicate the present chart format is easier to understand than the proposed chart or other recently revised