

Chapter 16-104 WAC

SHELL EGGS—STANDARDS, GRADES AND WEIGHT CLASSES

WAC

16-104-130	Washington state standards for quality of individual shell eggs—Application.
16-104-140	Terms descriptive of the shell.
16-104-150	Terms descriptive of the air cell.
16-104-160	Terms descriptive of the white.
16-104-170	Terms descriptive of the yolk.
16-104-180	General terms.
16-104-190	General.
16-104-200	Grades.
16-104-210	Summary of grades.
16-104-220	Weight classes.
16-104-230	Minimum sample schedule—Egg samples.
16-104-310	Minimum facility and operating requirements for shell egg grading and packing plants.
16-104-320	Grading room requirements.
16-104-330	Cooler room requirements.
16-104-340	Shell egg protecting operations.
16-104-350	Shell egg cleaning operations.
16-104-360	Shipping containers, egg cartons, and packing materials.
16-104-370	Chemicals and compounds.

16-104-080	filed 4/17/72, effective 7/1/72; Order 936, Regulation 2, § 1, filed 1/29/64; Order 773, Regulation 2, Paragraph 1, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW. Grades. [Order 1232, § 16-104-080, filed 4/17/72, effective 7/1/72; Order 936, Regulation 2, § 2, filed 1/29/64; Order 773, Regulation 2, Paragraph 2, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-090	Summary of grades. [Order 1232, § 16-104-090, filed 4/17/72, effective 7/1/72; Order 936, Regulation 2, § 3, filed 1/29/64; Order 773, Regulation 2, Paragraph 3, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-100	Weight classes. [Order 1232, § 16-104-100, filed 4/17/72, effective 7/1/72; Order 936, Regulation 2, § 4, filed 1/29/64; Order 773, Regulation 2, Paragraph 4, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-110	Minimum sample schedule—Egg samples. [Order 1232, § 16-104-110, filed 4/17/72, effective 7/1/72; Order 936, Regulation 3, § 1, filed 1/29/64; Order 773, Regulation 3, Paragraph 1, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-120	Effective date. [Order 1232, § 16-104-120, filed 4/17/72, effective 7/1/72.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: RCW 69.25 RCW.

DISPOSITION OF SECTIONS FORMERLY CODIFIED IN THIS CHAPTER

16-104-001	Promulgation. [Order 936, Promulgation, filed 1/29/64; Order 773, Promulgation, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-0011	Promulgation. [Order 1232, § 16-104-0011, filed 4/17/72, effective 7/1/72.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-010	Washington state standards for quality of individual shell eggs—Application. [Order 1232, § 16-104-010, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 1, filed 1/29/64; Order 773, Regulation 1, Paragraph 1, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-020	Definitions of terms descriptive of shell. [Order 1232, § 16-104-020, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 2, filed 1/29/64; Order 773, Regulation 1, Paragraph 2, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-030	Definitions of terms descriptive of the air cell. [Order 1232, § 16-104-030, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 3, filed 1/29/64; Order 773, Regulation 1, Paragraph 3, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-040	Definitions of terms descriptive of the white. [Order 1232, § 16-104-040, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 4, filed 1/29/64; Order 773, Regulation 1, Paragraph 4, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-050	Definitions of terms descriptive of the yolk. [Order 1232, § 16-104-050, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 5, filed 1/29/64; Order 773, Regulation 1, Paragraph 5, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-060	Definitions—General terms. [Order 1232, § 16-104-060, filed 4/17/72, effective 7/1/72; Order 936, Regulation 1, § 6, filed 1/29/64; Order 773, Regulation 1, Paragraph 6, effective 5/5/58.] Repealed by 87-16-075 (Order 1945), filed 8/4/87. Statutory Authority: Chapter 69.25 RCW.
16-104-070	Washington state consumer grades and weight classes for shell eggs—General. [Order 1232, § 16-104-070,

WAC 16-104-130 Washington state standards for quality of individual shell eggs—Application. (1) General. The Washington state standards for quality of individual shell eggs contained in this order are applicable only to eggs that are the product of the domesticated chicken hen and are in the shell.

Interior egg quality specifications for these standards are based on the apparent condition of the interior contents of the egg as it is twirled before the candling light. Any type or make of candling light may be used that will enable the particular grader to make consistently accurate determinations of the interior quality of shell eggs.

(2) AA quality. The shell must be clean, unbroken, and practically normal. The air cell must not exceed 1/8 inch in depth, may show unlimited movement and may be free or bubbly. The white must be clear and firm so that the yolk is only slightly defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.

(3) A quality. The shell must be clean, unbroken, and practically normal. The air cell must not exceed 3/16 inch in depth and may be free or bubbly. The white must be clear and at least reasonably firm so that the yolk outline is only fairly well defined when the egg is twirled before the candling light. The yolk must be practically free from apparent defects.

(4) B quality. The shell must be unbroken, may be abnormal, and may have slightly stained areas. Moderately stained areas are permitted if they do not cover more than 1/32 of the shell surface if localized, or 1/16 of the shell surface if scat-

tered. Eggs having shells with prominent stains or adhering dirt are not permitted. The air cell may be over 3/16 inch in depth, may show unlimited movement, and may be free or bubbly. The white may be weak and watery so that the yolk outline is plainly visible when the egg is twirled before the candling light. The yolk may appear dark, enlarged, and flattened and may show clearly visible germ development but no blood due to such development. It may show other serious defects that do not render the egg inedible. Small blood spots or meat spots (aggregating not more than 1/8 inch in diameter) may be present.

Dirty. An individual egg that has an unbroken shell with adhering dirt or foreign material, prominent stains, or moderate stains covering more than 1/32 of the shell surface if localized, or 1/16 of the shell surface if scattered.

Check. An individual egg that has a broken shell or crack in the shell but with its shell membranes intact and its contents do not leak. A "check" is considered to be lower in quality than a "dirty."

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-130, filed 8/4/87.]

WAC 16-104-140 Terms descriptive of the shell. (1)

Clean. A shell that is free from foreign material and from stains or discolorations that are readily visible. An egg may be considered clean if it has only very small specks, stains, or cage marks, if such specks, stains, or cage marks are not of sufficient number or intensity to detract from the generally clean appearance of the egg. Eggs that show traces of processing oil on the shell are considered clean unless otherwise soiled.

(2) **Dirty.** A shell that is unbroken and that has dirt or foreign material adhering to its surface, which has prominent stains, or moderate stains covering more than 1/32 of the shell surface if localized, or 1/16 of the shell surface if scattered.

(3) **Practically normal (AA or A quality).** A shell that approximates the usual shape and that is sound and is free from thin spots. Ridges and rough areas that do not materially affect the shape and strength of the shell are permitted.

(4) **Abnormal (B quality).** A shell that may be somewhat unusual or decidedly misshapen or faulty in soundness or strength or that may show pronounced ridges or thin spots.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-140, filed 8/4/87.]

WAC 16-104-150 Terms descriptive of the air cell.

(1) **Depth of the air cell** (air space between shell membranes, normally in the large end of the egg). The depth of the air cell is the distance from its top to its bottom when the egg is held air cell upward.

(2) **Free air cell.** An air cell that moves freely toward the uppermost point in the egg as the egg is rotated slowly.

(3) **Bubbly air cell.** A ruptured air cell resulting in one or more small separate air bubbles usually floating beneath the main air cell.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-150, filed 8/4/87.]

[Ch. 16-104 WAC—p. 2]

WAC 16-104-160 Terms descriptive of the white. (1)

Clear. A white that is free from discolorations or from any foreign bodies floating in it. (Prominent chalazae should not be confused with foreign bodies such as spots or blood clots.)

(2) **Firm (AA quality).** A white that is sufficiently thick or viscous to prevent the yolk outline from being more than slightly defined or indistinctly indicated when the egg is twirled.

(3) **Reasonably firm (A quality).** A white that is somewhat less thick or viscous than a firm white. A reasonably firm white permits the yolk to approach the shell more closely which results in a fairly well defined yolk outline when the egg is twirled.

(4) **Weak and watery (B quality).** A white that is weak, thin, and generally lacking in viscosity. A weak and watery white permits the yolk to approach the shell closely, thus causing the yolk outline to appear plainly visible and dark when the egg is twirled.

(5) **Blood spots or meat spots.** Small blood spots or meat spots (aggregating not more than 1/8 inch in diameter) may be classified as B quality. If larger, or showing diffusion of blood into the white surrounding a blood spot, the egg shall be classified as loss. Blood spots shall not be due to germ development. They may be on yolk or in the white. Meat spots may be blood spots which have lost their characteristic red color or tissue from the reproductive organs.

(6) **Bloody white.** An egg which has blood diffused through the white. Eggs with bloody whites are classed as loss. Eggs with blood spots which show a slight diffusion into the white around the localized spot are not to be classed as bloody whites.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-160, filed 8/4/87.]

WAC 16-104-170 Terms descriptive of the yolk. (1)

Outline slightly defined (AA quality). A yolk outline that is indistinctly indicated and appears to blend into the surrounding white as the egg is twirled.

(2) **Outline fairly well defined (A quality).** A yolk outline that is discernible but not clearly outlined as the egg is twirled.

(3) **Outline plainly visible (B quality).** A yolk outline that is clearly visible as a dark shadow when the egg is twirled.

(4) **Enlarged and flattened (B quality).** A yolk in which the yolk membranes and tissues have weakened and/or moisture has been absorbed from the white to such an extent that the yolk appears definitely enlarged and flat.

(5) **Practically free from defects (AA quality or A quality).** A yolk that shows no germ development but may show other very slight defects on its surface.

(6) **Serious defects (B quality).** A yolk that shows well developed spots or areas and other serious defects, such as olive yolks, which do not render the egg inedible.

(7) **Clearly visible germ development (B quality).** A development of the germ spot on the yolk of a fertile egg that has progressed to a point where it is plainly visible as a definite circular area or spot with no blood in evidence.

(8) **Blood due to germ development.** Blood caused by development of the germ in a fertile egg to the point where it

is visible as definite lines or as a blood ring. Such an egg is classified as inedible.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-170, filed 8/4/87.]

WAC 16-104-180 General terms. (1) Loss. An egg that is inedible, cooked, frozen, contaminated, or containing bloody whites, large blood spots, large unsightly meat spots, or other foreign material.

(2) Inedible eggs. Eggs of the following descriptions are classed as inedible: Black rots, yellow rots, white rots, mixed rots (addled eggs), sour eggs, eggs with green whites, eggs with stuck yolks, moldy eggs, musty eggs, eggs showing blood rings, eggs containing embryo chicks (at or beyond the blood ring state), and any eggs that are adulterated as such term is defined pursuant to the Federal Food, Drug, and Cosmetic Act.

(3) Leaker. An individual egg that has a crack or break in the shell and shell membranes to the extent that the egg contents are exuding or free to exude through the shell.

(4) Restricted eggs means any check, dirty eggs, incubator, reject, inedible, leaker, or loss.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-180, filed 8/4/87.]

WAC 16-104-190 General. (1) These grades are applicable to edible shell eggs in "lot" quantities rather than on an "individual" egg basis. A lot may contain any quantity of two or more eggs. References in these standards to the term "case" means 30-dozen egg cases as used in commercial practices in the state of Washington.

(2) Terms used in WAC 16-104-190 that are defined in WAC 16-104-130 have the same meaning as defined therein.

(3) Aggregate tolerances are permitted within each consumer grade only as an allowance for variable efficiency and interpretation of graders, normal changes under favorable conditions during reasonable periods between grading and inspection and reasonable variation of inspector's interpretation.

(4) Substitution of higher qualities for the lower qualities specified is permitted.

(5) "No grade" or "receipts" means eggs of possible edible quality on which no grade determination has been made or that fail to meet the requirements of an official Washington state consumer grade or that may have been contaminated by smoke, chemicals or other foreign material which may have seriously affected the character, appearance or flavor of the eggs. "No grade" or "receipts" eggs shall be sold only to a dealer who shall be equipped to assign a grade.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-190, filed 8/4/87.]

WAC 16-104-200 Grades. (1) Washington consumer grade AA (at origin) shall consist of eggs which are at least 87 percent AA quality. The maximum tolerance of 13 percent which may be below AA quality may consist of A or B quality in any combination, except that within the tolerance for B quality, not more than 1 percent may be B quality due to air cells over 3/4 inch, blood spots (aggregating not more than 1/8 inch in diameter), or serious yolk defects. Not more than

5 percent (7 percent for jumbo size) checks are permitted and not more than 0.50 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(2) Washington consumer grade AA (destination) shall consist of eggs which are at least 72 percent AA quality. The remaining tolerance of 28 percent shall consist of at least 10 percent A quality, and the remainder shall be B quality, except that within the tolerance for B quality not more than 1 percent may be B quality due to air cells over 3/8 inch, blood spots (aggregating not more than 1/8 inch in diameter), or serious yolk defects. Not more than 7 percent (9 percent for jumbo size) checks are permitted and not more than 1 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(a) Washington consumer grade A (A) Washington consumer grade A (at origin) shall consist of eggs which are at least 87 percent A quality or better. Within the maximum tolerance of 13 percent which may be below A quality, not more than 1 percent may be B quality due to air cells over 3/8 inch, blood spots (aggregating not more than 1/8 inch in diameter), or serious yolk defects. Not more than 5 percent (7 percent for jumbo size) checks are permitted and not more than 0.50 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may exceed 0.30 percent. Other types of loss are not permitted.

(b) Washington consumer grade A (destination) shall consist of eggs which are at least 82 percent A quality or better. Within the maximum tolerance of 18 percent which may be below A quality, not more than 1 percent may be B quality due to air cells over 3/8 inch, blood spots (aggregating not more than 1/8 inch in diameter), or serious yolk defects. Not more than 7 percent (9 percent for jumbo size) checks are permitted and not more than 1 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(3) Washington consumer grade B.

(a) Washington consumer grade B (at origin) shall consist of eggs which are at least 90 percent B quality or better, not more than 10 percent may be checks, and not more than 0.50 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(b) Washington consumer grade B (destination) shall consist of eggs which are at least 90 percent B quality or better, not more than 10 percent may be checks and not more than 1 percent leakers, dirties, or loss (due to meat or blood spots) in any combination, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

"Exemption." A licensed wholesale shell egg dealer may sell a consumer grade check on the premises where he packages eggs, directly to household consumers for use by such consumer and members of his household and his non-paying guests and employees. This consumer grade check shall consist of eggs which at least 99 percent are checks or better. Checks may not exceed 1% dirties, leakers, and loss in any combination (due to meat or blood spots). Loss other than meat or blood spots is not permitted.

(4) Additional tolerances:

(a) In lots of two or more cases:

(i) For grade AA - No individual case may exceed 10 percent less AA quality eggs than the minimum permitted for the lot average.

(ii) For grade A - No individual case may exceed 10 percent less A quality eggs than the minimum permitted for the lot average.

(iii) For grade B - No individual case may exceed 10 percent less B quality eggs than the minimum permitted for the lot average.

(b) For grade AA, A, and B, no lot shall be rejected or downgraded due to the quality of a single egg except for loss other than blood or meat spots.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-200, filed 8/4/87.]

WAC 16-104-210 Summary of grades. It shall be unlawful to sell, offer for sale, or use as human food any eggs or products containing eggs which have been broken or separated by a process that does not permit the inspection of each individual egg after it is broken or that allows the egg meat and shell to commingle. For the purposes of this rule, egg products sold under a United States Department of Agriculture (USDA) seal from a USDA approved and inspected egg products plant shall be deemed to meet the requirements of this rule for use as human food.

SUMMARY OF GRADES

The summary of Washington state consumer grades for shell eggs follows as Table 1 and Table 2 of this section:

TABLE 1 - SUMMARY OF WASHINGTON CONSUMER GRADES FOR SHELL EGGS

Washington State Consumer Grades (Origin)	Quality Required (1)	Tolerance Permitted (2)	
		Percent	Quality
Grade AA	87 percent AA	Up to 13 Not over 5	A or B (5) Checks (6)
Grade A	87 percent A or better	Up to 13 Not over 5	B Checks (6)
Grade B	90 percent B or better	Not over 10	Checks

Washington State Consumer Grades (Destination)	Quality Required (1)	Tolerance Permitted (3)	
		Percent	Quality
Grade AA	72 percent AA	Up to 28 (4) Not over 7	A or B (5) Checks (6)
Grade A	82 percent A or better	Up to 18 Not over 7	B (5) Checks (6)
Grade B	90 percent B or better	Not over 10	Checks

(1) In lots of two or more cases see Table 2 of this section for tolerances for an individual case within a lot.

(2) For the Washington consumer grades (at origin), a tolerance of 0.50 percent leakers, dirties, or loss (due to meat or blood spots) in any combination is permitted, except that such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(3) For the Washington consumer grades (destination), a tolerance of 1 percent leakers, dirties, or loss (due to meat or blood spots) in any combination is permitted, except that

such loss may not exceed 0.30 percent. Other types of loss are not permitted.

(4) For Washington grade AA destination, at least 10 percent must be A quality or better.

(5) For Washington grade AA or A at origin and destination within the tolerances permitted for B quality, not more than 1 percent may be B quality due to air cells over 3/4 inch, blood spots (aggregating not more than 1/8 inch in diameter), or serious yolk defects.

(6) For Washington grades AA or A jumbo size eggs, the tolerance for checks at origin and destination is 7 percent and 9 percent respectively.

TABLE 2 - TOLERANCE FOR INDIVIDUAL CASE WITHIN A LOT

Washington Consumer Grade	Case Quality	Origin (Percent)	Destination (Percent)
Grade AA	AA (min)	77	62
	A or B	13	28
	Check (max)	10	10
Grade A	A (min)	77	72
	B	13	18
	Check (max)	10	10
Grade B	B (min)	80	80
	Check (max)	20	20

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-210, filed 8/4/87.]

WAC 16-104-220 Weight classes. (1) The weight classes for Washington state consumer grades for shell eggs shall be as indicated in Table 1 of this section and shall apply to all consumer grades:

TABLE - 1 WASHINGTON STATE WEIGHT CLASSES FOR CONSUMER GRADES FOR SHELL EGGS.

Size or Weight Classes	Minimum Net Weight Per Dozen	Minimum Net Weight Per 30 Dozen	Minimum Weight for Individual Eggs at Rate Per Dozen
	Ounces	Pounds	Ounces
	Jumbo	30	56
Extra large	27	50 1/2	26
Large	24	45	23
Medium	21	39 1/2	20
Small	18	34	17
Peewee or pullet	15	28	—

(2) Minimum weights listed for individual eggs at the rate per dozen are permitted in the various weight classes only to the extent that they will not reduce the net weight per dozen below the required minimum.

(3) A lot average tolerance of 3.3 percent for individual eggs in the next lower weight class is permitted as long as no individual case within the lot exceeds 5 percent.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-220, filed 8/4/87.]

WAC 16-104-230 Minimum sample schedule—Egg samples. The following schedule is a minimum number of samples and shall be reasonably calculated to produce a fair representation of the entire lot of eggs examined.

Cases in Lot	Cases in Sample
1 case	1 (see footnote.)
2 to 10 inclusive	2
11 to 25 "	3
26 to 50 "	4
51 to 100 "	5
101 to 200 "	8
201 to 300 "	11
301 to 400 "	13
401 to 500 "	14
501 to 600 "	16

For each additional 50 cases or fraction thereof in excess of 600 cases, one additional case shall be included in the sample. A minimum of 100 eggs per sample case shall be examined. For lots which consist of 100 eggs or less, all eggs shall be examined.

SUMMARY OF WASHINGTON STATE STANDARDS FOR QUALITY OF INDIVIDUAL SHELL EGGS
SPECIFICATIONS FOR EACH QUALITY FACTOR

Quality Factor	AA Quality	A Quality	B Quality
Shell	Clean, unbroken. Practically normal.	Clean, unbroken. Practically normal.	Clean to slightly stained.*Unbroken, abnormal.
Air cell	1/8 inch or less in depth. Unlimited movement & free or bubbly.	3/16 inch or less in depth. Unlimited movement & free or bubbly.	Over 3/16 inch in depth. Unlimited movement & free or bubbly.
White	Clear, firm.	Clear, reasonable firm.	Weak and watery. Small blood spots present.
Yolk	Outline slightly defined. Practically free from defects.	Outline fairly well defined. Practically free from defects.	Outline plainly visible. Enlarged and flattened. Clearly visible germ development but no blood. Other serious defect.

- * Moderately stained areas permitted (1/32 of surface if localized, or 1/16 in scattered).
- ** If they are small (aggregating not more than 1/8 inch in diameter).

For eggs with dirty or broken shells, the standards of quality provide two additional qualities. These are:

Dirty	Check
Unbroken. Adhering dirt or foreign material, prominent stains, moderate stained areas in excess of B quality.	Broken or cracked shell but membranes intact, not leaking.***

- *** Leaker has broken or cracked shell and membranes, and contents leaking or free to leak.

[Statutory Authority: Chapter 69.25 RCW. 87-16-075 (Order 1945), § 16-104-230, filed 8/4/87.]

WAC 16-104-310 Minimum facility and operating requirements for shell egg grading and packing plants.
General requirements for buildings and plant facilities.

(1) Buildings shall be of sound construction so as to prevent, insofar as practicable, the entrance or harboring of vermin, including all domestic pets, insects, rodents, birds, etc. This applies to:

(12/17/91)

- (a) All grading room areas.
- (b) Any storage areas for eggs or cases and cartons. Egg case and carton storage shall be clean and dry, free from dust or any odorous material that could be absorbed by cases or cartons.
- (2) Grading and packing rooms shall be of sufficient size to permit installation of necessary equipment and the conduct of grading and packing in a sanitary manner. These rooms shall be kept reasonably clean during grading and packing operations and shall be thoroughly cleaned at the end of each operating day.

- (a) Floor shall be constructed of washable materials, tight, reasonably smooth, and in good repair.
- (b) Floor drains shall be provided where floors are subjected to flood type cleaning or where normal operations release or discharge water or liquid wastes onto the floor.
- (c) All floor areas shall be kept clean.
- (3) Adequate lavatory/toilet (restroom) accommodations shall be provided. Lavatory/toilet and locker rooms shall be maintained in a clean and sanitary condition. Hot and cold running water shall be provided. Rooms shall be ventilated to the outside of the building. Signs shall be posted in the restrooms instructing employees to wash their hands before returning to work. Lavatory/toilet rooms shall be equipped with handwashing facilities including soap and sanitary towels.

- (4) A separate refuse room or a separate designated area for the accumulation of trash must be provided in plants which do not have a system for the daily removal or destruction of such trash.
- (5) Areas subjected to moisture:
 - (a) Wood benches, platforms, etc., in areas which are subjected to moisture shall be maintained in good repair or made from other construction materials impervious to moisture and odors.
 - (b) Wood walls or partitions shall be maintained in good repair or be replaced with materials impervious to moisture and odor build up.

- (c) Newly constructed plants should be equipped with nonporous material benches, platforms, etc., in areas which are subjected to moisture. Wood benches, platforms, etc., are allowed when maintained in a sanitary, odor free condition.
- (6) Walls and ceilings:
 - (a) Walls and ceilings shall be kept clean, in good repair and free of cobwebs and dust.
 - (b) Ceiling shall be dust tight if space overhead is used for storage or other purposes.
- (7) Doors and windows: Effective means shall be provided to prevent entrance insofar as practicable of insects, rodents, birds or other vermin and dust.

(8) Hygiene of personnel. Plant personnel coming into contact with shell eggs shall wear clean clothing, free from animal waste, dust, loose dirt or prohibited chemical contamination.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-310, filed 12/17/91, effective 1/17/92.]

WAC 16-104-320 Grading room requirements. (1) The grading room candling area shall be adequately darkened to make possible accurate quality determination of the candled appearances of eggs.

(2) There shall be no crossbeams of light, and light reflection from candling lights shall be kept at a minimum.

(3) Candling area/equipment shall be constructed so as to permit cleaning and provide ample shelf space for convenient placement of the different grades to be packed.

(4) The candling lights shall be capable of delivering reasonably uniform intensity of light at the candling aperture to facilitate accurate quality determinations. In operations utilizing mechanical grading equipment, adequate light shall be provided to facilitate necessary quality determinations, including the detection and removal of stained and dirty shells and the condition of the packing material.

(5) Individual egg scales shall be provided to check accuracy of weight classing.

(6) Weighing equipment, whether manual or automatic, shall be kept clean and maintained in a manner to assure accurate operation.

(7) Ventilation and lighting:

(a) Adequate lighting shall be provided to assure accurate and safe grading room operations.

(b) Adequate ventilation shall be maintained to keep the area free from undesirable odors, dust, and condensation.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-320, filed 12/17/91, effective 1/17/92.]

WAC 16-104-330 Cooler room requirements. (1)

After processing and grading, shell eggs packed in consumer containers shall be refrigerated at maximum of forty-five degrees Fahrenheit, ambient air temperature. All containers shall be clearly labeled with the words "keep refrigerated," in lettering as follows:

Cartons:	1/8 inch minimum
Cases:	1 inch minimum
Baskets and racks:	1 inch minimum

This provision shall apply to baskets, racks, cases and cartons acquired after June 1, 1992.

(2) Accurate thermometers shall be provided in egg coolers and egg storage facilities to monitor required ambient air temperatures.

(3) All shell egg coolers shall be equipped with a hygrometer or portable equipment such as a psychrometer to determine that relative humidity is at least seventy percent. When necessary, humidifying equipment capable of maintaining seventy percent relative humidity, to minimize shrinkage, shall be provided: Provided, That this requirement shall not apply to refrigerated vehicles used to transport shell eggs.

(4) Egg coolers and egg storage facilities shall be free from objectionable odors and mold, and shall be maintained in a sanitary condition.

(5) All facilities where eggs are offered for sale to consumers, shall be maintained in a clean and sanitary condition. Display and storage temperatures shall be maintained at a maximum of forty-five degrees Fahrenheit ambient air temperature.

(6) Shell eggs stored prior to grading shall be refrigerated at a maximum of fifty-five degrees Fahrenheit ambient air temperature, when time prior to processing/grading exceeds twenty-four hours. When time during transport of ungraded eggs will exceed three hours, refrigeration at fifty-

five degrees Fahrenheit maximum is required. Transport time of shell eggs prior to processing/grading of three hours or less in unrefrigerated vehicles is allowed, however, that time shall be included as part of the twenty-four hours.

(7) Inedibles shall be held under refrigeration in covered containers, clearly labeled and stored to prevent possible odor contamination of graded or ungraded eggs.

(8) Refrigeration is required during all transit of graded product when transit time will require an excess of two hours. Temperatures during all transit of graded product shall be maintained at a maximum of forty-five degrees Fahrenheit ambient air temperature.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-330, filed 12/17/91, effective 1/17/92.]

WAC 16-104-340 Shell egg protecting operations.

Shell egg protecting (oil processing) operations shall be conducted in a manner to avoid contamination of the product and maximize conservation of its quality.

(1) Eggs with moisture on the shell shall not be shell protected.

(2) Oil having any off odor, or that is obviously rancid or contaminated, shall not be used in shell egg protection.

(3) Processing oil that has been previously used and which has become contaminated shall be filtered and heat treated at one hundred eighty degrees Fahrenheit for three minutes prior to reuse.

(4) Shell egg protecting equipment shall be washed, rinsed, and treated with a bactericidal agent each time the oil is removed. It is preferable to filter and heat treat processing oil and clean processing equipment daily when in use.

(5) Adequate coverage and protection against dust and dirt shall be provided when the equipment is not in use.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-340, filed 12/17/91, effective 1/17/92.]

WAC 16-104-350 Shell egg cleaning operations. (1)

Shell egg cleaning equipment shall be kept in good repair and shall be cleaned after each day's use or more frequently, if necessary.

(2) The temperature of the wash water shall be maintained at ninety degrees Fahrenheit or higher, and shall be at least twenty degrees Fahrenheit warmer than the temperature of the eggs to be washed. Rinse water temperature shall be at least ten degrees Fahrenheit warmer than the final wash water temperature. These temperatures shall be maintained throughout the cleaning cycle.

(3) An approved cleaning compound shall be used in the wash water. It must be approved by the United States Department of Agriculture or the Washington state department of agriculture. The use of metered equipment for dispensing the compound into solution is recommended.

(4) Wash water shall be changed approximately every four hours, or more often if needed, to maintain cleanliness and sanitary conditions, and at the end of each shift. Measures shall be taken to prevent excess foaming during the egg washing operation.

(5) Replacement water shall be added continuously to the wash water of washers to maintain a continuous overflow. Rinse water, chlorine, or quaternary sanitizing rinse may be used as part or all of the replacement water: Provided, That

they are compatible with the washing compound. Iodine sanitizing rinse may not be used as part of the replacement water.

(6) Water supply shall be of a safe sanitary quality. Only potable water under two parts per million iron content shall be used, without equipment to correct the excess. Water under pressure shall be available to grading and candling area or room for cleaning purposes. Frequency of testing for potability of the water supply shall be determined by the director, however, must also comply with state and local health department requirements. When the water source is changed, new tests are required.

(7) Waste water from the egg washing operation shall be continuously removed through appropriate drains to prevent standing water from accumulating.

(8) The washing and drying operation shall be continuous and shall be completed as rapidly as possible. Eggs shall not be allowed to stand or soak in water. Immersion-type washers shall not be used.

(9) Prewetting shell eggs prior to washing may be accomplished by spraying a continuous flow of water over the eggs in a manner which permits the water to drain away, or other methods which may be approved by the director. The temperature of the water shall be the same as prescribed in subsection (2) of this section.

(10) Washed eggs shall be spray rinsed with warm water containing an approved sanitizer of not less than 50 p/m nor more than 200 p/m of available chlorine or its equivalent.

(11) Test kits shall be available and used to determine the strength of the sanitizing solution.

(12) During any rest period or other line shutdown, preventative measures shall be taken to prevent overheating and/or partial cooking of eggs in the washing, rinsing, and scanning areas.

(13) Washed eggs shall be dry before cartoning or casing.

(14) When steam or vapors originate from the washing operation, they shall be continuously and directly removed to the outside of the building.

(15) Every reasonable precaution should be exercised to prevent "sweating" of eggs.

(16) Eggs may be dry cleaned or washed. If eggs are dry cleaned, the equipment shall be of a sanitary type, and kept clean and in good repair.

(17) Cloth or wash rags shall not be used for cleaning eggs unless they are of a sanitary single service type. Single service paper toweling may be used.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-350, filed 12/17/91, effective 1/17/92.]

WAC 16-104-360 Shipping containers, egg cartons, and packing materials. Eggs which are to be distributed with consumer grademarks shall be packaged only in new or good used cases, baskets or racks. They shall be clean, and have sufficient strength and durability to protect the eggs during normal distribution. Reuse of egg cartons or flats after distribution to a consumer outlet shall not be allowed. Used flats may be used for transporting and/or holding nest-run or restricted eggs prior to grading or breaking.

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-360, filed 12/17/91, effective 1/17/92.]

(12/17/91)

WAC 16-104-370 Chemicals and compounds. The following list of compounds shall be handled in accordance with the manufacturers' instructions. They shall be stored away from the grading area and not be allowed to come in contact with the shell eggs being processed, or with egg cases or cartons: Pesticides including herbicides, insecticides, fungicides and rodenticides; inks, oils, cleaning compounds, foam control agents, sanitizers, and any common cleaners used in the plant.

This paragraph is not intended to prohibit eggs being contacted by certain materials when those materials are used in the normal shell egg cleaning and sanitizing process and the materials have been authorized for such usage in the "List of Proprietary Substance and Non-Food Compounds Authorized for Use Under USDA Inspection And Grading Program."

[Statutory Authority: RCW 69.25.030 and chapters 42.30 and 35.05 [34.05] RCW. 92-01-091, § 16-104-370, filed 12/17/91, effective 1/17/92.]