PNS/BAFS

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Code of Hygienic Practice for Table Eggs



BUREAU OF AGRICULTURE AND FISHERIES STANDARDS

BPI Compound Visayas Avenue, Diliman, Quezon City 1101 Philippines Phone (632) 920-6131; (632) 455-2856; (632) 467-9039; Telefax (632) 455-2858 E-mail: bafpsda@yahoo.com.ph

Website: www.bafps.da.gov.ph

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For Public consultative meeting

This Code applies to the primary production, sorting, grading, storing, and distribution of table eggs produced by domesticated chicken intended for human consumption.

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2 Objective

The objective of this Code is to ensure the safety and suitability of table eggs by applying the General Principles of Food Hygiene (CAC/RCP 1-1969) to the particular case of table eggs. The document describes the specific considerations for food hygiene and safety associated with all methods of primary production up to distribution. This Code applies to all table egg producers.

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3 Normative reference

- The following referenced documents are indispensable for the application of this
- document. For dated references, only the edition cited applies. For undated references,
- the latest edition of the referenced document (including any amendments) applies.
- 16 CAC/RCP 1-1969, General principles of food hygiene
- 17 PNS/BAFS 48:2016, *Veterinary drug residues in food: Maximum Residue Limits (MRLs)*
- 18 PNS/BAFS, Table eggs

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4 Definition of terms

- Definitions of general expressions are included in the General Principles of Food
- 22 Hygiene (CAC/RCP 1969). For the purpose of this code, the terms have the definition
- 23 stated:

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- 4.1
- 26 **backyard**
- any farm or household raising at least one head of animal or bird and does not qualify
- as a commercial farm

- 30 **4.2**
- 31 **breeding flock**

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32 33	group of chicken raised for the purpose of production of the laying flock
34	4.3
35	broken
36	leaker egg
37	egg showing breaks of both the shell and the membrane, resulting in the exposure of its
38	content
39	
40	4.4
41	candling
42	examining the interior condition of an egg and the integrity of the shell by rotating or
43	causing the egg to rotate in front or over a light source that illuminates the content of
44	the egg
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46	4.5
47	commercial farm
48	any farm which, for poultry chicken, satisfies at least one of the following conditions: a)
49	500 layers or 1,000 broilers, or b) 100 layers and 100 broilers if raised in combination
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51	4.6
52	cracked egg
53	egg with a damaged shell, but with an intact membrane
54 55	4.7
56	dirty egg
57	egg with foreign matter on the shell surface, including egg yolk, manure or soil
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59	4.8
60	egg laying establishment
61	facilities and the surrounding area where primary production of table eggs takes place
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63	4.9
64	laying flock
65	group of chicken raised for the purpose of production of table eggs.
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67	4.10
68	microhiocidal treatment

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control measure that practically eliminates the number of microorganisms, including pathogenic microorganisms present in a food or reduces them to a level at which they do not constitute a health hazards

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pasteurization

microbiocidal control measure where table eggs or egg products are subjected to a process, using heat to reduce the load of pathogenic microorganisms to an acceptable level to ensure safety

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shelf life

period during which the table egg maintains its safety and suitability for human consumption

4.13

table egg

egg destined to be sold to the end consumer in its shell and without having received any treatment significantly modifying its properties

5 General principles

From primary production to the point or consumption, table eggs should be subject to control measures intended to achieve the appropriate level of public health protection.

Whenever appropriate, hygienic practices for table eggs should be implemented within the context of HACCP systems as described in the Annex to the General Principles of Food Hygiene (CAC/RCP 1-1969).

Control measures should be effective and validated, where practicable.

6 Primary production

The farm should comply with the provisions stated in Philippine National Standard (PNS) Good Animal Husbandry Practice (GAHP) for Chicken (Broiler and Layer).

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6.1	Environment hygiene	
to hum	aminants are present at levels which may result in an health, and corrective or preventive actions has ed hazards, the sites should not be used until such	ve not been taken to minimize
6.2	Flock management and animal health	
6.2.1	Where birds/flocks have been treated with transferred to eggs, their eggs should be disperiod for the particular veterinary drug hamaximum residue levels (MRLs), including the residues of veterinary drugs in table eggs, measures.	scarded until the withholding as been achieved. Established aose established by Codex, for
6.2.2	Appropriate sampling schemes and testing verify the effectiveness of on-farm controls of meeting established MRLs.	
6.2.3	Particularly for countries where <i>Salmonella</i> E with poultry or table eggs, monitoring for SE use of a vaccination protocol may reduce the vaccine is used, it should be approved by Monitoring for SE can also include environmental ventilation fans etc.	through faecal testing and the ne risk of human illness. If a by the competent authority.
6.2.4	Disposing of table eggs from infected florepresent a risk to human or flock health, in diverting them to a process that ensures eliminates	a safe manner or specifically
6.2.5	Where practicable, culling of Salmonella E	Enteritidis positive flocks or

6.3 Feeding

As feed can be a source of contamination, heat or other treatment of feed to reduce or eliminate pathogens including Salmonella should be considered.

6.4 Pest control

slaughter in accordance with country requirements.

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139 140	6.4.1	Any pest control measures should not result in unacceptable levels of residues, such as pesticides, in or on table eggs.
141 142 143	6.4.2	Rat bait should always be placed in "bait stations" so that they are obvious, cannot be accessed by animals or insects they are not intended for and can be identifiable and found easily for checking.
144 145 146 147	6.4.3	Any pest control chemicals should be stored in a manner that will not contaminate the laying environment. Such chemicals should be stored in a safe manner. They should not be stored in wet areas or close to feed stores or be accessible by birds.
148		
149	6.5	Agricultural and veterinary chemicals
150 151	6.5.1	Transport, storage and use of agricultural and veterinary chemicals should be in accordance with the manufacturer's instructions.
152 153 154	6.5.2	Storage and use of agricultural and veterinary chemicals on the egg laying establishment should be evaluated and managed, as they may represent a direct or indirect hazard for the table eggs and flock.
155 156 157 158	6.5.3	Agricultural and veterinary chemicals should not exceed limits established in PNS/BAFS 48:2016 Veterinary Drug Residues in Food: Maximum Residue Limits (MRLs) and in the Codex Alimentarius Database for Pesticide Residues in Food and Feeds.
159		
160	6.6	Areas and establishments for egg laying systems
161 162 163 164 165 166	6.6.1	The facilities used to house flocks should be cleaned and disinfected in a way that reduces the risk of transfer of pathogens to the next flock. An "allin, all-out" step for each poultry house should be followed, where feasible, taking into consideration multi-aged poultry houses. Such a process would give the opportunity to eliminate rodents and insects before the next flock is introduced.
167 168	6.6.2	Use of litter should be managed to reduce the risk of introducing or spreading hazards.
169 170	6.6.3	Water delivery systems should be protected, maintained and cleaned, as appropriate, to prevent microbial contamination of water.

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71 72 73	6.6.4	Drainage systems and systems for storing designed, constructed and maintained contaminating the water supply or table	so as to prevent the likelihood of
74 75 76	6.6.5	Accumulations of broken table eggs, m materials should be minimized in order with table eggs and to minimize attractin	to reduce the likelihood of contact
77 78 79	6.6.6	Cleaning programs should include probirds are in the poultry house. Full cleashould be applied when poultry houses a	aning and disinfection programmes
80 81 82 83	6.6.7	Cleaning procedures for de-populated p and/or sanitizing nest boxes/cages contaminated litter, nesting materials a where necessary, safe disposal of table or diseased birds.	, poultry houses, disposing of and feces from diseased birds and,
85			
86	6.7 Per	rsonnel hygiene and health status	
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88	6.7.1	Personnel hygiene	
39 90 91	domesti	el should be adequately instructed and/ocated birds to ensure the use of good hygicage or flock contamination.	
92			
93	6.7.2	Health status	
94 95 96 97	illness li enter an contami	People known, or suspected, to be suffering from, or to be a carrier of a disease or illness likely to be transmitted to birds or through table eggs should not be allowed to enter any bird facility or egg collection or handling area, if there is a likelihood of their contaminating the birds or the table eggs. Any person so affected should immediately report illness or symptoms of illness to the management.	
99			
00	6.7.3	Personal cleanliness	
01 02	6.7.3.1	Personnel who have direct contact with degree of personal cleanliness and,	

Code of Hygienic Practice for Table Eggs For Public consultative meeting 203 protective clothing, footwear and head covering that is not likely to introduce contamination into egg laying areas. 204 6.7.3.2 Personnel should always wash their hands with hand-cleansing agents: 205 before and after handling of table eggs; 206 each time they return to handling areas after a break; and 207 immediately after using the toilet. 208 209 6.7.4 Sanitary facilities 210 6.7.4.1 Facilities should be available to ensure that an appropriate degree of 211 personal hygiene can be maintained. 212 6.7.4.2 Facilities should: 213 • be located in close proximity to wherever table eggs or domesticated 214 birds are handled: 215 • be constructed to facilitate hygienic removal of wastes and avoid 216 contamination of facilities, equipment, raw materials and the 217 immediate environment: 218 have adequate means for hygienically washing and drying hands and 219 disinfecting footwear; and 220 • be maintained under sanitary conditions and in good repair at all 221 times. 222 223 6.8 **Documentation and record keeping** 224 Records should be kept, as necessary and where practicable, to enhance the 225 6.8.1 ability to verify the effectiveness of the control systems. Documentation of 226 procedures can enhance the credibility and effectiveness of the food safety 227 control system. 228 229 6.8.2 With respect to food safety, records should be kept on: 230 prevention and control of avian diseases with an impact on public health; 231 232 identification and movement of birds and table eggs; use of agricultural and pest control chemicals; 233

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nature and source of feed, feed ingredients and water;

PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting use of veterinary drugs/medicines; results of testing where testing is performed; health status of personnel: cleaning and disinfection; and traceability/product tracing and recall. 7 Collection, handling, storage and transport of table eggs Table eggs should be collected, handled, stored and transported in a manner that minimizes contamination and/or damage to the egg or egg shell, and with appropriate attention to time-temperature considerations, particularly temperature fluctuations. **Establishment: Design and facilities** 7.1 The following guidelines are supplemental to Codex Section 4 and section 6 of the General Principles of Food Hygiene (CAC/RCP 1- 1969) for establishments that produce table eggs. *See annex A and B*. Where practicable, separate areas should be allocated for storage and processing of egg products. Egg collection equipment 7.2 Collection equipment should be made of materials that are non-toxic and be 7.2.1 designed, constructed, installed, maintained and used in a manner to facilitate good hygienic practices. 7.2.2 Egg collecting equipment and containers should be cleaned and disinfected regularly, or if necessary replaced, and with sufficient frequency to minimize or prevent contamination of table eggs. 7.2.3 Egg collecting equipment should be maintained in proper working condition and this should be periodically verified. 7.3 Packaging and storage

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	Code of Hygi	ode of Hygienic Practice for Table Eggs		
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264 265 266	7.3.1	Egg packaging and packaging equipment should be designed, constructed, maintained and used in a manner that will minimize damage to the eggshell and avoid the introduction of contaminants in or on table eggs.		
267 268 269 270	7.3.2	Whenever table eggs are stored, it should be in a manner that minimizes damage to the eggshell and avoids the introduction of contaminants, or growth of existing microorganisms in or on table eggs, giving consideration to time and temperature conditions.		
271272273	7.3.3	Where permanent equipment is used, it should be corrosion-resistant and easy to clean and disinfect or if necessary able to be dismantled and reassembled.		
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275	Cont	rol of operation		
276	7.4.1	Control of food hazards		
277	7.4.1.1	Table eggs should be safe and suitable as defined in PNS Table Eggs.		
278	7.4.1.2	All efforts should be made to avoid production of dirty table eggs.		
279280281	7.4.1.3	Control measures based on risk should be in placed to ensure that process and product specifications are met, and the hazards in or on table eggs are effectively identified and controlled.		
282	7.4.1.5	Information that may be useful for establishing specifications could include:		
283	flock hea	lth status (including pathogens status);		
284	pathogen	n load in/on table eggs;		
285	agricultu	ral and Veterinary chemical status;		
286		age of table eggs;		
287		handling methods; and		
288	microbio	cidal treatments.		
289				
290	7.4.2	Key aspects of hygiene control systems		
291	7.4.2.1	Temperature and time issues		
292 293		From receipt of table eggs, through handling, sorting and grading, washing, drying, treatment, packaging, storage and distribution to point of consumption, consideration		

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protective cuticle.

If dry cleaning is undertaken, the methods used should minimize damage to the

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8.4	Washing, disinfection and drying	
	ng should be carried out under carefully co the shell and prevent contamination of the	
Table e	eggs should not be soaked prior to or durin	g washing.
Water pH and qua	used for washing should be potable with ality.	appropriate water temperature and
	ning compounds are used, they should be affect the safety of the egg.	suitable for use in table eggs and not
the shell th	e eggs are washed, they should be dried to nat can lead to contamination or growth of anitizing of the shell.	
8.5	In shell treatment	
	table eggs are treated to eliminate patho ent should not adversely affect the safety of	
8.6	Storage	
safety and egg storag the table e	e temperatures, times and humidity should suitability of table eggs. The time and tem e at the farm should be established taking eggs, the hazards that are reasonably like the intended duration of storage.	perature conditions and humidity for into account the hygienic condition of
	eggs should be stored and transported unsafety and suitability of the egg.	der conditions that will not adversely
	nore than one week from their production ling 24 degrees Celsius.	date shall be stored at temperatures

Table eggs are perishable products.

Temperature fluctuations during storage and distribution should be minimized.

Storage conditions should minimize moisture on the shell surface.

PNS/BAFS xx: PHILIPPINE NATIONAL STANDARD Code of Hygienic Practice for Table Eggs For Public consultative meeting Shelf life for table eggs 9.1 The growth of pathogenic and/or spoilage microorganisms to unacceptable levels may affect the shelf life of table eggs. 9.2 The shelf life of table eggs is influenced by number of factors, such as: storage conditions including temperature fluctuation and humidity methods and treatments type of packaging 9.3 Shelf life of table eggs should be established by the grader/packer, consistent with requirements of relevant authorities, based on: information from the producer on the time since lay, time and temperature in storage and transport; type of packaging; likelihood of microbial growth, due to reasonably anticipated temperature abuse during storage, distribution, retail, sale and handling by the consumer under reasonably foreseeable conditions of distribution, storage and use. **Transportation** Transport vehicle should be accredited/registered by the competent 10.1 authority. 10.2 Table eggs should be transported in a manner that will minimize breakage, damage and contamination 10.3 Mobile containers and tankers should be cleaned and disinfected prior to being refilled. 10.4 Egg haulers (driver or individual in charge of transport to and from packaging facility) should use vehicles suitable for transporting table eggs. which permit easy and thorough cleaning.

water on the shell surface.

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Table eggs should be transferred between establishments promptly. Table

eggs should be maintained at an appropriate temperature, including

avoiding fluctuations in temperatures that will result in condensation of

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385	11	Consumer awareness
386 387		e appropriate, advice should be made available to consumers on the safe ling, use, preparation and consumption of table eggs.
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389	12	Training
390 391	12.1	Persons engaged in egg hygiene activities should be trained and/or instructed to a required level of training, knowledge, skills and ability.
392	12.2	Training programs should:
393 394		provide personnel with the training, knowledge, skills and ability to carry out specified egg hygiene tasks;
395		provide practical training to the extent required;
396 397		ensure that personnel involved in supervisory roles have appropriate skills;
398		recognize and build on professional qualifications; and
399 400		provide for the continuing education of persons involved with egg hygiene.
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For Public consultative meeting 403 Annex A **Establishment: Design and facilities** 404 405 406 A.1 Location 407 A.1.1 Establishments 408 Potential sources of contamination need to be considered when deciding where to locate 409 food establishments, as well as the effectiveness of any reasonable measures that might be 410 taken to protect food. Establishments should not be located anywhere where, after 411 considering such protective measures, it is clear that there will remain a threat to food 412 safety or suitability. In particular, establishments should normally be located away from: 413 environmentally polluted areas and industrial activities which pose a serious threat of 414 contaminating food; 415 areas subject to flooding unless sufficient safeguards are provided; 416 areas prone to infestations of pests; 417 areas where wastes, either solid or liquid, cannot be removed effectively. 418 419 A.1.2 Equipment 420 Equipment should be located so that it: 421 permits adequate maintenance and cleaning; 422 functions in accordance with its intended use; and 423 facilities good hygiene practices, including monitoring. 424 425 A.2 Premises and rooms 426 427 A.2.1 Design and layout 428 Where appropriate, the internal design and layout of food establishments should permit 429 good food hygiene practices, including protection against cross-contamination between 430 and during operations by foodstuffs. 431 432

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A.2.2 Internal structures and fittings

PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting Structures within food establishments should be soundly built of durable materials and be easy to maintain clean and where appropriate, able to be disinfected. In particular the following specific conditions should be satisfied where necessary to protect the safety and suitability of food: The surfaces of walls, partitions and floors should be made of impervious materials with no toxic effect in intended use: Walls and partitions should have a smooth surface up to a height appropriate to the operation; Floors should be constructed to allow adequate drainage and cleaning; Ceilings and overhead fixtures should be constructed and finished to minimize the build up of dirt and condensation, and the shedding of particles. Windows should be easy to clean, be constructed to minimize the build up of dirt and where necessary, be fitted with removable and cleanable insect-proof screens. Where necessary, window should be fixed: Doors should have smooth, non-absorbent surfaces, and be easy to clean and, where necessary, disinfectant; Working surfaces that come into direct contact with food should be in sound condition, durable and easy to clean, maintain and disinfect. They should be made of smooth, nonabsorbent materials, and inert to the food, to detergents and disinfectants under normal operating conditions. A.2.3 Temporary/mobile premises and vending machines Premises and structures covered include market stalls, mobile sales and street vending vehicles, temporary premises in which food is handled such as tents and marquees. Such premises and structures should be sited, designed and constructed to avoid, as far as reasonable practicable, contaminating food and harbouring pests. In applying these specific conditions and requirements, any food hygiene hazards

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- 460 associated with such facilities should be adequately controlled to ensure the safety and 461 suitability of food. 462

A.3 Equipment

A.3.1 General 466

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Equipment and containers (other than once-only use containers and packaging) coming into contact with food, should be designed and constructed to ensure that, where necessary, they can be adequately cleaned, disinfected and maintained to avoid the contamination of food. Equipment and containers should be made of materials with no toxic effect in intended use. Where necessary, equipment should be durable and movable or capable of being dissembled to allow for maintenance, cleaning, disinfection, monitoring and, for example, to facilitate inspection for pests.

A.3.2 Food control and monitoring equipment

In addition to the general requirements in paragraph 4.3.1, equipment used to cook, heat treat, cool, store or freeze food should be designed to achieve the required food temperatures as rapidly as necessary in the interests of food safety and suitability, and maintain them effectively. Such equipment should also be designed to allow temperatures to be monitored and controlled. Where necessary, such equipment should have effective means of controlling and monitoring humidity, air-flow and any other characteristic likely to have a detrimental effect on the safety or suitability of food. These requirements are intended to ensure that:

harmful or undesirable micro-organisms or their toxins are eliminated or reduced to safe levels or their survival and growth are effectively controlled.

where appropriate, critical limits established in HACCP-based plans can be monitored; and

temperatures and other conditions necessary to food safety and suitability can be rapidly achieved and maintained.

A.3.3 Containers for waste and inedible substances.

Containers for waste, by-product and inedible or dangerous substances, should be specifically identifiable, suitably constructed and, where appropriate, made of impervious material. Containers used to hold dangerous substances should be identified and, where appropriate, be lockable to prevent malicious or accidental contamination of food.

A.4 Facilities

A.4.1 Water supply

PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting An adequate supply of potable water with appropriate facilities for its storage, distribution and temperature control, should be available whenever necessary to ensure the safety and suitability of food. Potable water should be as specified in the latest edition of WHO Guidelines for Drinking Water Quality, or water of higher standard. Non-potable water (for use in, for example, fire control, steam production refrigeration and other similar purposes where it would not contaminate food), shall have a separate system. Non-potable water systems shall be identified and shall not connect with, or allow reflux, into, potable water systems. A.4.2 Drainage and waste disposal Adequate drainage and waste disposal systems and facilities should be provided. They should be designed and constructed so that the risk of contaminating food or the potable water supply is avoided. A.4.3 Cleaning Adequate facilities, suitably designated, should be provided for cleaning food, utensils and equipment. Such facilities should have an adequate supply of hot and cold potable water where appropriate. A.4.4 Personnel hygiene facilities and toilets Personnel hygiene facilities should be available to ensure that an appropriate degree of personal hygiene can be maintained and to avoid contaminating food. Where appropriate, facilities should include: adequate means of hygienically washing and drying hands, including wash basins and a supply of hot and cold (or suitably temperature controlled) water; lavatories of appropriate hygienic design; and adequate changing facilities for personnel. Such facilities should be suitable located and designated.

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A.4.5 Temperature control

PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting Depending on the nature of the food operations undertaken, adequate facilities should be available for heating, cooling, cooking, refrigerating and freezing food, for storing refrigerated or frozen foods, monitoring food temperatures, and when necessary, controlling ambient temperatures to ensure the safety and suitability of food. A.4.6 Air quality and ventilation Adequate means of natural or mechanical ventilation should be provided, in particular to: minimize air-borne contamination of food, for example, from aerosols and condensation droplets; control ambient temperatures; control humidity, where necessary, to ensure the safety and suitability of food. Ventilation systems should be designed and constructed so that air does not flow from contaminated areas to clean areas and, where necessary, they can be adequately maintained and cleaned. A.4.7 Lighting Adequate natural or artificial lighting should be provided to enable the undertaking to operate in a hygienic manner. Where necessary, lighting should not be such that the resulting colour is misleading. The intensity should be adequate to the nature of the operation. Lighting fixtures should, where appropriate, be protected to ensure that food is not contaminated by breakages. A.4.8 Storage Where necessary, adequate facilities for the storage of food, ingredients and non-food chemicals (e.g. cleaning materials, lubricants, fuels) should be provided. Where appropriate, food storage facilities should be designed and constructed to: permit adequate maintenance and cleaning; avoid pest access and harbourage;

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where necessary, provide an environment which minimizes the deterioration of food

enable food to be effectively protected from contamination during storage; and

(e.g. by temperature and humidity control).

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The type of storage facilities required will depend on the nature of the food. Where necessary, separate, secure storage facilities for cleaning materials and hazardous substances should be provided.



PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting Annex B **Establishment: Maintenance and sanitation B.1** Maintenance and cleaning **B.1.1 General** Establishment and equipment should be kept in an appropriate state of repair and condition to: facilitate all sanitation procedures; function as intended: prevent contamination of food, e.g. from metal shards, flaking plaster, debris and chemicals.

Cleaning should be remove food residues and dirt which may be a source of 581 contamination. The necessary cleaning methods and materials will depend on the nature 582

583 of the food business. Disinfection may be necessary after cleaning.

Cleaning can be carried out by the separate or the combined use of physical methods, such 584 as heat, scrubbing, turbulent flow, vacuum cleaning or other methods that avoid the use of 585

586 water, and chemical methods using detergents, alkalis or acids.

Cleaning procedures will involve, where appropriate:

removing gross debris from surfaces;

applying a detergent solution to loosen soil and bacterial film and hold them in solution or suspension;

rinsing with water which may complies with section 4, to remove loosened soil and residues of detergent;

dry cleaning or other appropriate methods for removing and collecting residues and debris: and

where necessary, disinfection with subsequent rinsing unless the manufacturers' instructions indicate on scientific basis that rinsing is not required.

B.2 Cleaning programs

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Cleaning and disinfection programs should ensure that all parts of the establishment are 599 appropriately clean, and should include the cleaning of cleaning equipment.

PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting Cleaning and disinfection programs should be continually and effectively monitored for their suitability and effectiveness and where necessary, documented. Where appropriate, programs should be drawn up in consultation with relevant specialist expert advisors. **B.3 Pest control systems B.3.1 General** Pests pose a major threat to the safety and suitability of food. Pest infestations can occur where there are breeding sites and supply of food. Good Hygienic Practices should be employed to avoid creating an environment conducive to pests. Good sanitation, inspection of incoming materials and good monitoring can minimize the likelihood of infestation and thereby limit the need for pesticides. **B.3.2 Preventing access** Building should be kept in good repair and condition to prevent pest access and to eliminate potential breeding sites. Holes, drains and other places where pests are likely to gain access should be kept sealed. Wire mesh screens, for example on open windows, doors and ventilators, will reduce the problem of pest entry. Animals should, wherever possible, be excluded from the grounds of factories and food processing plants. **B.3.3 Harbourage and infestation** The availability of food and water encourages pest harbourage and infestation. Potential food sources should be stored in pest-proof containers and/or stacked above the ground and away from walls. Areas both inside and outside food premixes should be kept clean. Where appropriate, refuse should be stored in covered, pest-proof containers. **B.3.4 Monitoring and detection** Establishments and surrounding areas should be regularly examined for evidence of infestation.

B.3.5 Eradication

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PHILIPPINE NATIONAL STANDARD PNS/BAFS xx: Code of Hygienic Practice for Table Eggs For Public consultative meeting Pest infestations should be dealt with immediately and without adversely affecting food safety or suitability. Treatment with chemical, physical or biological agents should be carried out without posing a threat to the safety or suitability of food. **B.4 Waste management** Suitable provision must be made for the removal and storage of waste. Waste must not be allowed to accumulate in food handling, food storage, and other working areas and the adjoining environment except so far as is unavoidable for the functioning of the business. Waste stores must be kept appropriately clean. **B.5 Monitoring effectiveness** Sanitation systems should be monitored for effectiveness, periodically verified by means such as audit pre-operational inspections or, where appropriate, microbiological sampling of environment and food contact surfaces and regularly reviewed and adapted to reflect changed circumstances.

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