Chapter 16-213 WAC
MISCELLANEOUS AGRICULTURAL COMMODITY INSPECTION STANDARDS

WAC 16-213-200 Buckwheat inspection definitions.

(1) "Buckwheat" means grain which before the removal of dockage consists of fifty percent or more of whole kernels of buckwheat (domestic varieties). The term "buckwheat" in these standards shall not include wild buckwheat.

(2) "Dockage" means all matter other than buckwheat which can be readily removed from a test portion of the original sample by use of the approved device in accordance with the procedures as set down in these standards.

(3) "Foreign material" means all matter other than buckwheat which remains in the sample after the removal of dockage.

(4) "Moisture" means a percentage ascertained by the air oven or by any device and method which gives equivalent results.

(5) "Percentages" means percentages ascertained by weight except in the case of moisture.

(6) "Sample grade buckwheat" means buckwheat which has a commercially objectionable foreign odor; or is musty, sour, heating, or hot; or contains eight or more stones per one thousand grams; or fails to meet the grade requirements of Washington numerical grades, or is otherwise distinctly low quality.

(7) "Stones" means concreted, earthy, or mineral matter or other substances of similar hardness that do not disintegrate readily in water.

(8) "Test weight per bushel" means the weight as determined per Winchester bushel (35.24 liters) or as determined by any device and method which gives equivalent results.
"Type" of buckwheat (large or small) means the result determined by sizing a portion using an 8/64 x 3/4 slotted sieve, and shall be added to and made a part of the grade designation.

(a) The designation shall be "large" when twenty percent or less of the buckwheat passes through an 8/64 x 3/4 slotted sieve.

(b) The designation shall be "small" when more than twenty percent of the buckwheat passes through an 8/64 x 3/4 slotted sieve.

(10) "Weevily" buckwheat shall be buckwheat that is infested with live weevils or other insects injurious to stored buckwheat.

[Statutory Authority: Chapter 22.09 RCW. WSR 00-08-041, § 16-213-200, filed 3/30/00, effective 4/30/00; WSR 84-06-036 (Order 1812), § 16-213-200, filed 3/2/84.]

WAC 16-213-210 Procedures. (1) The determination of dockage shall be on approximately nine hundred seventy-five to one thousand twenty-five grams cut from the representative sample.

(a) The Carter dockage tester shall be set up as follows:
(i) Set the air control at number six;
(ii) Set the feed control at number six;
(iii) Use the number two riddle in the riddle carriage;
(iv) Use no sieve in the top sieve carriage;
(v) Use the number eight sieve in the middle sieve carriage;
(vi) Use the number six sieve in the bottom sieve carriage.

(b) Buckwheat produced in the Pacific Northwest tends to be exceptionally large and dockage cannot be accurately determined using the standard method. For this large northwest buckwheat, the Carter dockage tester shall be set up as follows:
(i) Set the air control at number three;
(ii) Set the feed control at number four;
(iii) Use the number twenty-five riddle in the riddle carriage;
(iv) Use no sieve in the top sieve carriage;
(v) Use the number eight sieve in the middle sieve carriage;
(vi) Use the number six sieve in the bottom sieve carriage.

(c) Dockage will then consist of:
(i) The material removed from the air collecting pan;
(ii) Material over the number two or twenty-five riddle. If any buckwheat is in this pan, remove and return to dockage free buckwheat;
(iii) Material through the number eight sieve. If by weight, it is fifty percent or more of material other than buckwheat, return all of it to the dockage. If by weight, it is more than fifty percent buckwheat, return all of it to the dockage free buckwheat;
(iv) Material through the number six bottom sieve.

(d) Record the percentage of dockage on the pan ticket. When applicable, the percentage of dockage shall be shown on the inspection certificate. The percentage of dockage when equal to 0.5 percent or more shall be stated in terms of half percent, whole percent, or whole and half percent, whichever is applicable, with other fractions disregarded as shown in the following examples:

0.50 to 0.99 percent is expressed as 0.5 percent;
1.00 to 1.49 percent is expressed as 1.0 percent;
1.50 to 1.99 percent is expressed as 1.5 percent, etc.

(2) The determination of foreign material shall be made on a representative portion of approximately sixty grams cut from the work sample after the removal of dockage. The percentage of foreign materi-
al shall be shown on the pan ticket and the inspection certificate to
the nearest tenth of a percent.

(3) The determination for moisture shall be made on a representa-
tive portion of exactly two hundred fifty grams obtained from the rep-
resentative sample before the removal of dockage. The percentage of
moisture shall be shown on the pan ticket and the inspection certifi-
cate in whole and tenths of a percent to the nearest tenth percent.

(4) The determination for distinctly low quality and Washington
sample grade factors shall be made on the basis of the lot as a whole
and/or a representative portion of approximately one thousand grams
cut from the representative sample before the removal of dockage. Dis-
tinctly low quality factors shall include:

(a) Animal filth. Buckwheat containing two or more rodent pel-
lets, bird droppings, or an equivalent quantity of other animal filth
shall be graded Washington sample grade.

(b) Broken glass. Buckwheat containing two or more pieces of bro-
ken glass shall be graded Washington sample grade.

(c) Castor beans. These multicolored bean-like seeds of the cas-
tor-oil plant have been found to be highly toxic to animal life. Buck-
wheat containing three or more castor beans shall be graded Washington
sample grade.

(d) Crotonaria. The seeds of crotonaria (CROTALARIA spp.) are high-
ly toxic to animal life. These seeds can be various colors and are
generally "kidney" or "boxing glove" shaped. Buckwheat containing three or more crotonaria seeds shall be graded Washington sample
grade.

(e) Unknown foreign substance. Buckwheat containing four or more
pieces of an unknown foreign substance shall be graded Washington sam-
ple grade. Pelletized material other than feed pellets shall be con-
sidered an unknown foreign substance. Feed pellets in buckwheat are
considered dockage or foreign material, depending on where they are
found during grading.

When buckwheat is found to be Washington sample grade on one or
more of these factors, this fact and the reasons therefore shall be
shown on the pan ticket and the inspection certificate even though the
buckwheat may be Washington sample grade on another factor.

(5) The determination of stones shall be made on a representative
portion of approximately one thousand grams of buckwheat after the re-
moval of dockage.

(6) The determination for test weight per bushel shall be made on
a representative portion of buckwheat ranging in size from one and
one-eighth to one and one-quarter quarts after the removal of dockage.
The test weight per bushel of buckwheat, whether or not this factor
determines the grade, shall be shown on the pan ticket and the inspec-
tion certificate in whole and half pounds. A fraction of a half pound
shall be disregarded.

(7) The determination of type shall be made on a representative
portion of approximately two hundred fifty grams cut from the work
sample after the removal of dockage. One of the following methods may
be used:

(a) The mechanical sieving method.

(i) Mount an 8/64 x 3/4 slotted sieve and the bottom pan on the
mechanical sieve shaker with the sieve perforations parallel to the
direction of the movement. The sample is placed on the sieve and shak-
en lengthwise of the slots for twenty strokes.

(ii) All the material passing through the sieve shall be weighed
and the percentage determined to the nearest tenth of a percent. This
percentage shall be shown on the pan ticket and the inspection certificate.

(b) Hand sieving method.
   (i) Mount an 8/64 x 3/4 slotted sieve on a bottom pan.
   (ii) Place the two hundred fifty gram portion in the center of the pan.
   (iii) Hold the sieve level in both hands with elbows close to the body and the sieve perforations parallel to the direction of the movement.
   (iv) In a steady motion move the sieve left to right approximately ten inches and then return from right to left.
   (v) Repeat the operation twenty times.
   (vi) All the material passing through the sieve shall be weighed and the percentage determined to the nearest tenth of a percent. This percentage shall be shown on the pan ticket and the inspection certificate.

(8) The determination for the special grade "weevily" shall be made on the basis of the lot as a whole and/or the representative sample before the removal of dockage. Buckwheat is considered infested and shall be graded weevily when:
   (a) The work sample contains one live weevil and any other live insect injurious to stored grain.
   (b) The work sample contains one live weevil and the balance of the representative sample contains one live weevil or any other live insect injurious to stored grain.
   (c) The work sample, or the work sample and the balance of the representative sample combined, contains no live weevils but does contain five or more other live insects injurious to stored grain.
   (d) Two or more live weevils are found in, on or about the lot. When buckwheat is found to be weevily, this fact shall be shown on the pan ticket and on the inspection certificate in accordance with grade designation procedures.

(9) To provide uniform certification the following procedure shall be observed when writing grade designations on pan tickets and inspection certificates:
   (a) The word "Washington" preceded by the abbreviation "no." and the numerical grade, or preceded by the words "sample grade," as the case may be, shall be shown first;
   (b) The word "large" or "small" shall be shown next;
   (c) The word "buckwheat" shall be shown next;
   (d) When applicable, the special grade "weevily" shall be shown next;
   (e) When applicable, the word "dockage" together with the percentage thereof.

(10) The following certification requirements are applicable to buckwheat under these standards:

<table>
<thead>
<tr>
<th>GRADE</th>
<th>MINIMUM TEST WEIGHT PER BUSHEL (POUNDS)</th>
<th>MAXIMUM LIMIT OF FOREIGN MATERIAL</th>
</tr>
</thead>
<tbody>
<tr>
<td></td>
<td>LARGE</td>
<td>SMALL</td>
</tr>
<tr>
<td>No. 1 Washington</td>
<td>45</td>
<td>48</td>
</tr>
<tr>
<td>No. 2 Washington</td>
<td>43</td>
<td>46</td>
</tr>
<tr>
<td>No. 3 Washington</td>
<td>40</td>
<td>42</td>
</tr>
</tbody>
</table>
Sample grade - Buckwheat which has a commercially objectionable foreign odor, or is musty, sour, heating, hot, contains eight or more stones per one thousand grams, or is otherwise distinctly low quality shall be graded Washington sample grade buckwheat with the inspector's notation as to quality and condition.

[Statutory Authority: Chapter 22.09 RCW. WSR 86-20-050 (Order 1908), § 16-213-210, filed 9/29/86; WSR 84-06-036 (Order 1812), § 16-213-210, filed 3/2/84.]

WAC 16-213-260 Cracked corn, corn screenings, and mixed grain screenings inspection definitions. (1) "Cracked corn" is a byproduct of the elevating, transporting, or cleaning of corn. Cracked corn is the entire corn kernel, broken, ground, or fractured. Cracked corn may contain incidental whole kernels of corn. Cracked corn may be "yellow" or "white" if one color constitutes ninety percent or more of the mixture. Cracked corn may not contain more than four percent of admixture (foreign material).

(2) "Corn screenings" is a byproduct of the elevating, transporting, or cleaning of corn. Corn screenings is the entire corn kernel, broken, ground, or fractured. Corn screenings may contain incidental whole kernels of corn. Corn screenings must consist of seventy percent or more of corn, whole and broken, and may contain not more than thirty percent of admixture.

(3) "Mixed grain screenings" is a byproduct of the elevating, transporting, or cleaning of grain. Grain screenings is the entire grain kernel, broken, ground, or fractured. Mixed grain screenings may contain incidental whole kernels of grain. Mixed grain screenings must consist of seventy percent or more of whole, light, and broken kernels of wheat, barley, oats, corn, rye, flaxseed, sorghum, triticale, soybeans, or wild oats in combination. Mixed grain screenings may contain not more than thirty percent of other foreign material.

(4) "Admixture" in cracked corn or corn screenings means foreign material and standardized grains other than corn.

(5) "Other foreign material" in mixed grain screenings means material other than standardized grains under the United States Grain Standards Act and wild oats.

(6) "Test weight per bushel" means the weight per winchester bushel (35.24 liters) or as determined by any device and method which gives equivalent results.

(7) "Moisture" means a percentage ascertained by the air oven method or by any device and method which gives equivalent results.

[Statutory Authority: Chapter 22.09 RCW. WSR 00-08-041, § 16-213-260, filed 3/30/00, effective 4/30/00; WSR 87-08-030 (Order 1919), § 16-213-260, filed 3/26/87.]

WAC 16-213-270 Cracked corn, corn screenings, and mixed grain screenings inspection procedures. (1) The determination of cracked corn, yellow or white in cracked corn, corn screenings or mixed grain screenings shall be made on a representative portion of approximately thirty grams cut from the representative sample.

(a) In the case of cracked corn and corn screenings, the percentage of admixture shall be determined and recorded on the inspection
certificate in whole and tenths of a percent to the nearest tenth of a percent.

(b) In the case of mixed grain screenings, the percentage of other foreign material shall be determined and recorded on the inspection certificate in whole and tenths of a percent to the nearest tenth of a percent.

(2) The determination for moisture shall be made on a representative portion of the sample of exactly two hundred fifty grams cut from the work sample. The percentage of moisture is determined by using the motomco moisture meter or other device that yields equivalent results. The percentage of moisture shall be recorded on the inspection certificate in whole and tenths of a percent to the nearest tenth of a percent.

(3) The determination of test weight per bushel shall be made on a representative portion of the sample ranging in size from one and one-eighth to one and one-fourth quarts. The test weight per bushel shall be recorded on the inspection certificate in whole and half pounds. A fraction of a half pound shall be disregarded.

(4) The examination of shiplots and combined lots of cracked corn, corn screenings and mixed grain screenings.

(a) When examining a shiplot or combined lot of cracked corn, corn screenings or mixed grain screenings, an individual sublot sample may exceed the limit for admixture in cracked corn and corn screenings and the limit of other foreign material in mixed grain screenings by up to two percent provided that:

(i) The weighted or mathematical average for the lot as a whole is within the prescribed limits of the applicable definition; and

(ii) The preponderance of the lot by weight meets the applicable definition.

(b) The certificate for a lot must show the following:

(i) The term cracked corn, corn screenings or mixed grain screenings.

(ii) The approximate weight of the lot.

(iii) In the case of cracked corn or corn screenings, the percentage of admixture.

(iv) In the case of mixed grain screenings, the percentage of other foreign material.

(v) The presence of sour, musty, or commercially objectionable foreign odors, an unknown foreign substance, live weevils or other live insects injurious to stored grain, glass, rodent pellets or the presence of other factors likely to adversely affect the quality of the cracked corn, corn screenings, or mixed grain screenings shall be noted in remarks on the certificate.

(c) At the request of the applicant, the certificate for a lot may show the following:

(i) In the case of cracked corn, the terms yellow or white.

(ii) The percentage of moisture.

(iii) The test weight per bushel.

(iv) In remarks, "We certify that cracked corn (or corn screenings) is not residue or waste from food industries. It is corn cracked during transportation or handling."

[Statutory Authority: Chapter 22.09 RCW. WSR 00-08-041, § 16-213-270, filed 3/30/00, effective 4/30/00; WSR 87-08-030 (Order 1919), § 16-213-270, filed 3/26/87.]