

# **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.
- (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. Recommended products are **GENERAL CLEAN** and **OP-430**.
- (3) Adequate lavatory and toilet accommodations shall be provided. 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 rest rooms instructing employees to wash their hands before returning to work. Recommended products are **CREME HANDSOAP** and **L'EXECUTIVE ANTISEPTIC HANDSOAP**.
- (4) A separate refuse room or a 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. Recommended products are **DO-79** and **ODOR-X**.
- (5) Wood benches, platforms, etc., in areas which are subjected to moisture and which develop odors shall be replaced with equipment of metal construction. Wood walls or partitions which develop odors shall be replaced with materials impervious to moisture. Newly constructed plants should be equipped with metal benches, platforms, etc., in areas which are subjected to moisture.

## **Grading room requirements. The grading room shall be adequately darkened to make possible accurate quality determination of the candled appearance of eggs.**

- (1) There shall be no crossbeams of light, and light reflection from candling light shall be kept at a minimum.
- (2) Candling benches shall be constructed so as to permit cleaning and provide ample shelf space for convenient placement of the different grades to be packed. Recommended products are **GENERAL CLEAN**, **DEAMY** and **OP-430**.
- (3) The candling lights shall be capable of delivering reasonably uniform intensity of light at the candling aperture to facilitate accurate quality determinations; and the light shall provide ample case light for detection of stained and dirty shells and the condition of the packing materials. 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.
- (4) Individual egg scales shall be provided to check accuracy of weight classing.
- (5) Weighing equipment, whether manual or automatic, shall be kept reasonably clean and shall be capable of ready adjustment. Recommended products are **GENERAL CLEAN** and **OP-430**.

(6) Adequate ventilation shall be provided.

### **Cooler room requirements.**

(1) Cooler rooms shall have refrigeration facilities capable of reducing within 24 hours and holding the maximum volume of eggs handled to 15°C or below. Accurate thermometers shall be provided.

(2) Cooler rooms shall be free from objectionable odors and from mold, and shall be maintained in a sanitary condition. Recommended products are **D-600**, **IX-91** and **DEAMY**.

(3) All shell egg coolers shall be equipped with a hygrometer or portable equipment such as a psychrometer shall be available to determine the relative humidity. Humidifying equipment capable of maintaining a relative humidity which will minimize shrinkage shall be provided.

### **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 excess moisture on the shell shall not be shell protected.

(2) Oil having any off odor, or that is obviously 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 83°C for 3 minutes prior to use.

(4) Shell egg processing 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. Recommended products are **D-600**, **IX-91** and **CL-18**.

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

### **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. Recommended products are **GENERAL CLEAN** and **BRITE-ALL**.

(2) The temperature of the wash water shall be maintained at 32° or higher, and shall be at least 11°C warmer than the temperature of the eggs to be washed. These temperatures shall be maintained throughout the cleaning cycle.

(3) An approved cleaning compound shall be used in the wash water. (The use of metered equipment for dispensing the compound into solution is recommended.) Recommended product is **EG-CD**.

(4) Wash water shall be changed approximately every 4 hours or more often if needed to maintain sanitary conditions, and at the end of each shift. Remedial measures shall be taken to prevent excess foaming during the egg washing operation. Recommended product is **D'FOAM EG**.

(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 of the

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

(6) Only potable water may be used to wash eggs. Each official plant shall submit certification to the national office stating that their water supply is potable. An analysis of the iron content of the water supply, stated in parts per million, is also required. When the iron content exceeds 2 parts per million, equipment shall be provided to correct the excess iron content. Frequency of testing shall be determined by the Administrator. When the water source is changed, new tests are required.

(7) Waste water from the egg washing operation shall be piped directly to drains.

(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) Pre-wetting 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 Administrator. The temperature of the water shall be the same as prescribed in this section.

(10) Washed eggs shall be spray rinsed with warm water containing an approved sanitizer of not less than 50 ppm nor more than 200 ppm of available chlorine or its equivalent. Recommended product is CL-18.

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

(12) During any rest period, eggs shall be removed from the washing and rinsing area of the egg washer and from the scanning area whenever there is a buildup of heat.

(13) Washed eggs shall be reasonably 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.

### **Requirements for eggs which are to be marked with official CANADA identification mark.**

(1) Shell eggs held in the official plant shall be placed under refrigeration of 15°C or lower promptly after packaging. Officially identified shell eggs with an internal temperature of 21°C or higher when shipped from the official plant should be transported at a temperature of 15°C or less.

(2) Every reasonable precaution shall be exercised to prevent "sweating" of eggs (see table on page 4).

(3) Eggs which are to be officially identified with consumer grademarks shall be packaged only in new or good used cases and packing materials. Cases and packing materials must be reasonably clean, free of mold, mustiness and off odors and must be of sufficient strength and durability to adequately protect the eggs during normal distribution.

		TEMPERATURE (°C) OF EGGS AS TAKEN FROM COOLER			
		13	15	18	21
		% relative humidity (approximately) at or above which sweating will occur.			
TEMPERATURE (°C)	38	22	28	32	38
	35	27	32	38	45
	32	31	37	44	52
	29	36	43	51	61
	27	42	51	60	72
	24	50	60	71	85
	21	59	70	83	100

**The following substances used in the plant shall be approved and handled in accordance with the manufacturer's instructions: Pesticides, insecticides, rodenticides, cleaning compounds, destaining compounds, foam control compounds, sanitizers, and inks and oils coming into contact with the product.**

**SOME OF THE FEDERALLY APPROVED PRODUCTS FROM MELROSE CHEMICALS LTD ARE:**

BRITE-ALL  
 CL-18  
 CREME HANDSOAP  
 D-600  
 DEAMY  
 DO-79  
 D'FOAM EG  
 EG-CD  
 GENERAL CLEAN  
 IX-91  
 L'EXECUTIVE  
 ODOR-X  
 OP-430  
 SUPER FOG