

HISTORICAL COMPILATION OF CHANGES IN THE GRAIN STANDARDS OF THE UNITED STATES

The United States Grain Standards Act (Act) was passed by Congress on August 11, 1916. The first standards established under the Act were for corn and became effective December 1, 1916. Since then, standards have been developed for barley, canola, flaxseed, mixed grain, oats, rye, sorghum, soybeans, sunflower seed, triticale, and wheat.

The standards for the various grains have been revised or amended from time to time. This publication which contains a compilation of these revisions and amendments and a cross-reference guide, supersedes "Historical Compilation of Changes in the Grain Standards of the United States" dated September 1996.

CONTENTS

Part I - United States Standards for:	<u>Page</u>
Subpart A. General Provisions	1
B. Barley	2
C. Canola	7
D. Corn	8
E. Feed Oats and Mixed Feed Oats	12
F. Flaxseed	13
G. Mixed Grain	15
H. Oats	18
I. Rye	22
J. Sorghum	25
K. Soybeans	29
L. Sunflower Seed	33
M. Triticale	34
N. Wheat	35

SUBPART A - GENERAL PROVISIONS

Established effective June 30, 1987 (52 FR 24418, 6/30/87)

Established Subpart A - General Provisions for terms common to all grains and revised the rounding procedures as stated in the section on percentages to more generally accepted mathematical procedures. Certain sections are removed from individual grain standards and are included in Subpart A, such as test weight per bushel, moisture, and stones. The common wording for Basis of Determination and rounding procedures are removed from each standard. Also, the wording for Grade Designations and Special Grade Designations are removed from individual standards and rewritten in general terms for inclusion into Subpart A.

Revised effective May 1, 1988 (52 FR 24441, 6/30/87)

Redefined the infested designation as it applies to the representative sample, lot as a whole (stationary), and sample as a whole (continuous loading/ unloading of shiplots and bargelots).

Revised effective September 1, 1994 (57 FR 3274, 1/29/92)

Revised the method of recording the percentage of splits in soybeans from in whole percent with fractions of a percent being disregarded to the nearest tenth percent.

Revised effective June 1, 1997 (61 FR 18486, 4/26/96 and 61 FR 24669, 5/16/96)

Revised the method of recording the percentage of dockage in barley from whole percent with fractions of a percent being disregarded to whole and half percent with a fraction less than one-half percent disregarded.

Revised effective June 1, 1999 (63 FR 20054, 4/23/98)

Revised the method of recording the percentage of dockage in rye from whole percent with fractions of a percent being disregarded to the nearest tenth percent.

Revised effective September 1, 2007 (71 FR 52403,9/6/06)

Revised the method of recording Test Weight (TW) for soybeans from whole and half pounds with a fraction of a half pound disregarded to the nearest tenth pound. Also, clarified that TW in canola is only determined and reported upon the request of an applicant.

B. BARLEY

Established effective August 24, 1926

Amended effective September 15, 1927

1. Changed requirements for sound barley in grades Nos. 2 and 3 in the class Barley from 88 to 86 percent in both grades.
2. Changed percentage of oats and wild oats in grades Nos. 2 and 3 in the class Barley from 8 to 10 percent in both grades.
3. Changed the moisture content in grades Nos. 2, 3, and 4, and No. 1 Feed in the class Barley from 14.5 to 15.5 percent for each grade.

Amended effective July 21, 1933

1. Sound barley definition changed to exclude barley which was damaged or materially discolored by blight and/or mold.
2. Sample grade definition changed to include barley with more than 5 percent of barley damaged or materially discolored by blight or mold.
3. Established a grade Blighted barley for barley with more than 2 percent but not more than 5 percent of kernels damaged or materially discolored by blight and/or mold.

Revised effective July 2, 1934

1. Class I Barley was divided into two subclasses: Malting Barley and Barley.
2. Eliminated special No. 2 and No. 1 Feed, and adopted five numerical grades and Sample grade.
3. Grade requirements for class Black Barley were made the same as for the class Barley.
4. Eliminated the class Two-rowed Barley and established special grade for Two-rowed barley.
5. Eliminated grade factor general appearance and required that badly stained or materially weathered barley grade not higher than No. 4.
6. Adopted a dockage system for the class Barley.
7. Raised the percentage of sound barley in grades No. 2 and No. 3 from 86 and 86 percent

to 93 and 90 percent for the class Barley.

8. Changed the basis of grade determination for all factors except dockage, temperature, odor, garlic, and insects in all classes of Barley from the grain as a whole to the grain when free from dockage.
9. Redesignated the grades Bleached barley, Garlicky barley, Weevily barley, Smutty barley, and Blighted barley as special grades and established special grades for test weight of Western barley, Bright Western barley, Stained Western barley, Two-rowed barley, Tough barley, and Ergoty barley.
10. Eliminated test weight as a numerical grading factor for Western Barley.
11. Eliminated skinned kernels as a grading factor except for Malting Barley and increased the limits for broken kernels in all classes except Malting Barley.
12. Eliminated smutty odor as a grading factor in the special grade Smutty.

Amended effective July 1, 1935

Changed the basis method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective July 1, 1937

1. Eliminated the determination of dockage on the basis of specific classes and adopted one method for determining dockage for all classes of barley.
2. Required that heat-damaged and mellow kernels be determined on the basis of the pearled dockage-free grain.
3. Added a definition for damaged barley.

Amended effective July 1, 1950

Revised the special grade for Two-rowed barley and provided special grades for Choice Malting Two-rowed Western Barley and Malting Two-rowed Western Barley.

Revised effective August 2, 1954

Excluded barley injured by heat, mold, and barley of the special grade Weevily from the definition for Choice Malting Two-rowed and Malting Two-rowed Western Barley, and provided that No. 1 Malting Two-rowed Western Barley be of somewhat higher quality than the No. 2 and No. 3.

Revised effective July 1, 1956

1. Provided for a subclass Blue Malting Barley.
2. Provided numerical grades and grade requirements for the subclasses Malting Barley and Blue Malting Barley.
3. Eliminated the class Black Barley and provided that black barley be graded as Mixed Barley.
4. Provided maximum limits of thin barley in each of the numerical grades for all subclasses of the class Barley.
5. Changed the minimum limits of sound barley from 95 and 93 percent in grades No. 1 and No. 2 to 97 and 94 percent.
6. Provided maximum limits of damaged kernels and heat-damaged kernels in each of the numerical grades for the subclass Barley of the class Barley and of damaged kernels in each of the numerical grades for the subclasses Malting Barley and Blue Malting Barley in the class Barley.

Revised effective July 1, 1960

1. Reduced the percentage of skinned and broken kernels in the definition for the subclass Malting Barley from 10.0 percent to 8.0 percent.
2. Reduced the maximum limits of skinned and broken kernels in grades No. 2 and No. 3 of the subclasses Malting Barley and Blue Malting Barley from 7.0 percent and 10.0 percent to 6.0 percent and 8.0 percent.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include barley which contains more than two crotalaria seeds in 1,000 grams.

Amended effective July 1, 1962

1. Provided that barley grown in Alaska be classed as Barley rather than Western Barley.
2. Changed the special grades Choice Malting Two-rowed Western Barley and Malting Two-rowed Western Barley to Choice Malting Two-rowed Barley and Malting Two-rowed Barley to permit the grading of the variety Betzes under these special grades.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the barley standards changed from "Official Grain Standards of the United States for Barley" to "United States Standards for Barley."

Revised effective November 1, 1976 (40 FR 33428, 8/8/75)

1. Provided that barley be classed by kernel characteristics instead of area of production such as Western Barley.
2. Reduced the minimum test weight per bushel for U.S. No. 1 Choice Two-Rowed Malting Barley from 52 to 50 pounds and for U.S. No. 1, 2, and 3 Two-Rowed Malting Barley from 50 to 48 pounds.
3. Defined the term plump barley and provided a basis for reporting the amount found in malting barley.
4. Changed the special grade limit from 0.3 percent to 0.10 percent for Ergoty barley.
5. Redesignated the terms used to describe barley kernels damaged by frost, mold, or heat and established limits for such damage.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Barley, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective June 30, 1987 (52 FR 24418, 6/30/87)

1. Removed the requirement, "semisteely in mass," from the definition of malting barley and removed the special grades "Tough," "Stained," "Bleached," and "Bright."
2. Removed the terms "frost-damaged kernels (minor)," "mold-damaged kernels (minor)," and "heat-damaged kernels (minor)" and substitute the terms "injured-by-frost kernels," "injured-by-mold kernels," and "injured-by-heat kernels," respectively, and deleted such terms, except for injured-by-heat, from the definition of damage.
3. Removed the term "black barley" as a grade-determining factor and included black barley under the definition of "other grains."
4. Removed the requirement that barley containing smut in excessive amounts be graded Sample grade.
5. Removed the requirement for wild bromegrass seeds in the definition of Sample grade.
6. Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

Amended effective June 1, 1997 (61 FR 18486, 4/26/96 and 61 FR 24669, 5/16/96)

1. Modified the classification system of barley by establishing two classes: Malting barley and Barley. Revised Two-rowed Malting barley by removing the U.S. No. 1 Choice grade designation. Amended the definition for suitable malting type to include other malting varieties used by private malting and brewing companies.
2. Amended the subclass definitions for Six-rowed and Two-rowed barley by deleting the reference to Malting barley.

3. Revised the dockage certification procedure by reporting results in half and whole percent with a fraction less than one-half being disregarded.
4. Amended the definition of thins to require the use of a single sieve (5/64 x 3/4 slotted-hole) only in the class Barley.
5. Eliminated the numerical grade restriction for badly stained and materially weathered from the standards.

C. CANOLA

Established effective February 28, 1992 (57 FR 3274, 1/29/92)

Revised effective September 1, 2007 (71 FR 52403, 9/6/06)

1. Clarified reporting requirements for test weight per bushel (TW)

D. CORN

Established effective December 1, 1916

Revised effective July 15, 1918

1. Defined corn as shelled corn of the flint or dent varieties.
2. Changed the heading of the grade factor heat-damaged and mahogany kernels to heat-damaged kernels and raised the allowance for this factor in the six numerical grades from 0.0, 0.0, 0.0, 0.5, 1, and 3 percent to 0.0, 0.1, 0.3, 0.5, 1.0, and 3.0 percent.
3. Added minimum test weight per bushel of 51, 49, 47, and 44 pounds for the grades Nos. 3, 4, 5, and 6.
4. Added the terms commercially objectionable foreign odor and heating and dropped the term fire-burned in the definition for Sample grade.
5. Deleted the terms immature and badly blistered from the definition of grade No. 6.

Amended effective October 3, 1921

Changed from a 14/64-inch sieve to a 12/64-inch sieve for determining foreign material and cracked corn.

Amended effective August 15, 1924

Changed the grading of corn infested with live weevils from Sample grade to a grade Weevily corn.

Revised effective September 1, 1934

1. Reduced the number of numerical grades from six to five, redesignated the grade Weevily corn as a special grade, and established a special grade for Flint corn.
2. Total damage was liberalized from 2, 4, 6, 8, 10, and 15 percent to 3, 5, 7, 10, and 15 percent; and heat damage was liberalized from 0.0, 0.1, 0.3, 0.5, 1, and 3 percent to 0.1, 0.2, 0.5, 1.0, and 3.0 percent in the several numerical grades.
3. The definition of Sample grade was changed to include musty and sour corn which was previously included in grade No. 6.
4. Test weights for the several grades were changed from 55, 53, 51, 49, 47, and 44 to 54,

53, 51, 48, and 44.

5. The percentage of other grains was limited to 10 percent. Prior to this change, there was nothing in the corn standards about other grains, and other grains were limited by the amount of foreign material and cracked corn.
6. Moisture in grades 4 and 5 was changed from 19.5 and 21.5 percent to 20.0 and 23.0 percent.
7. Cracked corn and foreign material in grade No. 5 was changed from 6 percent to 7 percent.

Amended effective July 1, 1935

Changed the basic method for determining moisture from the Brown-Duvel to the water-oven method or any method giving similar results.

Amended effective January 20, 1937

Redefined the special grade Flint corn and added a special grade Flint and Dent corn.

Revised effective October 1, 1959

1. Changed the basic method for determining moisture from the water-oven method to the air-oven method.
2. Changed the minimum test weight per bushel from 54, 53, 51, 48, and 44 pounds to 56, 54, 52, 49, and 46 pounds for grades Nos. 1 through 5.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include corn which contains more than two crotalaria seeds in 1,000 grams.

Amended effective June 3, 1966

Interpretations regarding the term "yellow kernels of corn with a slight tinge of red" and "white kernels of corn with a slight tinge of light straw or pink color" were published as an added part of the standards.

Amended effective March 30, 1969

The corn standards were assigned new section numbers (§§ 26.151 - 26.153 to §§ 26.351 - 26.353).

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the corn standards changed from "Official Grain Standards of the United States for Corn" to "United States Standards for Corn."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Corn, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective February 1, 1978 (43 FR 2816, 1/20/78)

1. Established a special grade Waxy corn comprising corn of any class which consists of 95 percent or more waxy corn.
2. Established a new requirement "slightly yellow" in the determination of other colors in White Waxy Corn.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective September 9, 1985 (49 FR 35340, 9/7/84)

1. Included a definition for D.L.Q. (Distinctly low quality).
2. Included in the definition of Sample grade specific limits for stones, glass, castor beans, cockleburs, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), and animal filth.
3. Deleted corn from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly

low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.

4. Deleted moisture content as a grade-determining factor.

Amended effective June 30, 1987 (52 FR 24418, 6/30/87)

1. Removed Interpretations (§§ 810.904 and 810.905) with respect to the term "yellow kernels of corn with a slight tinge of red," and with respect to the term "white kernels of corn with a slight tinge of straw or pink color," respectively.
2. Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to the term "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

Amended effective September 1, 1996 (60 FR 61194, 11/29/95)

1. Report test weight to the nearest tenth of a pound.
2. 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.
3. Offer stress crack testing as official criteria (effective January 1, 1996).

C. FEED OATS AND MIXED FEED OATS

Established effective September 1, 1925

Revised effective July 2, 1934

1. Changed the definition for oats so that oats containing more than 10 percent of wild oats was classified as feed oats and was graded under the grades of feed oats rather than as Sample grade oats as was the case before this change.
2. Established special grades for Tough, Bleached, Weevily, Smutty, and Ergoty feed oats and Mixed feed oats.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.
2. Added a definition for fine seeds.
3. Changed the special grades for Smutty feed oats and Smutty mixed feed oats to provide for percentage determination instead of smutball count determination.

Canceled effective June 1, 1959

Mixtures of oats and wild oats, not coming within the requirements of the oats standards, would be graded under the mixed grain standards effective August 1, 1959.

D. FLAXSEED

Established effective August 1, 1934

Amended effective July 1, 1935

1. Required that dockage be expressed in whole percent instead of in whole and half percent.
2. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include flaxseed which contains more than two crotalaria seeds in 1,000 grams.

Revised effective July 15, 1965

1. Lowered the maximum moisture limits in the numerical grades from 11.0 percent to 9.5 percent.
2. Provided maximum limits for heat-damaged flaxseed of 0.2 percent in grade No. 1 and 0.5 percent in grade No. 2. The previous standards had no limit for this factor.
3. Reduced maximum limits of damaged flaxseed in grade No. 1 from 20 percent to 10.0 percent and in grade No. 2 from 30 percent to 15.0 percent.
4. The definition of Sample grade was made more specific by including castor beans, crotalaria seed, stones, unknown foreign substances, and commonly recognized harmful or toxic substances.
5. The flaxseed standards were recodified in the interest of clarity and to conform to the codification used in the wheat standards.

Amended effective February 28, 1970

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the flaxseed standards changed from "Official Grain Standards of the United States for Flaxseed" to "United States Standards for Flaxseed."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Flaxseed, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Revised effective July 13, 1986 (49 FR 49427, 12/20/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted moisture content as a criterion in designating flaxseed Sample grade.
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.
4. Deleted flaxseed from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

1. Removed rounding procedures for inclusion into Subpart A, General Provisions.

E. MIXED GRAIN

Established effective July 2, 1934

Amended effective July 25, 1934

Provided that the quantity of smut in the special grade Smutty mixed grain in which wheat or rye predominates be increased from 10 to 14 smut balls of average size in 250 grams of grain.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method for the kind of grain which predominates in the mixture or any method which gives equivalent results.
2. Provided that the grade designation for Mixed Grain include the name and approximate percentage of each kind of grain in the mixture.
3. Changed the special grade Smutty mixed grain to provide that mixed grain in which oats predominates should be determined on the basis of weight rather than on the basis of number of smut balls in 250 grams of mixed grain.

Revised effective August 1, 1959

1. Added definitions for wild oats and stones.
2. Provided for certain mixtures of oats and wild oats which had previously been graded Feed Oats and Mixed Feed Oats and which did not fall into the oats standards as revised June 1, 1959.

Revised effective December 1, 1960

1. Added a definition for mixed feed oats.
2. Provided grades for No. 1 and No. 2 Mixed Feed Oats based on the quality factors of foreign material, damaged kernels, heat-damaged kernels and test weight per bushel.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include grain which contains more than two crotalaria seeds in 1,000 grams.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the mixed grain standards changed from "Official Grain Standards of the United States for Mixed Grain" to "United States Standards for Mixed Grain."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot may be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Mixed Grain, than the grade specified by the contract; i.e., U.S. No. 2 or better.

Revised effective January 28, 1985 (49 FR 3445, 1/27/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted all reference to mixed feed oats and wild oats from the standards.
3. Deleted the special grade "Tough mixed grain."
4. Tightened the limit for the special grade "Ergoty mixed grain" to 0.10 percent from 0.30 percent.
5. Redefined mixed grain by incorporating a minimum requirement of 50 percent of whole kernels of grain for which standards have been established, and/or whole and broken soybeans which will not pass through a 5/64-inch triangular-hole sieve, and/or whole flaxseed passing through the sieve.
6. Included a new factor, "Foreign material and fines."
7. Changed the basis for determining the percentage of each type of grain present in the mixture and the amount of damaged kernels, to the basis of the grain after sieving with a 5/64-inch triangular-hole sieve.
8. Deleted mixed grain from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the requirements for Sample grade Mixed Grain.
9. Required that the special grades "Smutty mixed grain" and "Garlicky mixed grain" be applicable to mixtures in which triticale predominates.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

F. OATS

Established effective June 16, 1919

Amended effective August 15, 1924

Changed the grading of oats infested with live weevils from Sample grade to a grade Weevily oats.

Revised effective September 1, 1925

1. Changed definition of oats from cultivated oats with "not more than 25 percent of foreign material, other grains, and wild oats" to "any grain which consisted of 80 percent or more cultivated oats and not more than 10 percent of foreign material."
2. Dropped the grade Clipped Oats.

Amended effective August 30, 1928

Established a grade for Cereal oats.

Revised effective July 2, 1934

1. Changed definition of oats to permit not more than 10 percent of wild oats.
2. Liberalized the factor of general appearance. Stained appearance was eliminated, but slightly weathered oats was to be graded not higher than No. 3, and badly stained or materially weathered was to be graded not higher than No. 4.
3. Raised test weight in grades Nos. 2, 3, and 4 from 29, 26, and 23 pounds to 30, 27, and 24 pounds.
4. Lowered sound cultivated oats in grades No. 1 and No. 2 from 98 and 95 percent to 97 and 94 percent.
5. Provided that musty oats be graded Sample grade instead of No. 4.
6. Redesignated the grades for Bleached oats, Weevily oats, and Cereal oats as special grades and established special grades for Tough oats, Heavy oats, Extra Heavy oats, Bright oats, Smutty oats, Ergoty oats, and Garlicky oats.

7. The special grade Cereal oats was based on "more than 20 percent of oats and/or other matter passing 0.064 x 3/8-inch slotted sieve" instead of on appearance of being sized.

Amended effective July 1, 1935

1. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.
2. Increased maximum limits of foreign material in grades No. 2 and No. 3 from 2 and 3 percent to 3 and 4 percent.
3. Amended special grade Cereal oats to exclude fine seeds. Fine seeds defined so they functioned as part of foreign material.
4. Changed the determination of Smutty oats from "in excess of a quantity equal to 30 balls of average size in 250 grams of oats" to "smut masses or smut balls in excess of 0.2 percent."

Amended effective July 1, 1937

Changed special grade Cereal oats to special grade Thin oats.

Amended effective July 1, 1941

Provided a special grade Special Red Oats for Columbia or other red oats having similar characteristics.

Amended effective July 1, 1947

Provided for a special grade Medium oats for grades Nos. 3 and 4 and Sample grade for oats having test weight of 30 or more but less than 35 pounds.

Revised effective June 1, 1959

1. Changed the minimum test weight per bushel from 32, 30, 27, and 24 pounds to 34, 32, 30, and 27 pounds for grades Nos. 1 to 4.
2. Changed the minimum test weight per bushel from 35 pounds to 36 pounds for the special grade Heavy oats.
3. Changed the minimum moisture requirements for tough oats from 14.5 percent to 14.0 percent.
4. The various classes of oats were more specifically defined, and other physical

characteristics in addition to color were included in their determination.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include oats which contain more than two crotalaria seeds in 1,000 grams.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the oats standards changed from "Official Grain Standards of the United States for Oats" to "United States Standards for Oats."

Revised effective June 1, 1975 (39 FR 32125, 9/5/74)

1. All class names deleted.
2. Increased the minimum test weight requirement for grade U.S. No. 1 from 34 pounds to 36 pounds and for grade U.S. No. 2 from 32 pounds to 33 pounds.
3. Increased the test weight requirement for Extra-heavy oats from 38 pounds or more to 40 pounds or more and for Heavy oats from 36 pounds or more but less than 38 pounds to 38 pounds or more but less than 40 pounds.
4. Tightened the allowable limits of ergot by requiring that oats which contain ergot in excess of 0.10 percent be graded Ergoty oats.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Oats, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective April 14, 1986 (49 FR 49431, 12/20/84)

1. Deleted the special grade "Tough oats."
2. Deleted moisture content as a criterion in designating oats Sample grade.

3. Included in the definition of Sample grade specific limits for broken glass, castor beans, particles of an unknown foreign substance(s), or a commonly recognized harmful or toxic substance(s), cockleburs, rodent pellets, bird droppings, and other animal filth.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

H. RYE

Established effective July 1, 1923

Amended effective August 15, 1924

Liberalized the factor of heat-damaged kernels in grades No. 1 and No. 2 from no heat damage in either grade to 0.1 and 0.2 percent.

Revised effective July 2, 1934

1. Eliminated moisture as a numerical grading factor and established a special grade Tough rye containing more than 14 percent but not more than 16 percent moisture.
2. Provided that musty and slightly sour rye be graded Sample grade instead of No. 4.
3. Provided that moisture be determined on dockage-free grain.
4. Redesignated the grade Garlicky rye as a special grade and changed requirements for this grade from "one or more garlic bulblets" to "two or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets" per 1,000 grams of rye. Divided the special grade into Light Garlicky and Garlicky rye, based on the number of bulblets.
5. Redesignated the grade Smutty rye as a special grade, changed the requirements from "in excess of a quantity equal to 2 balls of average size in 50 grams" to "in excess of a quantity equal to 10 balls of average size in 250 grams" of rye, and divided the special grade into Light Smutty and Smutty rye based on the quantity of smut.
6. Changed the definition of rye to permit not more than 10 percent of other grains before the removal of the dockage.

Amended effective July 25, 1934

Increased the amount of smut in the special grade Smutty rye from "in excess of a quantity equal to 10 balls of average size" to "in excess of a quantity equal to 14 balls of average size" in 250 grams of rye.

Amended effective July 1, 1935

Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective July 1, 1941

Provided a special grade for Plump rye and maximum limits of Thin rye in grades Nos. 1, 2, and 3.

Amended effective July 1, 1951

Decreased the maximum limits of Thin rye permitted in grades Nos. 1, 2, and 3 from 20, 20, and 30 percent to 10, 15, and 25 percent.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include rye which contains more than two crotalaria seeds in 1,000 grams.

Amended effective March 30, 1969

A new section "Grade Designations" added to conform in format to other grain standards.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the rye standards changed from "Official Grain Standards of the United States for Rye" to "United States Standards for Rye."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Rye, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Revised effective May 25, 1985 (49 FR 22060, 5/25/84)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted the special grade "Tough rye."
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.
4. Deleted moisture content as a criterion in designating rye Sample grade.
5. Deleted rye from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.
6. Smut balls, in addition to being considered in determining the special grade, also are considered foreign material.
7. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating rye Sample grade.
8. Ergot is stated in hundredth percent.
9. Raised the limit for heat-damaged kernels in grade U.S. No. 1 to 0.2 percent from 0.1 percent.
10. Reduced the maximum number of rodent or bird pellets or other animal filth permitted in the numerical grades to 1 from 2.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

Revised effective June 1, 1999 (63 FR 20054, 4/23/98)

Amended Subpart A--General Provisions by revising the method of recording the percentage of dockage in rye from whole percent with fractions of a percent being disregarded to the nearest tenth percent.

I. SORGHUM

Established effective December 1, 1924

Revised effective September 1, 1934 (03/31/34 FR)

1. Class names were changed from types such as Kafir, Milo, etc., to class names based on color such as White Grain Sorghums, Yellow Grain Sorghums, etc. Some subclass names were based on type characters and others on color.
2. A dockage system was set up instead of the subfactor "sand, dirt, and finely broken kernels" in the factor "foreign material and cracked kernels."
3. Provided that musty and sour sorghum be graded Sample grade instead of No. 4.
4. Eliminated general appearance from numerical grades and established special grades for Bright and Discolored grain sorghums.
5. Added "other grains" to the factor cracked kernels and foreign material, and increased the amount allowed in grades Nos. 1 to 3 from 3, 6, and 10 percent to 4, 8, and 12 percent.
6. Revised damaged kernels definition to include damaged kernels of other grains and nongrain sorghums.
7. Redesignated the grades for Weevily and Smutty grain sorghums as special grades and revised the special grade for Smutty grain sorghums by eliminating odor as a factor and specified a quantity of smut equal to 10 smut masses in 50 grams of grain sorghums.
8. Changed the definition of foreign material and cracked kernels to cracked kernels, foreign material and other grains and changed the sieve used to determine this factor from one with an 8/64-inch triangular hole to one with a 5/64-inch triangular hole, a somewhat smaller opening.

Amended effective July 1, 1935 (3/28/35 FR)

1. Required dockage to be expressed in whole percent instead of in whole and half percent.
2. Changed the basic method for determining moisture from the Brown-Duvel to the air-oven method or any method giving similar results.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include sorghum which contains more than two crotalaria seeds in 1,000 grams.

Revised effective August 1, 1962 (3/31/62 FR)

1. Provided four classes: Yellow Grain Sorghum, White Grain Sorghum, Brown Grain Sorghum, and Mixed Grain Sorghum. The class Red Grain Sorghum was dropped and all subclasses were eliminated.
2. Provided that white grain sorghum with brown undercoats be classed as Brown Grain Sorghum.
3. Changed the minimum test weight per bushel from 55, 53, 51, and 49 pounds for grades Nos. 1 to 4 to 57, 55, 53, and 51 pounds.
4. Changed the maximum moisture limits from 14, 15, and 16 percent in grades Nos. 1 through 3 to 13.0, 14.0, and 15.0 percent. No change was made in the maximum moisture limits of grade No. 4.
5. Eliminated the grading factor nongrain sorghums and included nongrain sorghum in the definition of other grains.
6. Eliminated the special grades Bright grain sorghums and Discolored grain sorghums and provided that grain sorghum which is distinctly discolored shall be graded not higher than No. 3.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the grain sorghum standards changed from "Official Grain Standards of the United States for Grain Sorghum" to "United States Standards for Grain Sorghum."

Revised effective June 1, 1974 (39 FR 3943, 1/31/74)

1. Changed the designation grain sorghum to sorghum.
2. Redefined the class White Sorghum to permit the inclusion of not more than 2.0 percent of sorghum of other colors.
3. Redefined the class Yellow Sorghum to include sorghum with white pericarps which

contain more than 2.0 percent of sorghum of other colors but not more than 10.0 percent of sorghum with brown pericarps or brown subcoats.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Sorghum, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective July 1, 1984 (48 FR 44169, 9/28/83)

Redefined the class White sorghum to include sorghum with translucent pericarps, and white-colored sorghum containing spots which singly or in combination cover 25.0 percent or less of the kernels. Concurrently, sorghum with white but spotted pericarps was deleted from the definition of the class Yellow sorghum.

Amended effective September 9, 1985 (49 FR 35744, 9/12/84)

Deleted moisture content as a grade-determining factor.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

Revised effective June 1, 1993 (57 FR 58967, 12/14/92)

1. Reduced the maximum BNFM limits for U.S. Nos. 2, 3, and 4 from 8.0, 12.0, and 15.0 percent to 7.0, 10.0, and 13.0 percent, respectively; and established grade limits for foreign material for U.S. Nos. 1 (1.5%), 2 (2.5%), 3 (3.5%), and 4 (4.5%).
2. Reduced the amount of Brown sorghum allowed in Yellow sorghum from 10.0 percent to 3.0 percent.
3. Modified the classification terminology Yellow sorghum to "Sorghum" and Brown sorghum to "Tannin" sorghum.
4. Revised the definitions for all classes to reflect the changes.

Revised effective June 1, 2008 (72 FR 39730, 07/20/07)

- 1) Deleted the reference to tannin content from definitions of Sorghum, Tannin sorghum and White sorghum, and defined these classes based on the presence or absence of a pigmented testa (subcoat);
- 2) Revised the definition of nongrain sorghum by deleting sorghum-sudangrass hybrids, sorggrass, and added language referencing seeds of Sorghum bicolor (L.) Moench that appear atypical of grain sorghum;
- 3) Reduced the grading limits for broken kernels and foreign material (BNFM) and the subfactor foreign material (FM);
- 4) Inserted a total count limit of 10 for other material used to determine sample grade factors;
- 5) Revised the certification of sorghum test weight to tenths of a pound per bushel;
- 6) Revised the sorghum breakpoints and associated grade limits for U.S. Nos. 1, 2, 3, and 4 BNFM and FM.

J. SOYBEANS

Established effective November 20, 1940

Standards for soybeans were recommended by the U.S. Department of Agriculture in 1925. These standards were revised in 1935 and brought under the U.S. Grain Standards Act by an amendment to the Act in 1940.

Revised effective September 1, 1941

1. Increased the percentage of splits in grades No. 1 and No. 2 from 1.0 and 10.0 percent to 10 and 15 percent.
2. Reduced the maximum moisture limits from 15.0, 15.0, and 16.5 percent in grades Nos. 1, 2, and 3 to 13, 14, and 16 percent.
3. Established a dockage system based on an 8/64-inch round hole sieve and expressed on the certificate in terms of whole percent. A fraction of a percent was disregarded.
4. Increased the maximum percentage of foreign material from 0.5, 2.0, 4.0, and 6.0 percent in grade Nos. 1 through 4 to 1, 2, 3, and 5 percent.
5. Increased the maximum percentage of damaged kernels permitted in grade No. 1 from 1.5 to 2 percent.
6. The factor "other colors" was eliminated in the grade table. A footnote was added which applied to the No. 1 and No. 2 grade, providing that grade No. 1 of each of the classes Yellow Soybeans and Green Soybeans may contain not more than 2 percent and that grade No. 2 of each of these classes may contain not more than 3 percent of black, brown, or bicolored soybeans singly or combined.
7. Limits for other classes were changed. Brown and black soybeans may contain not more than 10 percent of soybeans of other colors and yellow and green soybeans may contain not more than 10 percent of other colors, including not more than 5 percent of brown, black, or bicolored soybeans.
8. Established a special grade Weevily soybeans.

Amended effective September 1, 1942

Changed the method of determining moisture from the water-oven to the air-oven.

Revised effective September 1, 1949

1. Classifying a part of the foreign material as dockage was eliminated.
2. The maximum limits of splits were increased from 15, 20, and 30 percent for grades Nos. 2, 3, and 4 to 20, 30, and 40 percent.
3. The maximum limits for foreign material were increased from 1, 2, 3, and 5 percent for grades Nos. 1 through 4 to 2.0, 3.0, 4.0, and 6.0 percent. This change was necessary due to elimination of the dockage factor.
4. The definitions for the classes Yellow Soybeans and Green Soybeans were changed to provide that all soybeans with yellow or green seedcoats which were yellow in cross section be classified as yellow soybeans and only soybeans that were green in cross section and had green seedcoats be classified as green soybeans.
5. Established a special grade Garlicky soybeans.

Revised effective September 1, 1955

1. Reduced the foreign material in the numerical grades from 2.0, 3.0, 4.0, and 6.0 percent to 1.0, 2.0, 3.0, and 5.0 percent.
2. Fixed special limits on heat damage of 0.2, 0.5, 1.0, and 3.0 percent in the numerical grades.
3. Redefined splits as pieces of soybeans that are not damaged.
4. Required that purple mottled and stained soybeans be graded not higher than No. 3.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include soybeans which contain more than two crotalaria seeds in 1,000 grams.

Amended effective October 30, 1963

Provided that the term purple mottled or stained includes soybeans which are discolored by a fungus. Purple mottled or stained soybeans would be graded not higher than No. 3.

Amended effective March 22, 1966

Provided that the term bicolored soybeans be construed to include soybeans with seedcoats of two colors, one of which is black or brown, when the black and/or brown color covers 50 percent or more of the seedcoat. The hilum of a soybean is not considered a part of the seedcoat.

Amended effective September 1, 1969 (34 FR 7282, 5/3/69)

Stinkbug-stung kernels considered damaged kernels at the rate of one-fourth of the actual percentage of the stung kernels.

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective January 8, 1974

The name of the soybean standards changed from "Official Grain Standards of the United States for Soybeans" to "United States Standards for Soybeans."

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Soybeans, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Revised effective September 9, 1985 (50 FR 18455, 5/1/85)

1. Updated the format of the standards to conform to other grain standards.
2. Deleted the classes Green, Black, and Brown soybeans and included them under the definition of Soybeans of other colors.
3. Included in the definition of Sample grade specific limits for stones, pieces of glass, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance(s), rodent pellets, bird droppings, and other animal filth.
4. Deleted soybeans from § 810.901 Interpretation with respect to the term D.L.Q. (Distinctly low quality) and included the numerical limit for crotalaria seeds in the Sample grade definition.
5. Deleted § 810.902 Interpretation with respect to the term "Purple mottled or stained" and

included a definition for the term under Terms Defined.

6. Deleted moisture content as a grade-determining factor.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

Revised effective September 1, 1994 (59 FR 10569, 3/7/94)

1. Revised the reporting requirements to report the percentage of splits in tenths percent.
2. Reduced the U.S. Sample grade criteria for stones from eight or more to four or more and reduce the U.S. Sample grade aggregate weight criteria for stones from more than 0.2 percent by weight to more than 0.1 percent by weight.
3. Reduced the U.S. Sample grade criteria for pieces of glass from two to zero.
4. Eliminated the grade limitation on purple mottled or stained soybeans and establish a special grade, Purple Mottled or Stained.
5. Eliminated the grade limitation on soybeans that are materially weathered.
6. Clarified the reference to Mixed soybeans.
7. Established a cumulative total for factors which may cause a sample to grade U.S. Sample grade.

Revised effective September 1, 2007 (71 FR 52403,9/6/06)

1. Changed the minimum test weight per bushel (TW) from a grade determining factor to an informational factor.
2. Revised the reporting requirements for TW from whole and half pounds with a fraction of a half pound disregarded to reporting to the nearest tenth of a pound.

K. SUNFLOWER SEED

Established effective September 1, 1984 (49 FR 22761, 6/1/84)

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

L. TRITICALE

Established effective May 1, 1977 (42 FR 9377, 2/16/77)

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Triticale, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective May 1, 1986 (49 FR 49424, 12/20/84)

1. Reduced the limit for castor beans permitted in the numerical grades to 1 from 2.
2. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating triticale Sample grade.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."

M. WHEAT

Established standards for Hard Red Winter Wheat, Soft Red Winter Wheat, Common White Wheat, and Club Wheat effective July 1, and standards for all other wheat effective August 1, 1917

Revised effective July 15, 1918

1. Eliminated the subclasses Red Spring Humpback and Soft Red. Wheat of the variety Humpback was included in the subclass Red Spring. A grade "Garlicky" was established which applied to all classes and took the place of subclass Soft Red in the class Soft Red Winter Wheat. The class name Common and Red Durum Wheat was changed to Durum Wheat.
2. Changed the minimum limits of dark, hard, and vitreous kernels in the subclass Dark Hard Spring from 85 percent to 75 percent, in the subclass Dark Hard Winter from 90 percent to 80 percent, and for No. 1 Dark Hard Winter from 95 percent to 80 percent.
3. Changed the definition for the subclass Hard White from "not more than 20 percent of kernels of soft and chalky texture" to "75 percent or more of hard (not soft and chalky) kernels," and for the subclass Soft White from "more than 20 percent of kernels of soft and chalky texture" to "less than 75 percent of hard (not soft and chalky) kernels."
4. Changed the minimum test weight per bushel for grade No. 1 for all subclasses of Hard Red Spring Wheat from 59 pounds to 58 pounds. Changed the minimum test weight per bushel for all subclasses of Durum Wheat, Hard Red Winter Wheat, and the subclass Red Winter of the class Soft Red Winter Wheat from 61, 59, 57, 55, and 53 pounds for grades Nos. 1 through 5 to 60, 58, 56, 54, and 51 pounds. Changed the minimum test weight per bushel for the subclass Red Walla of the class Soft Red Winter Wheat from 60, 58, 56, 54, and 52 pounds for grades Nos. 1 through 5 to 58, 56, 54, 52, and 49 pounds, and from 52 pounds to 51 pounds for grade No. 5 for all subclasses of White Wheat.
5. Changed the maximum limits of damaged kernels in grade No. 1 from 1 percent to 2 percent and of heat-damaged kernels from no heat-damaged kernels and 0.1 percent in grades No. 1 and No. 2 to 0.1 percent and 0.2 percent.
6. Changed the names of grading factors "Inseparable foreign material" and "Kinghead, corncockle, vetch, darnel, and wild rose" to "Foreign material other than dockage" and "Matter other than cereal grains." Changed the maximum limits of foreign material other than dockage from 0.5, 1, 2, 4, and 6 percent for grades Nos. 1 through 5 to 1, 2, 3, 5, and 7 percent, and of matter other than cereal grains from 0.25, 0.5, 1, 2, and 3 percent for grades Nos. 1 through 5 to 0.5, 1.0, 2.0, 3.0, and 5.0 percent.
7. Changed the maximum limits of wheats of other classes for all classes except Durum

Wheat from 2, 4, and 6 percent in grades Nos. 1, 2, and 3 to 5, 10, and 10 percent.

Changed the maximum limits of wheats of other classes in the subclasses Amber Durum and Durum in the class Durum Wheat from 2 percent in grade No. 1 to 5 percent.

Changed the maximum limits of wheat of other classes in the subclass Red Durum in the class Durum Wheat from 2, 4, and 6 percent for grades Nos. 1 through 3 to 5, 10, and 10 percent.

Changed the maximum limits of Common White, White Club, and Durum Wheat, singly or combined, in the classes Hard Red Spring Wheat and Hard Red Winter Wheat from 1, 2, 3, 5, and 5 percent for grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Soft Red Winter, Common White, and White Club wheat, singly or combined, in the subclasses Amber Durum and Durum of the class Durum Wheat from 1, 5, 5, 5, and 5 percent in grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Soft Red Winter, Common White, and White Club wheat, singly or combined, in the subclass Red Durum of the class Durum Wheat from 1, 2, 3, 5, and 5 percent for grades Nos. 1 through 5 to 2, 5, 10, 10, and 10 percent.

Changed the maximum limits of Durum wheat in the classes Soft Red Winter Wheat and White Wheat from 1 percent in each of the grades Nos. 1 through 5 to 2, 3, 10, 10, and 10 percent.

8. Changed the maximum moisture limits for the classes Hard Red Spring Wheat and Durum Wheat from 13.5, 14.5, 14.5, 15.5, and 15.5 percent for grades Nos. 1 through 5 to 14.0, 14.5, 15.0, 16.0, and 16.0 percent.

Changed the maximum moisture limits for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat from 13, 13, 14, 14, and 15 percent for grades Nos. 1 through 5 to 13.5, 14.0, 14.5, 15.5, and 15.5 percent.

9. Added a grade for Garlicky wheat, Treated wheat, and Smutty wheat and changed the method of expressing the grades for Mixed Wheat.
10. Excluded emmer, spelt, and einkorn from the definition for wheat.
11. Changed the method of expressing dockage from whole and half percent to whole percent.

Amended effective August 15, 1921

Eliminated "bright" from the No. 1 grade requirements.

Amended effective July 17, 1922

Combined the classes Common White Wheat and White Club Wheat into one class White Wheat with three subclasses Hard White, Soft White, and Western White. In the class Soft Red Winter Wheat, changed the subclass Red Walla to Western Red.

Amended effective August 15, 1924

1. Established the grade No. 1 Hard Spring for Hard Red Spring Wheat with 85 percent or more dark, hard, and vitreous kernels and test weight of not less than 60 pounds.
2. Provided grades for Mixed Durum, for Mixed Wheat with more than 70 percent of Durum and not more than 5 percent of Soft Red Winter and/or White Wheat.
3. Changed the test weight per bushel requirements for the several numerical grades of the subclass Western Red from 58, 56, 54, 52, and 49 to 60, 58, 56, 54, and 51.
4. Changed the grading of wheat infested with live weevils from Sample grade to a grade Weevily Wheat.
5. Excluded Polish and poulard wheat from the definition of wheat.
6. Revised the definition for treated wheat.

Revised effective July 2, 1934

1. Removed moisture as a specific numerical grading factor and established a special grade Tough wheat for wheat between 14.5 and 16 percent moisture for the classes Hard Red Spring Wheat, Durum Wheat, and Red Durum Wheat and for wheat between 14 and 15.5 percent moisture for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat. Wheat with more than the maximum moisture permitted in the special grade Tough wheat was graded Sample grade.
2. Divided the class Durum Wheat into two classes, Durum Wheat and Red Durum Wheat. Durum Wheat was divided into three subclasses, Hard Amber Durum, Amber Durum, and Durum. The subclass White Club was added to the class White Wheat, and a slight change was made in the definition of the subclass Western White.
3. Changed the grading of musty and sour wheat from No. 5 to Sample grade.
4. The grade No. 1 Hard Spring was dropped and No. 1 Heavy was adopted for Hard Red Spring Wheat with a test weight of 60 pounds.

5. The minimum percentage of dark, hard, and vitreous kernels in the subclass Dark Hard Winter was changed from 80 percent to 75 percent.
6. Redesignated the grades Treated wheat, Garlicky wheat, Smutty wheat, and Weevily wheat as special grades and added a special grade Ergoty wheat.
7. The special grade Garlicky wheat was liberalized from "one or more garlic bulblets" to "two or more green garlic bulblets or an equivalent quantity of dry or partly dry bulblets" per 1,000 grams of wheat and the special grade was divided into Light garlicky and Garlicky, based on the number of bulblets.
8. The special grade Smutty wheat was liberalized from "in excess of 2 balls of average size in 50 grams of wheat" to "10 balls of average size in 250 grams of wheat," and the special grade was divided into Light smutty and Smutty based on the quantity of smut.
9. A limit of 10 percent of Red Durum was allowed in Mixed Durum.
10. Damaged and heat-damaged was applied to kernels and pieces of kernels of other grains as well as to the wheat kernels.
11. The determination of other grains in the definition of wheat was on the basis of the wheat before the removal of the dockage rather than on the dockage-free basis as before.
12. Changed the maximum limits of wheats of other classes in all classes of wheat from 5 to 10 percent for grade No. 2.

Amended effective July 25, 1934

Increased the amount of smut in the special grade Smutty wheat from "in excess of a quantity equal to 10 balls of average size," to "in excess of a quantity equal to 14 balls of average size" in 250 grams of wheat.

Amended effective July 1, 1935

Changed the basic moisture method from the Brown-Duvel to the air-oven or any method giving similar results.

Revised effective October 1, 1937

1. Prescribed the manner in which the grade designation for Mixed Wheat was to be written and changed the grade requirements for Mixed Durum to provide that wheat with not less than 60 percent of kernels that are hard and vitreous and of amber color be designated as Amber Mixed Durum.
2. Provided limits of 7 percent of shrunken and broken kernels in the top two grades and 10 percent in grade No. 3.

Amended effective August 2, 1954

Changed the method of expressing smut dockage.

Revised effective June 15, 1957

1. Changed the maximum limits of foreign material from 1.0, 2.0, 3.0, 5.0, and 7.0 percent in grades Nos. 1 through 5 to 0.5, 1.0, 2.0, 3.0, and 5.0 percent.
2. Eliminated the factor "matter except other grains."
3. Changed the maximum limits of shrunken and broken kernels from 7 percent for grades No. 1 and No. 2 and 10 percent for grade No. 3 to 5.0 percent and 8.0 percent.
4. Changed the maximum limits of wheats of other classes in grade No. 2 from 10 percent to 5.0 percent.
5. Changed the minimum limits of dark, hard and vitreous kernels in the subclass Hard Winter Wheat from 25 percent to 40 percent.
6. Eliminated Amber Mixed Durum and Mixed Durum from the grade designation in the class Mixed Wheat.
7. Provided that distinctly low quality be determined on the basis of the grain as a whole.

Amended effective February 8, 1961

Provided that the term D.L.Q. (Distinctly low quality) be construed to include wheat which contains more than two crotalaria seeds in 1,000 grams.

Revised effective June 1, 1964 (29 FR 1309, 2593, 5378, 5/29/64)

1. Changed the method of expressing dockage from whole percent to whole and half percent.
2. Eliminated the subclasses Red Winter Wheat and Western Red Wheat in the class Soft Red Winter Wheat.
3. Provided that the name and percentage of White Club Wheat and other White Wheat be given as a part of the grade designation in the subclass Western White Wheat.
4. The clause "and may include not more than 10.0 percent of wheats of other classes" was deleted from the definition for the classes Hard Red Spring Wheat, Durum Wheat, Red Durum Wheat, Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat.
5. Changed the definition for the class Mixed Wheat.
6. Changed the maximum limits of shrunken and broken kernels from 5.0 percent for grades No. 1 and No. 2 and 8.0 percent for grade No. 3 to 3.0, 5.0, 8.0, 12.0, and 20.0 percent for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.
7. Added a factor "total defects" which included damaged kernels, foreign material, and shrunken and broken kernels and provided maximum limits of 3.0, 5.0, 8.0, 12.0, and 20.0 percent for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.
8. Combined the tables of grade requirements for all classes of wheat into one table.
9. Reduced the minimum moisture requirements for the special grade Tough wheat for the classes Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat from 14.0 percent and for the classes Hard Red Spring Wheat, Durum Wheat, and Red Durum Wheat from 14.5 percent to 13.5 percent for all classes. Eliminated the maximum moisture requirement for the special grade Tough wheat for all classes and deleted reference to moisture in the definition for Sample grade.
10. Provided a special grade Heavy wheat for all classes to be applied to grades No. 1, No. 2, and No. 3. Eliminated the grade No. 1 Heavy in the class Hard Red Spring Wheat.
11. Deleted smut dockage in the special grade Smutty wheat.
12. Moisture in Durum Wheat was rescinded not to become effective until June 1, 1965, so Durum Wheat with over 16 percent moisture is graded Sample grade. Durum Wheat with over 14.5 percent but not over 16.0 percent moisture is graded special grade Tough wheat.

13. Changed the maximum limits of wheat of other classes in grade No. 1 from 5.0 to 3.0 percent. A new factor, Contrasting Classes, was created and defined as: (a) Durum Wheat, Red Durum Wheat, and White wheat in the classes Hard Red Spring Wheat and Hard Red Winter Wheat; (b) Hard Red Spring Wheat, Red Durum Wheat, Hard Red Winter Wheat, Soft Red Winter Wheat, and White Wheat in the class Durum Wheat; (c) Durum Wheat and Red Durum Wheat in the class Soft Red Winter Wheat; and (d) Durum Wheat, Red Durum Wheat, Hard Red Spring Wheat, and Hard Red Winter Wheat in the class White Wheat. The maximum limits of contrasting classes in all classes of wheat were set at 0.5, 1.0, 2.0, 10.0, and 10.0 for grades No. 1, No. 2, No. 3, No. 4, and No. 5, respectively.

NOTE: The provision rescinding the moisture requirement for Sample grade and the special grade Tough wheat in Durum Wheat until June 1, 1965, was not extended; and on June 1, 1965, the moisture requirement for the special grade Tough wheat was reduced from 14.5 percent to 13.5 percent, and the reference to moisture in the definition in Sample grade was deleted.

Amended effective June 15, 1965

Changed the maximum limits of contrasting classes in grades No. 1, No. 2, and No. 3 from 0.5, 1.0, and 2.0 percent to 1.0, 2.0, and 3.0 percent, respectively, in all classes of wheat except Mixed Wheat.

Amended effective January 31, 1969 (33 FR 16065, 11/1/68)

1. Lowered the test weight per bushel requirements for White Club Wheat to those established for Hard Red Spring Wheat.
2. Redefined Sample grade to include factors previously considered under the term "otherwise of distinctly low quality."

Amended effective March 30, 1969

The wheat standards were assigned new section numbers (§§ 26.101 - 26.129 changed to read §§ 26.301 - 26.329).

Amended effective February 28, 1970 (34 FR 3591, 2/28/69)

Provided that the prefix U.S. be shown on all official grain grades.

Amended effective August 10, 1973 (38 FR 21639, 8/10/73)

The determination for crotalaria seeds, large stones, castor beans, broken glass, animal filth, unknown foreign substances, and commonly recognized harmful or toxic substances changed from the basis of the dockage-free wheat to the basis of the wheat as a whole.

Amended effective January 8, 1974

The name of the wheat standards changed from "Official Grain Standards of the United States for Wheat" to "United States Standards for Wheat."

Revised effective May 1, 1977 (41 FR 26670, 6/29/76)

1. Deleted the class Red Durum Wheat.
2. Established a new class Unclassed Wheat.
3. Deleted the subclasses in the class Hard Red Winter Wheat.
4. Changed the basis of determination for heat-damaged kernels, damaged kernels (total), and foreign material from a dockage-free basis to a dockage and shrunken and broken kernel-free basis.
5. Changed the limits for heat-damaged kernels in grades U.S. Nos. 1 and 2 from 0.1 and 0.2 percent, respectively, to 0.2 percent for both grades.
6. Deleted the special grade Heavy wheat.
7. Deleted the special grade Tough wheat.
8. The components and percentages for the subclass Western White Wheat and the classes Unclassed Wheat and Mixed Wheat to be shown under "Remarks" on the inspection certificate.

Amended effective May 1, 1977 (42 FR 9379, 2/16/77)

1. Section 26.303(b), heading changed to read "Certain Quality Determinations."
2. Included broken glass in the definition of sample grade to correct an inadvertent omission.

Amended effective September 8, 1977 (42 FR 30146, 6/13/77)

Certification requirements were changed so that a lot would be certificated:

1. As being of a specific U.S. grade, or
2. As being equal to or better in quality, as defined by the U.S. Standards for Wheat, than the grade specified by the contract; i.e., U.S. No. 2 or better, U.S. No. 3 or better, etc.

Amended effective October 28, 1983 (48 FR 44167, 9/28/83)

Changed inspection procedures so the determination of odor may be performed either prior to or after mechanical cleaning of the sample.

Amended effective May 1, 1985 (49 FR 20640, 5/16/84)

1. Deleted the special grade "Light garlicky wheat." The special grade "Garlicky wheat" is redefined as wheat containing more than 2 green bulblets or an equivalent quantity of dry or partly dry bulblets in 1,000 grams. The work portion is reduced to 250 grams for counts in excess of 10 green garlic bulblets.
2. Reduced the limit for castor beans permitted in the numerical grades to 1 from 2.
3. Clarified the grade chart to show that when Hard Red Spring wheat or White Club wheat predominates in Mixed wheat, the test weight requirements for those wheats would apply.
4. Deleted the presence of a quantity of smut so great that one or more grade requirements cannot be accurately determined as a criterion in designating wheat Sample grade.
5. The components of the subclass Western White wheat are listed in the order of predominance on the official certificate.
6. Changed inspection procedures so the factors wheat of other classes, contrasting classes, and subclasses are analyzed on a work portion of wheat free from dockage and shrunken and broken kernels.

Revised effective May 1, 1987 (52 FR 30325, 8/26/86)

Revised § 810.305(b) to state the percentage of dockage in whole and tenth percents to the nearest 0.1 percent.

Revised effective June 30, 1987 (52 FR 24418, 6/30/87)

Removed rounding procedures for inclusion into Subpart A, General Provisions.

Amended effective May 1, 1988 (52 FR 24441, 6/30/87)

1. Redesignated the special grade "weevily" to "infested" to more appropriately describe grain containing live insects injurious to stored grain.
2. Revised tolerances for "infested."
3. Revised the definition for Sample grade to include a limit of 32 insect-damaged kernels per 100 grams of representative sample.

Revised effective May 1, 1990 (54 FR 48735, 11/27/89)

Replaced the single class White wheat with two classes, Hard White wheat and Soft White wheat. The class Soft White wheat has three subclasses, Common White wheat, White Club wheat, and Western White wheat. The class Hard White wheat has no subclasses. This change provides greater consistency in applying the standards; makes the standards easier to interpret; and facilitates trade in both hard and soft white wheat.

Revised effective May 1, 1993 (57 FR 58966, 12/14/92)

1. Removed the description Red Durum wheat from the definition of Unclassed wheat.
2. Tightened the limit for stones from 8 or more to 4 or more and reduced the aggregate weight criteria from more than 0.2 percent by weight to more than 0.1 percent by weight.
3. Reduced the tolerances for pieces of glass from 2 or more to 1 or more (0 tolerance).
4. Established a cumulative total for factors which may cause a sample to grade U.S. Sample grade. Any combination of stones, crotalaria seeds, castor beans, particles of an unknown foreign substance(s) or a commonly recognized harmful or toxic substance, or animal filth per 1,000 grams would cause the wheat to be graded U.S. Sample grade if the total exceeds a count of 4.
5. Tightened the limit for ergot from 0.30 percent to 0.05 percent by weight.
6. Tightened the limit for the special grade "Light smutty" wheat from more than 14 smut balls to more than 5 smut balls.

7. Tightened the limits for foreign material for U.S. Nos. 1, 2, and 3 to 0.4, 0.7, and 1.3 percent, respectively.

Revised effective May 1, 2006 (70 FR 8233, 02/18/05)

1. Changed the definition of contrasting classes in Hard Red Winter wheat and Hard Red Spring wheat such that Hard White wheat is not a contrasting class but is considered as wheat of other classes.
2. Added the sample size used to determine sample grade factors.