Appendices

Appendix 1……9 CFR §590

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APPENDIX 2

Table of Minimum Cooling and Temperature Requirements for Egg Products

Table of Pasteurization Requirements

Table 1 – Minimum Cooling and Temperature Requirements for Liquid Egg Products – 9 CFR §590.530(c)

[Unpasterurized product temperature within 2 hours from time of breaking]

Product	Liquid (other than salt product) to be held 8 hours or less	Liquid (other than salt product) to be held in excess of 8 hours	Liquid salt product	Temperature within 2 hours after pasteurization	Temperature within 3 hours after stabilization
Whites (not to be stabilized)	55 °F. or lower	45 °F. or lower		45 °F. or lower	
Whites (to be stabilized)	70 °F. or lower	55 °F. or lower		55 °F. or lower	([1])
All other product (except product with 10 percent or more salt added)	45 °F. or lower	40 °F. or lower		If to be held 8 hours or less 45 °F. or lower. If to be held in excess of 8 hours, 40 °F. or lower	If to be held 8 hours or less, 45 °F. or lower. If to be held in excess of 8 hours, 40 °F. or lower.
Liquid egg product with 10 percent or more salt added			If to be held 30 hours or less, 65 °F. or lower. If to be held in excess of 30 hours, 45 °F. or lower	65 °F. or lower [2]	

[1] Stabilized liquid whites shall be dried as soon as possible after removal of glucose. The storage of stabilized liquid whites shall be limited to that necessary to provide a continuous operation.

[2] The cooling process shall be continued to assure that any salt product to be held in excess of 24 hours is cooled and maintained at 45 °F. or lower.

Table I—Pasteurization Requirements [1] – 9 CFR §590.570(b)

Liquid egg product	Minimum temperature requirements (°*F.*)	Minimum holding time requirements (*Minutes*)
Albumen (without use of chemicals)	134	3.5
	132	6.2
Whole egg	140	3.5
Whole egg blends (less than 2 percent added nonegg ingredients)	142	3.5
	140	6.2
Fortified whole egg and blends (24-38 percent egg solids, 2-12 percent added nonegg ingredients)	144	3.5
	142	6.2
Salt whole egg (with 2 percent or more salt added)	146	3.5
	144	6.2
Sugar whole egg (2-12 percent sugar added)	142	3.5
	140	6.2
Plain yolk	142	3.5
	140	6.2
Sugar yolk (2 percent or more sugar added)	146	3.5
	144	6.2
Salt yolk (2-12 percent salt added)	146	3.5
	144	6.2

[1] Pasteurization of egg products not listed in this table shall be in accordance with paragraph (c) of this section.

APPENDIX 3

Directive 10,230.4

APPENDIX 4

FSIS Form 5400-11
FSIS Form 5400-12

U.S. DEPARTMENT OF AGRICULTURE
FOOD SAFETY AND INSPECTION SERVICE
EGG PRODUCTS INSPECTION

DAILY REPORT OF EGG DRYING OPERATIONS

PLANT NAME AND ADDRESS *(Print)*	PLANT NUMBER	DATES	Code Date / PROCESSING OPERATIONS

INSPECTOR'S BADGE NUMBER	SIGNATURE(S) OF INSPECTOR(S)	INSPECTOR'S HOURS OF DUTY				DRYING		PASTEURIZATION	
		FROM a.m.	TO a.m.	FROM p.m.	TO p.m.	FROM	TO	FROM	TO

INSTRUCTIONS: Give exact figures or method where applicable. Place a "Y" for "Yes" or "SATISFACTORY" and a "N" FOR "NO" OR "UNSATISFACTORY." Explain deviations under "REMARKS."

OPERATIONAL SANITATION CHECKLIST — TIME OF INSPECTION →										
1. Organoleptic inspection of liquid and powder?										
2. Packaging rooms, equipment, containers and liners and product sanitarily packaged?										
3. Are packaging and processing rooms, etc., air filtration systems and air flow satisfactory?										
4. Health and cleanliness of employees (*uniforms, hairnets, clean hands, food handling practices, etc.)?*										
5. Drier and processing rooms and equipment?										
6. Cleaning and sanitizing of tanker trucks?										
7. Container identification, labeling, and accuracy of weighing?										
8. Are openings closed, joints, gaskets, etc., sealed so unfiltered air is not drawn into drier system?										
9. Reconstituting, free flowing, adding and mixing ingredients?										
10. Pasteurizer and equipment used for pasteurized liquid (pipelines, gaskets, valves, pumps, etc.)?										
11. High pressure pumps, lines, valves, nozzles, cores, etc., and CIP cleaning of pipelines?										
12. Fly, rodent and odor control?										
13. Control, denaturing and labeling of inedible?										
14. Heat treatment room, spacing of product and air circulation?										
15. Other (*Specify*)										
16. Other (*Specify*)										

TEMPERATURES — TIME OF INSPECTION →										
PRODUCT →										
17. UNPASTEURIZED LIQUID a. Received - held under 8 hours										
b. Received - held over 8 hours										
c. Held for processing										
18. STABILIZATION										
19. PASTEURIZATION a. Recorder - Controller										
b. Indicating thermometer										
c. Flow-diversion valve setting										
d. Flow rate per minute										
e. Holding time *(minutes)*										
20. PASTEURIZED LIQUID a. Direct to drier										
b. To be held under 8 hours										
c. To be held over 8 hours										
d. Held for processing										
e. Other (*Specify*)										

INDICATING THERMOMETER

Accuracy °F | Thermometric response Seconds

RECORDER-CONTROLLER

Accuracy °F | Thermometric response Seconds

FLOW DIVERSION VALVE

Response Time Seconds | Does valve seat properly? ☐ YES ☐ NO

Does flow leak past forward flow seat?

☐ YES ☐ NO

Response to Manual Diversion:

SANITATION CHECKLIST TIME OF INSPECTION →		DRIER SANITATION	CLEANING METHOD	INSPECTION
21. Air lines to product contact surfaces blown out and clean prior to use		29. Drier, fans and ducts		
22. Edible ingredient storage		30. Augers, pneumatic system and valves		
23. Insecticides and chemicals isolated from edible products		31. Sifters and flexible connectors		
24. Package material and product storage		32. Bags and bag house		
25. General sanitation of other areas		33. Bag section(s) changed		
26. Rest rooms and lunchrooms		34. Drier air filtration system, fan and air ducts		
27. Premises, receiving and shipping areas		35. Sanitizing or preheating augers, pneumatic, sifter, etc.		
28. Refuse removal and disposal		36. Drier system openings and exhaust closed after cleaning and shutdown		
	37. Drier preheated _____ Time _____ °F Intake _____ °F Exhaust _____			

TYPE PRODUCT PRODUCED	PRODUCTION RECORD			TEST WEIGHING *(Finished Product)*			
	NUMBER CONTAINERS	SIZE CONTAINERS	POUNDS	NUMBER CONTAINERS	GROSS	TARE	NET
INEDIBLE NONDENATURED							
INEDIBLE DENATURED							
TOTAL →							

REMARKS:

UNITED STATES DEPARTMENT OF AGRICULTURE
FOOD SAFETY AND INSPECTION SERVICE EGG
PRODUCTS INSPECTION

DAILY REPORT OF PLANT OPERATION

NAME OF PLANT	ADDRESS OF PLANT		PLANT NUMBER
SIGNATURE OF INSPECTOR	**INSPECTOR'S BADGE NUMBER**	**DATE**	**CODE DATE**

PROCESSING OPERATIONS

BREAKING FROM: _____ A.M. TO: _____ P.M. PASTEURIZATION FROM: _____ A.M. TO: _____ P.M.

INSPECTOR'S HOURS OF DUTY _____ A.M. TO: _____ P.M.

INSTRUCTIONS: Give exact figures where applicable. Mark "Y" for "Yes" or "Satisfactory" and "N" for "No" or "Unsatisfactory".

PRE-OPERATIONAL SANITATION/PROGRAM MONITORING

TIME OF INSPECTION:	
1. Cleanliness and sanitizing of equipment used for pasteurized liquid *(pipelines, gaskets, valves, pumps, etc.)*	
2. Cleanliness and sanitizing of equipment prior to start up.	
3. Cleanliness of shell egg washers and conveyors.	
4. General sanitation of other areas	
5. Premises, receiving, and shipping areas.	
6. Refuse removal and disposal.	
7. Rest rooms and lunch rooms	
8. CIP cleaning of pipelines and equipment.	
9. a. Are breaking and packaging room, compressor, air filters, etc., satisfactory?	
9. b. Are air lines to product contact surfaces blown out and clean prior to use?	
10. Edible ingredient storage	
11. Insecticides, rodenticides, etc., isolated from chemical compounds.	
12. Insecticides, rodenticides, and chemical compounds isolated from edible products.	
13. Package material storage.	
14. Freezers, clean, containers properly spaced, and air circulation adequate.	
15. Is the exhaust system operable in the rest-room, transfer and refuse rooms?	
16. Tanker truck area.	
17. Shell egg rooms and coolers.	
18. Fly and rodent control inside and outside plant.	
19. Verify Plant's Salmonella Surveillance Record	
20. Verify Product Formulation/Refractometer	

OPERATIONAL CHECKLIST

TIME OF INSPECTION:				
21. Organoleptic inspection and pour test.				
22. Health and cleanliness of employees *(uniforms, hair nets, clean hands, etc.)*				
23. Breaking or breaking machines operating in sanitary manner				
24. Organoleptic examination of individual eggs.				
25. Breaking procedure when inedible is encountered *(segregate inedible, change equipment, wash hands, etc.)*				
26. Segregation of leakers, dirties and loss for breaking.				
27. Denaturing and labeling of inedible eggs and liquid.				
28. Hydrogen peroxide test.				
29. Sanitation - packaging room and equipment.				
30. Product containers clean and sanitarily filled.				
31. Container identification and labeling.				
32. Accuracy of weighing product.				
33. Positive flow of air in processing and packaging rooms.				
34. Processing rooms free from flies and odors.				
35. Equipment clean and sanitized prior to use.				
36. Sanitation - breaking and processing rooms and equipment.				
37. Shell strainers, egg filters efficient and cleaned.				
38. Sanitation - transfer room, wash water and equipment				
39. Show ppm of sanitizing spray for shell eggs.				
40. Show temperature of shell egg wash water.				
41.				
42.				
43.				
44.				
45.				
46.				
47.				

TEMPERATURES	Time:				Time:				Time:				ime:			
	WHOLE EGGS	YOLKS	WHITES	EGG PROD.	WHOLE EGGS	YOLKS	WHITES	EGG PROD.	WHOLE EGGS	YOLKS	WHITES	EGG PROD.	WHOLE EGGS	YOLKS	WHITES	EGG PRO
UNPASTEURIZED LIQUID																
a. 2 hrs. after breaking - to be held under 8 hrs.																
b. 2 hrs. after breaking - to be held over 8 hrs.																
c. Held for shipment or processing																
a. Recorder - controller																
b. Indicating thermometer																
c. Flow-diversion valve setting																
d. Flow-rate per minute																
e. Holding time *(minutes)* **PASTEURIZED LIQUID**																
a. 2 hrs. after pasteurizing - to be held under 8 hrs.																
b. 2 hrs. after pasteurizing - to be held over 8 hrs.																
c. Held for shipment																
FREEZER OR LIQUID HOLDING ROOM																

REMARKS: (Explain any deviations from above. Use reverse, if necessary.)

EGGS PROCESSED

30 - Doz Cases _____

TOTAL OF SHELL EGGS (liquid equivalent) AND LIQUID DENATURED

_____ lbs.

TYPE PRODUCT PRODUCED	PRODUCTION RECORD			FINAL INSPECTION *(Liquid or Frozen)*				TEST WEIGHING *(Finished Product)*			
	NO CONTAINER	CONT MARKED WEIGHT	POUNDS	DATE DRILLED OR INSPECTED	NO CONTAINER	TEMP.	CONDITION	NO CONTAINER	GROSS	TARE	NET
Inedible											
TOTAL											

REMARKS

INDICATING THERMOMETER

ACCURACY *(Quarterly)* _____ °F

LAG *(Quarterly)* _____ SECONDS

RECORDER - CONTROLLER

ACCURACY *(Quarterly)* _____ °F

THERMOMETRIC LAG *(Quarterly)* _____ SECONDS

CUT-IN TEMPERATURE *(Monthly)* _____ °F

CUT-OUT TEMPERATURE *(Monthly)* _____ °F

FLOW-DIVERSION

RESPONSE TIME *(Quarterly)*

DOES VALVE SEAT PROPERLY? *(Daily)* ☐ YES ☐ NO

DOES FLOW LEAK PAST FORWARD FLOW SEAT WHEN OPERATING IN DIVERSION? *(Biweekly)* ☐ YES ☐ NO

RESPONSE TO MANUAL DIVERSION: *(Biweekly)*