



THAI AGRICULTURAL STANDARD

TAS 6901-2009

**GOOD AGRICULTURAL PRACTICES FOR
BROILER FARM**

National Bureau of Agricultural Commodity and Food Standards

Ministry of Agriculture and Cooperatives

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National Bureau of Agricultural Commodity and Food Standards

Ministry of Agriculture and Cooperatives

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Good Agricultural Practices for Broiler Farm**

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(3)

Industrial broiler farming for meat and processed product is an important industrial sector of Thailand and has continuously improved, particularly at the farm and its supply chain, by applying technology in the production. Broiler farming should be managed in a hygienic manner with measures to prevent diseases which would result in the good health and hygienic broiler. The Agricultural Standards Committee deems it necessary to establish Thai Agricultural Standard on Good Agricultural Practices for Broiler Farm for operators within any broiler farms in order to operate effectively and hygienically, to improve health of broilers, and to produce products that are safe for further processing and for consumption.

This standard is based on the information of the following documents:

Department of Livestock Development. (2003). Regulated Standard of Broiler Farm.

OIE Animal Production Food Safety Working Group. (2006). Guide to good farming practices for animal production food safety. Rev.sci.tech.off.int.epiz. 25(2):823-836.



NOTIFICATION OF MINISTRY OF AGRICULTURE AND COOPERATIVES
SUBJECT: THAI AGRICULTURAL STANDARD:
GOOD AGRICULTURAL PRACTICES FOR BROILER FARM
UNDER THE AGRICULTURAL STANDARDS ACT B.E. 2551 (2008)

Whereas the Agricultural Standards Committee deemed necessary to establish an agricultural standard on Good Agricultural Practices for Broiler Farm as voluntary standard in accordance with the Agricultural Standards Act B.E. 2551 (2008) to promote such agricultural commodity standard to meet its quality standard and safety.

By virtue of Section 5, Section 15 and 16 of the Agricultural Standards Act B.E. 2551 (2008), the Minister of Agriculture and Cooperatives hereby issued this Notification of Thai Agricultural Standards: Good Agricultural Practices for Broiler Farm (TAS 6901-2009) to be a voluntary standard, details of which are attached herewith.

Notified onB.E. 2552 (2009)

(Mr. Theera Wongsamut)
Minister of Agriculture and Cooperatives

THAI AGRICULTURAL STANDARD

GOOD AGRICULTURAL PRACTICES FOR BROILER FARM

1. SCOPE

This agricultural standard applies to good agricultural practices on broiler farm management in order to produce healthy broilers for food that are safe for consumption.

2. DEFINITIONS

For the purpose of this standard:

2.1 Broiler means a type of chicken with the scientific name of *Gallus gallus domesticus* or *Gallus domesticus* which are reared for a certain period, according to breed, to produce meat for consumption.

2.2 Broiler farm means a commercial broiler rearing place covering areas of broiler rearing, feed storage and preparation, carcass destruction, garbage disposal, office and accommodation etc.

2.3 Broiler housing means an area used for raising broiler which includes both controlled and uncontrolled environment

3. REQUIREMENTS AND INSPECTION METHODS

Requirements and inspection methods shall be as of Table 1.

Table 1 Requirements and Inspection Methods

(Section 3)

Items	Requirements	Inspection methods
1. Components of farm 1.1 Location	1.1 Farm is located in a no risk environment from any contamination of physical, chemical and biological hazards.	1.1 Visual inspection
1.2 Layout	1.2.1 Farm has sufficient and suitable size for broiler rearing and does not pose any problem to environment. 1.2.2 Farm layout is set in a sanitarily operational manner and segregated areas according to the farm activities such as broiler rearing, feed storage, carcass destruction, and worker accommodation.	1.2.1 Visual inspection of farm size and environment 1.2.2 Examine farm layout and visual inspection of operating area.
1.3 Broiler housing	1.3.1 Broiler housing shall be strong, hygienic, easily cleaned and maintained and well ventilated. 1.3.2 Area in broiler housing is adequate for hygienic broiler rearing	1.3.1 Visual inspection of broiler housing construction. 1.3.2 Visual inspection of broiler rearing area and stocking density.
2. feed	2.1 feed shall meet the quality and standard according to the Feed Quality Control Act, relevant laws and regulations.	2.1 Check the records on feed source or feed analysis; and sampling the feed for laboratory test to determine quality and residues.

Items	Specific Criteria	Inspection Procedures
	<p>2.2 In case of using self mixed feed, banned substances shall not be used according to the Feed Quality Control Act, relevant laws and regulations.</p> <p>2.3 Feed shall be preliminary checked for physical characteristics, and kept as sample for laboratory test when needed.</p> <p>2.4 There shall be separated places for feed storage; and feed is kept to protect from contamination and deterioration.</p> <p>2.5 All broilers can access to and are sufficiently provided with feed.</p>	<p>2.2 Check farm records.</p> <p>2.3 Visual inspection of kept feed samples and check feed receiving record.</p> <p>2.4 Visual inspection of feed storage area, such as clean, dry, well ventilated, free from insects and pests, feed bags placed on pallets.</p> <p>2.5 Visual inspection of number, size and position of feeding trough and broiler feeding.</p>
3. Watering	<p>3.1 Water source used on farm shall be located in an area safe from contamination of hazardous substance.</p> <p>3.2 Drinking water for broiler and water used on farm shall be clean.</p> <p>3.3 All broilers can access to and are sufficiently provided with water.</p>	<p>3.1 Visual inspection of water source.</p> <p>3.2 Check record of water analysis in accordance with the standard of potable water or underground potable water.</p> <p>3.3 Visual inspection of number, size and position of drinkers and broiler watering.</p>
4. Farm management 4.1 Farm manual	4.1 Availability of farm management manual illustrate the details of the important farm operations e.g. broiler rearing system, broiler feeding and watering, farm management, animal health and welfare management.	4.1 Inspection of manual and related documents.

Items	Specific Criteria	Inspection Procedures
4.2 Personnel	<p>4.2.1 Availability of sufficient personnel in line with the broiler population. Each personnel is clearly assigned with duty and responsibility.</p> <p>4.2.2 Person who takes care of broiler rearing shall have knowledge and be trained to be able to manage the broiler farm.</p> <p>4.2.3 Availability of animal husbandry man or a person trained on animal husbandry from recognized institute to supervise the broiler rearing.</p> <p>4.2.4 Availability of licensed veterinarian to supervise broiler farm and animal health.</p> <p>4.2.5 Personnel shall have good personal hygiene to prevent contamination and spread of disease.</p>	<p>4.2.1 Visual inspection and check job description.</p> <p>4.2.2 Check training records.</p> <p>4.2.3 Check personnel history and training record.</p> <p>4.2.4 Check veterinary license and poultry farm veterinary supervisor license issued by the Department of Livestock Development (DLD).</p> <p>4.2.5 Visual inspection of personal hygiene, and check personnel health records including annual health checkup.</p>
4.3 Cleaning and maintenance	<p>4.3.1 Broiler housing, tools and equipments, and area within farm shall be cleaned and maintained in a good and hygienic condition.</p> <p>4.3.2 Broiler housing, and tools and equipments are cleaned and disinfected after depopulation. It shall be kept close for at least 14 days before introducing a new flock into the broiler housing broiler housing unless otherwise established by DLD.</p>	<p>4.3.1 Check cleaning records of broiler housing, equipment and area within farm.</p> <p>4.3.2 Check cleaning and disinfection records.</p>

Items	Specific Criteria	Inspection Procedures
<p>5. Animal health</p> <p>5.1 Prevention and control of diseases</p>	<p>5.1.1 Source of broiler chicks shall be identified.</p> <p>5.1.2 Availability of preventive and control measures of diseases introducing into farm by persons, vehicles and other equipment.</p> <p>5.1.3 Availability of disease prevention program established by the farm veterinary supervisor</p> <p>5.1.4 Broiler health is monitoring daily.</p> <p>5.1.5 If there is an outbreak or suspicion of epidemic disease, follow the requirements of the laws and regulations on animal epidemic disease.</p>	<p>5.1.1 Check broiler chicks source records</p> <p>5.1.2 Check measures and records on prevention and control.</p> <p>5.1.3 Check disease prevention program and records of operation</p> <p>5.1.4 Check broiler health report and identification of sick flock.</p> <p>5.1.5 Check record on the operational action according to the laws and regulations.</p>
<p>5.2 Treatment</p>	<p>5.2 Treatment shall follow the instruction of the farm veterinary supervisor.</p>	<p>5.2 Check treatment and veterinary drug use records.</p>
<p>6. Animal welfare</p>	<p>6. Care shall be taken for the welfare of broilers. In case of injury, sickness or deformity, broilers shall be appropriately treated to avoid from suffering.</p>	<p>6. Visual inspection and check treatment document.</p>
<p>7. Environment</p>	<p>7.1 Appropriate disposal of refuse and waste such as manure, discarded carcasses to prevent odour and pathogens.</p> <p>7.2 Prevention of litter scattering after depopulation.</p> <p>7.3 Waste water shall be treated prior to discharge to public water resources.</p>	<p>7.1 Visual inspection.</p> <p>7.2 Inspection of preventive method.</p> <p>7.3 Visual inspection.</p>

Items	Specific Criteria	Inspection Procedures
8. Record keeping	8.1 Important operations on farm management that affect animal health and disease control shall be recorded. 8.2 The records shall be kept for at least 3 years.	8.1 Check the records 8.2 Check the records.

4. GUIDANCE ON GOOD AGRICULTURAL PRACTICES FOR BROILER FARM

Recommendations for good agricultural practices for broiler farm are aimed to provide broiler rearing entrepreneurs and farmers to use as guidance on good agricultural practices for broiler farm. The details of such recommendations are explained in Appendix A.

APPENDIX A
GUIDANCE FOR GOOD AGRICULTURAL PRACTICES
FOR BROILER FARM

(Section 4)

A.1 COMPONENTS OF FARM

A.1.1 LOCATION

A.1.1.1 Farm is located in an appropriate area for good broiler rearing, such as the area with convenient transportation, well-drained land, sufficient supply of clean water source for animal drinking, open space and good air movement. Farm should be kept distance from the community and is permitted by the Local Administrative Organization.

A.1.1.2 Farm is located in a no risk environment from any contamination of physical, chemical and biological hazards which may adversely affect to broiler hygiene, such as not in the vicinity of industrial area or waste disposal site.

A.1.1.3 Farm location shall be at least 5 km from bird collection area such as live poultry market, poultry slaughterhouse, to prevent spreading of any animal diseases to farm.

A.1.2 LAYOUT

A.1.2.1 Farm has sufficient and suitable size for broiler rearing and does not pose any problem to environment and animal health.

A.1.2.2 Farm has a good layout and sufficient space for broiler house construction convenient for farm operations, not crowded. Layout of farm is divided according to the farm activities such as broiler rearing area for housing, feed storage, equipment storage and carcass destruction, office area, farm entrance and exit, and waste disposal area. Farm office and worker accommodation shall be separated and away from the broiler rearing area in order to facilitate the hygienic farm management and effective animal disease control.

A.1.2.3 Farm shall have only one entrance and exit, which is equipped with disinfection system. The broiler rearing area is fenced.

A.1.2.4 Farm road shall be durable, having appropriate condition and width for transporting of equipment, feed and birds in and out of the farm.

A.1.2.5 Accommodation and office are distinctively separated and located with sufficient distance from broiler rearing area. Accommodation shall be well constructed, clean, tidy and fenced. Housing for farm worker shall be adequate.

A.1.3 BROILER HOUSING

A.1.3.1 Broiler housing should be well constructed using permanent materials that is easy to clean, maintain and have good ventilation.

A.1.3.2 Materials used for broiler house construction should be those that can be cleaned and disinfected. Broiler house should not have protrusion that can injure broilers. .

A.1.3.3 Broiler housing shall have appropriate model and size according to the number of broilers to allow them to freely move without unnecessary injury, and not be too crowded to adversely affect the hygienic practices on broiler rearing. There shall be appropriate distance between broiler houses. At the entrance of each broiler house, there shall be a disinfectant bath for boots dipping prior to entering and exit the house. If broiler house is an open system, the prevention of other birds and other disease carriers entering the house shall be applied e.g. a net.

A.1.3.4 Lighting equipment should be either the permanent or portable one for sufficient light for broilers according to the specified criteria.

A.1.3.5 Broiler rearing area

(1) *Open system* means the broiler house where its condition will be varied according to the outer environment.

The maximum stocking density for broiler shall not exceed 20 kg/m².

(2) *Close system* means the broiler house where its environment shall be controlled namely temperature, humidity, ventilation and light which is suitable for wellbeing of broilers.

The maximum stocking density for broiler shall not exceed 33 kg/m².

A.1.3.6 The following environmental factors of close-system shall be appropriately controlled to avoid any danger to broilers:

- (1) appropriate control of ventilation to broiler age and climates;
- (2) appropriate control of temperature, relative humidity, air speed and dust;
- (3) control of gas levels (at the birds' height)

ammonia	not exceed	20 ppm
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carbon dioxide	not exceed	3,000 ppm
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A.1.3.7 Lighting (open- and close- system)

(1) Broiler house shall have average lighting intensity of at least 20 lux measured at bird eye level and covering at least 80% of the rearing area.

(2) Provide appropriate dark period for good broiler welfare such as within seven days from the new placement and until three days before slaughtering, the lighting shall follow a 24-hour rhythm and include periods of darkness lasting at least six hours in total, with at least one uninterrupted period of darkness of at least four hours.

A.2 FEEDING

A.2.1 Quality and standard of broiler feed shall be complied with the Feed Quality Control Act.

A.2.2 In case of self mixed feed, the prohibited substances according to the Feed Quality Control Act, shall not be used.

A.2.3 Feed shall be purchased from licenced suppliers according to the Feed Quality Control Act B.E. 2525 (1982) and its amendments.

A.2.4 The use of medicated feed for disease prevention or treatment shall be under supervision of farm veterinarian and kept separately from other feed with clear indication.

A.2.5 Feed container shall be clean, dry and moisture proof. Container is never used for containing hazardous substances, fertilizer or any materials that may be harmful to animals and has no contaminant that may contaminate to animal feed. If the inner surface of container is coated, the coating material shall not be harmful to animals.

A.2.6 Truck used for feed transport should have a dry, clean loaded section which is appropriate for feed carrying.

A.2.7 When accepting broiler feed at farm, the physical characteristics shall be preliminary checked such as no rupture of feed bag, correct labeling and no fungal contamination.

A.2.8 Samples of feed as in A.2.7 should be collected for laboratory test in case of any problem found in the farm.

A.2.9 . The verification of broiler feed quality and residues by sampling for laboratory test shall be done by the Department of Livestock Development in compliance with the Feed Quality Control Act.

A.2.10 Specific area for feed storage shall be provided and shall be clean, dry, free from insects and disease carriers, and well ventilated . The feed storage shall be able to protect feed from both contamination and deterioration.

A.2.11 Feed bag shall be placed on supporting material, like pallet, to obtain good ventilation and moisture prevention.

A.2.12 Broiler feeding should be appropriate to the nutritional requirement according to age and breed.

A.2.13 Appropriate feeder should be used and placed at a proper position accessible for all broilers.

A.3 WATERING

A.3.1 Water source used on farm shall be from an area not contaminated by animal manure or waste water from broiler housing or residential area. Furthermore, water source should be far from slaughterhouses or industrial factories. If water is sourced from underground, the artesian well shall be completely covered.

A.3.2 Water supply for animal drinking and use on farm should be clean and sufficient. Water quality shall be complied with the TIS 257 (potable water standard of Thai Industrial Standards). If underground water is used, it shall be complied with the underground potable water standard according to the Notification of Ministry of Natural Resources and Environment. Water samples shall be tested at least once a year for microbials, hardness and toxic substances.

A.3.3 Number and size of drinkers such as water trough, nipples or water pot should be appropriate and positioned in such a way that chickens can easily access.

A.4 FARM MANAGEMENT

A.4.1 Farm manual

A.4.1.1 Farm shall have farm management manual illustrating broiler rearing system, broiler feeding and watering, farm management, animal disease control and prevention, animal welfare management, and farm hygiene with detailed documentation on:

A.4.1.1.1 broiler housing preparation;

A.4.1.1.2 chick brooding;

A.4.1.1.3 broiler feed;

A.4.1.1.4 broiler drinking water;

A.4.1.1.5 pest and disease carrier control and eradication;

A.4.1.1.6 animal health management

(1) vaccination programme

(2) randomly check disease situation and flock immunity

(3) sick and dead chicken management

(4) veterinary drug use;

A.4.1.1.7 sanitation and environmental management

(1) light

(2) temperature

(3) humidity

(4) ventilation

(5) waste disposal;

A.4.1.1.8 Provisions for poultry welfare at farm and during transport.

A.4.2 Personnel

A.4.2.1 Farm shall have sufficient personnel according to the number of broilers. The duty and responsibility of each position shall be clearly identified as follows:

A.4.2.1.1 *Keeper* means person who is responsible for broiler and trained for broiler rearing.

(1) open system: one keeper should be taking care of broilers to the maximum of 10,000 birds

(2) close system: one keeper should be taking care of broilers to the maximum of 100,000 birds

A.4.2.1.2 *Supervisor* means animal husbandry person or others who are trained on animal husbandry from recognized institute. Supervisor who holds minimum degree in Bachelor of Animal Husbandry or Animal Science shall supervise broiler rearing to the maximum number of 1,000,000 birds in his responsibility.

A.4.2.1.3 *Veterinarian* means person who supervises animal health and hygienic farm operation as well as animal welfare. Veterinarian is the one who graduates veterinary science and possesses the veterinary license of Veterinary Council and the poultry farm

veterinary supervisor license issued by the Department of Livestock Development (DLD). A veterinarian should be responsible to the maximum number of 5,000,000 birds.

A.4.2.2 Persons who take care of broiler shall have knowledge and experiences on broiler rearing. They shall be trained and improved continuously. Training shall be recorded as individual file.

A.4.2.3 Personnel shall have good hygiene and personal health checkup at least once a year. Any person who is sick or injured from such as diarrhea, vomit, sore throat, fever, shall be refrained from work in broiler house and his/her sickness shall be reported to the farm manager.

A.4.3 Cleaning and maintenance

A.4.3.1 Equipment used for broiler rearing such as feeders and drinkers shall be thoroughly cleaned. Broiler house and equipment shall be cleaned prior to placement to ensure the hygienic and convenient operation.

A.4.3.2 Immediate surrounding area of broiler house of at least 3 meter radius shall be clean, clear and no garbage.

A.4.3.3 Wet or lumpy litter shall be removed from broiler house immediately.

A.4.3.4 Broiler house and equipment shall be well maintained for safety of both broilers and operators.

A.4.3.5 The major tools and equipment shall be checked at least once a day e.g. necessary automatic equipment for animal welfare, if defected, it shall be immediately fixed; otherwise appropriate action shall be carried out to protect animal health. Good ventilation system shall be in place to provide adequate air volume. Back up devices shall be provided in case of equipment broken. Alarm system should be installed for any defects and should be regularly checked.

A.4.3.6 There shall be an effective and sanitary system for cleaning and disinfection of broiler house, equipment and surrounding area. After depopulation, cleaning and disinfection of broiler house and equipment shall be done and a downtime period of at least 14 days shall be observed before introducing of a new flock except the DLD stipulates otherwise.

A.5 ANIMAL HEALTH

A.5.1 Disease Prevention and Control

A.5.1.1 Broilers shall come from the identifiable sources i.e. breeder farms, breeder flocks, hatcheries.

A.5.1.2 There shall be disease prevention and control measures at the farm entrance. A stringent disinfection of vehicles and visitors entering into and exit from farm or broiler rearing area shall be applied. The procedures for disease mitigation shall also be in place to prevent disease spreading out from farm.

A.5.1.3 Strictly control at the farm entrance in enforced, vehicles shall be sprayed with disinfectant or pass disinfectant spraying facilities incorporated with wheel dips (disinfectant shall be prepared according to the rate indicated in the manufacturer's

documentation and regularly changed). Farm gate shall be locked at all times. It will be opened only whenever allowed by the responsible person. Keep a record of visitors and vehicles in and out of the farm, including the time, for inspection.

A.5.1.4 Limit non-essential visitors to the farm. The broiler rearing area shall be fenced and there shall be on site warning sign “no trespassing” for unauthorized persons and vehicles.

A.5.1.5 Persons entering the farm shall have their shoes and hands disinfected at the farm entrance. Persons who enter the broiler rearing area shall pass through the disinfecting and showering room, and change clothing provided by the farm.

Disinfecting and showering room shall consist of:

- (1) changing facility for protective clothing and footwear before entering the disinfecting room;
- (2) disinfecting room provided with sufficient space, non-slippery floor and non-irritant disinfectant for user;
- (3) showering room after passing disinfecting room;
- (4) changing facility before entering broiler house.

Every room is clearly segregated and equipped with good condition equipment that are constantly cleaned. Clothes and shoes used in the farm shall be cleaned after each use .

A.5.1.6 The workers and equipment of each broiler house shall be distinctly separated. Disinfection procedures and control measures for materials and equipment bringing into and out of farm shall be in place to prevent contamination with pathogens. The vehicles used inside and outside the farm shall be separated.

A.5.1.7 To prevent accumulation of pathogens in broiler rearing area, the mobile disinfection sprayers shall be provided for use at various farm area. The number of sprayers shall be appropriate to the farm size and in good working condition.

A.5.1.8 Farm disease surveillance plan shall be established in accordance with the Department of Livestock Development (DLD) plan.

A.5.1.9 To create immunity against diseases, every chicken shall be vaccinated according to the vaccination programme established by the farm veterinary supervisor.

A.5.1.10 Prevention and control of animal disease carriers shall be in place to avoid being a pathogen source that can affect health and hygiene of broilers , for example no waterlogging or filthy water around the broiler house to be an insect source, immediate removal of dead chicken when found, and disposal in water-proof plastic bag or container to avoid access of disease carriers. Programme and methods for eradication of vectors should be regularly and continuously implemented.

A.5.1.11 Each broiler flock should be identified and monitored. Inspection of all chickens for any abnormalities shall be carried out at least twice a day, for instance inspection for any disease symptom or appearance of chicken in order to control diseases.

A.5.1.11.1 Management of sick chickens

Sick chicken should be isolated from the flock for treatment. Specific area for sick chickens shall be provided to isolate sick chickens from normal chickens to prevent disease infection. The symptom of sick chicken shall be observed and treated until the chickens are well recovered under supervision of the farm veterinarian. In case of the chickens cannot recover, the appropriate action shall be taken to prevent animal suffering. If the infectious disease is epidemic disease i.e. Newcastle disease, Avian Influenza, all chickens shall be destroyed to prevent the spread of the disease in accordance with the Animal Epidemics Act B.E. 2499 (1956) and its amendments.

A.5.1.11.2 Management of dead chickens

If the mortality rate is abnormal, the farm veterinarian shall dissect the chicken carcasses to determine the preliminary cause of disease. If it is suspicious of epidemic disease, immediately notify to the DLD official.

A.5.1.11.3 Destruction of chicken carcasses

Specific area shall be provided for destruction of chicken carcasses. It shall be distance from broiler house, feed storage and water source. Four methods of carcass destruction are:

- (1) Destruction by burial. There shall be sufficient space and high terrain from flooding. Carcasses are buried at the depth of not less than 50 cm (centimeter). Proper disinfectants shall be poured or scattered over every part of the carcasses, then filling the pit with a mound piled above the ground level at least 50 cm. If permanent pond is used for burial, it should be completely covered to prevent animal digging.
- (2) Destruction by burning. There shall be burning place or incinerator installed in proper area for complete burning .
- (3) Destruction by rendering. Procedures for moving of chicken carcasses to rendering plant shall be complied with the biosecurity principles.
- (4) Destruction by decomposing. There shall be a proper area for decomposition of chicken carcasses and ensure that the temperature used during decomposition leads to a complete degradation and hence pose no risk of becoming source of disease spreading. Procedures for carcass decomposition shall be complied with the biosecurity principles.

A.5.2 Treatment of diseases

Farm veterinarian shall practice according to the Veterinary Profession Act B.E. 2545 (2002) and its amendments and the requirement of TAS 9023 of the Thai Agricultural Standard on Good Practices for Control of the Use of Veterinary Drugs.

Treatment of animal diseases and use of veterinary drugs including hazardous substances on farm shall be under supervision of the farm veterinarian.

It is prohibited to use growth promoting hormones and banned substances as stipulated in the Notification of Ministry of Agriculture and Cooperatives.

A.6 ANIMAL WELFARE

A.6.1 Number of broilers in broiler house shall not be too crowded. Broilers shall be reared in a comfortable condition without stress.

A.6.2 Broilers are taken care of good health, normal growth rate and can express normal behavior.

A.6.3 Broiler health shall be regularly checked at an appropriate time. Immediate action for sick, injured and deformed chickens should be carried out to put them from suffering and illness.

A.6.4 Welfare handling shall comply with the Regulations of the Department of Livestock Development on Protection of Poultry Welfare at Farm B.E. 2542 (1999). In case of moving and transporting of live chickens, the animal welfare handling shall comply with the Regulations of the Department of Livestock Development on Protection of Poultry during Transport B.E. 2542 (1999).

A.7 ENVIRONMENT

A.7.1 Garbage, discarded carcasses, and other waste such as manure shall be removed to prevent odour and pathogens. Carcasses of disease carriers such as bird and rat shall be destroyed by burial or burning.

A.7.2 After final depopulation, litter shall be sprayed with disinfectant before removal from broiler house to avoid litter scattering during transport from farm. Reuse of litter is not allowed. The truck carrying used litter shall be covered with canvas to guard against spilling of litter during transportation.

A.7.3 Used water for cleaning broiler house and equipment after depopulation and downtime shall be treated before release to public water resources.

A.8 DOCUMENTATION AND RECORD KEEPING

There shall be a system of documentation. The records of important information shall be kept for a period of at least three years for trace back inspection covering the following items:

A.8.1 The information on farm administration i.e. organization chart of farm, animal health information, personnel and training history records, number of employees, and job description ;

A.8.2 The information on production management i.e. data relating to broilers, feed and drinking water for broilers, farm management, animal health, disease prevention and control, waste disposal.

APPENDIX B**UNITS**

Units and symbols used in this standard and the SI unit (International System of Units or *Le Système International d' Unitiès*) approved to be used are:

Items	Unit	Unit Symbol
mass	kilogram	kg
length	centimeter	cm
	meter	m
	kilometer	km
area	square meter	m ²
light intensity	lux	lx