



PROGRAM REQUIREMENTS FOR PARTICIPANTS

General Statement of Purpose

The Maryland Egg Quality Assurance Program (MEQAP) is a voluntary industry program intended to minimize *Salmonella enteritidis* (SE) contamination of chicken (shell) eggs and provide standards for the quality of eggs marketed under the provisions of this program. Although this program does not guarantee shell eggs to be free of SE contamination, the program does assure commitment of the producer and/or the processor to implementation of those management and monitoring practices most likely to prevent SE contamination. The Maryland Department of Agriculture (MDA) provides oversight and technical advice to this program. The egg industry carries the financial burden of the program. The Maryland Department of Health and Human Hygiene (MDHMH) provides technical advice regarding public health implications. MEQAP participants are assuring the public that they are taking every reasonable precaution to assure the safety of shell eggs. Eggs that are produced, processed and packaged under the guidelines established in Parts I and II of the MEQAP program may be identified with the MEQAP logo.

PART I - PRODUCTION REQUIREMENTS

I. STATEMENT OF PURPOSE

The requirements of this section provide for management and monitoring practices most likely to prevent SE contamination of flocks. Basic prevention measures include placement of SE clean chicks, rodent control, cleaning and disinfecting between flocks, environmental monitoring of pullet and layer houses with continuous testing of eggs from any environmentally positive houses and proper on farm handling of eggs. Positive eggs are diverted for pasteurization.

II. PROGRAM ADMINISTRATION

1. The Program is supervised and coordinated by the MDA.
2. Procedures, operating protocols and program standards are established by the MDA.

III. PARTICIPATION

1. Any poultry producer in Maryland may participate in the Program.
2. Participation in the Program is voluntary and any participant may withdraw at any time.
3. Producer/owner participation in the Program may be terminated by the MDA if the participant does not comply with the requirements of Parts I and II of this document (Program Requirements for Participation).

4. Flock, Egg and premises testing information shall be the property of the flock owner and shall be treated confidentially by MDA.
5. No evidence of SE contamination of the participant flock, premises or eggs produced thereon shall be withheld from the MDA.
6. Although the poultry house is the basic unit for program operations, the entire complex shall be required to enter the Program for Biosecurity purposes.
7. Participation in the Program offers no warranty by MDA, expressed or implied that eggs produced under this Program are free of *Salmonella enteritidis*.
8. Representatives of the Program or the MDA may conduct independent spot checking of compliance with Program protocols to verify flock status and adequacy of testing.
9. Nothing in these conditions shall be or become the basis for a claim for damages of any nature whatsoever against MDA, MDHMH, their employees or agents.
10. Participants understand their participation in MEQAP does not relieve them of responsibility to comply with applicable statutes and regulations of MDA and MDHMH relative to food borne diseases.

IV. PROGRAM REQUIREMENTS FOR PARTICIPANTS

PULLETS

1. Chicks shall be obtained from U.S. Sanitation Monitored *Salmonella enteritidis* negative breeder flocks.
2. Chick delivery containers shall be swabbed at the time of delivery (every 10th container liner) and submitted to a laboratory for culture for SE.
3. Manure in pullet grower facilities shall be cultured at 10 to 15 weeks of age. A culture shall consist of two samples taken from the manure beneath each row of cages.
4. Houses with positive manure or chick samples must be cleaned and disinfected before new chicks may be placed.

LAYERS

1. Pullets shall be obtained from an SE monitored flock.
2. Manure in layer facilities shall be cultured at 29 to 31 weeks of age and again at 44 to 46 weeks of age. A culture of the manure during any test will consist of 2 samples taken from the manure beneath each row of cages.
3. Houses with positive manure samples must be thoroughly cleaned and disinfected

between flocks.

NEST RUN EGGS

1. Houses with negative manure samples, except flocks and premises implicated in an outbreak of egg-associated human SE or SE contamination of food, will not be required to test eggs.
2. Houses with positive manure samples must test 1,000 nest run eggs or a combination of all available blood spot eggs plus additional nest run eggs to total 1,000 eggs every two weeks for four lots of samples. These eggs will be cultured in pools of 20. If the four lots of eggs are negative, a sample of 1,000 eggs (nest run and blood spot) must be sampled each month for the life of the flock.
3. If any egg pools are positive, then all eggs must be diverted for pasteurization or hard cooking. To be able to resume sale of eggs as table eggs, 1,000 eggs must be tested in pools of 20 for four lots of samples and test negative. These eggs can be a combination of nest run and blood spot eggs. Following return to the table egg market, 1,000 eggs (nest run and blood spot) must be sampled each month for the life of the flock.
4. Houses and flocks determined to be the source of eggs causing egg-associated human SE or SE contamination of food shall be subject to environmental culture and culture of 1,000 eggs in pools of 20 every two weeks for 4 lots of samples - samples shall be representative of the building or premises and flocks where the suspect birds are located except when epidemiology indicates a specific flock in which case only the suspect flock and its environment need to be sampled.
5. Eggs from flocks in SE culture positive environments implicated in an egg-associated outbreak of human SE or SE contamination of food shall, unless determined to be SE culture negative according to the testing requirements of this section, not be marketed for food unless pasteurized or hard-cooked.
6. Flocks determined to be infected by culture of SE from internal organs shall be subject to the same egg restrictions and testing requirement as an egg culture positive flock.
7. Egg testing will eliminate the need for further environmental testing.
8. As additional experience is gained, environmental and egg testing requirements may be modified.

FORCE MOLTED FLOCKS

1. Manure from force molted flocks shall be tested at five to seven weeks following return to feed. If manure is SE positive, eggs shall be tested as described for a laying flock.

RODENT CONTROL

1. An approved rodent control and monitoring program must be documented and maintained at all times.

BIO-SECURITY

1. All participants must maintain biosecurity standards established by MDA.

ON FARM EGG HANDLING

1. On farm cleaning of eggs must follow the same guidelines as for processing. Dirty eggs cannot be soaked.
2. On farm - after gathering, eggs must be held in a facility with an ambient temperature of $\leq 55^{\circ}$ F.

V. PARTICIPANT RESPONSIBILITIES

Participants agree that they or their representatives shall:

1. Cooperate with MDA and MDHMH in carrying out the prescribed monitoring and prevention procedures.
2. Participate in training sessions on sample collection and SE prevention procedures.
3. Pay for the cost of sampling supplies, culturing costs, training and the monitoring of the program including semi-annual visits to the flocks and the cost of taking monitoring samples by the Department. Where applicable and feasible, routine semi-annual monitoring of flock records will be conducted by MDA graders during their regular tour of duty without additional cost to participants.
4. Conduct sample collection in accordance with program protocols covering testing of chicks, pullets, environments and eggs.
5. Transport samples to a laboratory approved by the MDA.
6. Maintain a standard log provided by the MDA for each flock in the program.
7. Maintain an appropriate rodent control program approved by the MDA.
8. Divert eggs to pasteurization or hard cooking according to the requirements of this agreement if eggs are positive for SE. Records of diversion must be maintained by the participant for at least six months. Eggs may be returned to the table egg market only by following the appropriate program protocol.
9. Clean and disinfect environmentally positive (SE) layer or pullet houses between flock placements according to standards set by the MDA.

10. Maintain adequate biosecurity and practice good poultry management according to standards set by the MDA.

PART II - PROCESSING REQUIREMENTS

I. STATEMENT OF PURPOSE

The requirements of Part II - Processing Requirements provide for management and monitoring practices that promote the proper handling of eggs produced under Part I - Production Requirements of this program. Part II establishes guidelines for washing, refrigeration, labeling and quality control of shell eggs. Only eggs produced and processed according to the standards established in Parts I and II of this document or an MDA approved equivalent program may be identified with the MEQAP logo.

II. PROGRAM ADMINISTRATION

1. The program is supervised and coordinated by the MDA.
2. Procedures, operating protocols and program standards are established by the MDA.

III. PARTICIPATION

1. Any shell egg processor in Maryland may participate in the Program.
2. Participation in the Program is voluntary and any participant may withdraw at any time.
3. Shell egg processor's participation in the program may be terminated by the MDA if the participant does not comply with Section IV of Part II of this document (Program Requirements for Participation).
4. Testing information that is not required by other MDA and MDHMH mandatory programs will be treated confidentially by MDA.
5. No information relevant to the requirements of this program shall be withheld from the MDA.
6. Participation in the Program offers no warranty by the MDA, expressed or implied, that eggs processed under this Program are free of *Salmonella enteritidis*.
7. Representatives of the MDA will conduct independent random inspections to verify compliance with Program protocols including documentation of egg sources and adequacy of monitoring and recordkeeping.
8. Nothing in these conditions shall be or become the basis for a claim for damages of any nature whatsoever against MDA, MDHMH, their employees or agents.
9. Participants understand their participation in MEQAP does not relieve them of

responsibility to comply with applicable statutes and regulations of MDA, MDHMH and USDA.

IV. PROGRAM REQUIREMENTS

PREMISES AND PROCESSING EQUIPMENT

1. Records must be kept documenting the monitoring of all premises and processing equipment requirements. Where applicable, USDA records will be sufficient.
2. Cooling units for receiving coolers must produce an ambient air temperature of $\leq 55^{\circ}$ F with a relative humidity of $\leq 80\%$
3. Approved rodent and fly control programs must be maintained.
4. Premises (cooler, supply room, grading and packing room) must be clean. Monitoring must be performed daily.
5. All areas of the processing equipment that come into direct contact with the eggs must be clean prior to processing eggs to be identified with the MDA logo. Monitoring must be performed a minimum of once every four hours.
6. Adequate lavatory facilities (hot/cold water, soap, towels, etc.) must be maintained. Monitoring must be performed daily.
7. Precautions must be taken to ensure handlers of unwashed eggs and /or materials thoroughly cleanse their hands before handling processed eggs. Egg handlers must follow hygienic practices (clothes, hands, etc).

PROCESSING

1. Records must be kept documenting the monitoring of all processing requirements. Where applicable, USDA records will be sufficient.
2. Water used for egg cleaning and sanitizing must be tested by a state or locally approved certifying agency for potability and iron content semiannually. Iron content must not exceed 2 ppm.
3. Wash water temperature must be at least 20° F, but no more than 40° F, warmer than the eggs. Temperature must be a minimum of 90° . Temperature must be monitored a minimum of every two hours while processing eggs to be marketed under this program.
4. An approved cleaning compound must be used in wash water. On continuous type washers, the water must be changed a minimum of every four hours.
5. Rinse water temperature must be \geq wash water temperature. The rinse water must contain an approved sanitizing compound with an effective strength level of 50 to 200 ppm of

available chlorine or its equivalent. Sanitizer effective strength level must be monitored, using the titration method, a minimum of every two hours while processing eggs to be marketed under this program.

6. Eggs cannot be immersed at any time.
7. Wash Water must be maintained at a pH of ≥ 10 . The pH must be monitored a minimum of every two hours during processing.

PACKAGING

1. Packaging supplies must be kept off the floor.
2. Used fiber filler flats, cartons and/or fiber cases cannot be used for eggs identified with the MDA logo. Plastic flats must be washed and sanitized before use. Plastic/Metal baskets must be clean.
3. Consumer containers (cartons, sleeves, cases for loose eggs, etc) must be labeled with a grade, a size, safe handling instructions, a packer identification number, a lot number to assist in identification of the producing flock, net weight or numerical count, the packer's or distributor's name and address, and the identity of the product as eggs. Cases of eggs containing cartoned eggs must be labeled with a grade, a size, the identity of the product as eggs, the net quantity in weight or numerical count, and safe handling instructions. Cases of loose eggs must bear the same information as cartons. Cases of loose eggs and cartoned eggs must be labeled with an expiration date not to exceed 45 days from the date of pack.

REFRIGERATION

1. Before processing, eggs must be held in coolers with units that produce an ambient air temperature of $\leq 55^{\circ}$ F and $\leq 80\%$ relative humidity.
2. After processing, eggs must be held in coolers with units that produce an ambient air temperature of $\leq 45^{\circ}$ F and $\leq 80\%$ relative humidity.
3. Eggs must be transported in the refrigerated area of a unit that produces an ambient air temperature of $\leq 45^{\circ}$ F.

EGG QUALITY AND WEIGHT STANDARDS

1. All eggs bearing the MDA logo must have a lot average not less than 75% AA. The balance may be of lower quality, however, the lot average shall be no more than 5% checks, 5% B interior quality and .5% dirty, leaker and/or loss.
2. All eggs bearing the MDA logo must meet the USDA minimum weight requirements for the

labeled size.

V. PARTICIPANT RESPONSIBILITIES

Participants agree that they or their representatives shall:

1. Cooperate with MDA and MDHMH in carrying out the prescribed monitoring and prevention procedures.
2. Participate in training sessions on quality control and recordkeeping.
3. Pay for the cost of training and monitoring of the program including the cost of quarterly visits by MDA to the processing plant. Where applicable and feasible, routine quarterly monitoring of processing plant records and verification of compliance with the established requirements will be conducted by MDA graders during their regular tour of duty without additional cost to participants.
4. Maintain a standard log on a form approved by MDA to record monitoring of the requirements established in Part II, Section IV of this Program.
5. Maintain an appropriate rodent control program approved by the MDA.
6. Obliterate the MDA logo from all cartons and cases containing eggs produced and/or processed under conditions not meeting the requirements of Parts I and II of this Program.
7. Adopt Standard Operating Procedures and records for plant pre operational and operational sanitation procedures and egg quality according to standards set by MDA.