ATTACHMENT I TECHNICAL REGULATION FOR TECHNOLOGICAL, HYGIENIC AND SANITARY INSPECTION OF POULTRY MEATS

1. DEFINITIONS:

FACILITIES: this refers to the civil construction establishment and its annexes, also including water, sewerage, steam and other systems.

EQUIPMENT: this refers to machinery and other tools used in the establishments.

RIISPOA: Regulation for Industrial and Sanitary Inspection of Product of Animal Origin, approved by Executive Order No. 30.691, of 03/29/1952, which regulated Law No. 1.283, of 12/18/1950, amended by Executive Order No. 1.255, of 06/25/1962, amended by Executive Order No. 1.236, of 09/02/1994, amended by Executive Order No. 1.812, of 02/08/1996, amended by Executive Order No. 2.244, of 06/04/1997, regulated by Executive Order No. 7.889, of 11/23/1989.

DIPOA: Department of Inspection of Products of Animal Origin, under the DEPARTMENT OF AGRICULTURAL AND LIVESTOCK DEFENSE of the Ministry of Agriculture and Supply.

SIF: Federal Inspection Service of the Ministry of Agriculture, under DIPOA (in each industrial establishment).

POULTRY: means domesticated fowl, collectively:

- a. Gallus species: chicken, chicken capon, hen and old rooster.
- b. *Meleagridis* species: young turkey and mature turkey.
- c. Columba species: pigeons.
- d. Anas species: young duck and mature duck.
- e. Anser species: young goose and mature goose.
- f. Perdix species: partridge, crow, tinamou / quail.
- g. Phaslanus species: pheasant.
- h. Numida meleagris species: young guinea fowl and mature guinea fowl.

POULTRY MEATS: this means the edible muscle portion of slaughtered birds, considered fit for human consumption by official veterinarian inspection prior to and after slaughtering.

CARCASS: this means the whole body of a bird after being stunned or not, bled, having its feathers and viscera (pouch, windpipe, esophagus, entrails, cloaca, spleen, reproductive organs and lungs) removed. Removal of kidneys, feet, neck and head is optional.

CUTS: this means the portion or fraction of the carcass, within limits previously specified by DIPOA, with or without bone, with or without skin, seasoned or not, without mutilations and/or lacerations.

CUTOUTS: this means a portion or fraction of a cut.

GIBLETS: this means the edible viscera: the liver from which the bile sac has been removed, the heart from which the pericardial sac has been removed and the gizzard from which the contents and living have been fully removed.

COOLING: this a refrigerating process and maintenance of a temperature between zero degree centigrade (0°C) to four degree centigrade (4°C) for the poultry products (carcasses, cuts, cutouts, giblets and/or byproducts) with tolerance of one degree (1°C) measured at their core center.

PRE-COOLING: this is a process of lowering the temperature of the bird carcasses immediately after the stages of evisceration and washing carried out by immersing the birds in cold water and/or water with ice or making them pass through a cooling tunnel, observing the corresponding specific technical criteria.

FREEZING is a refrigerating process and maintenance of a temperature not higher than -12°C, for the poultry products (carcasses, cuts, cutouts, giblets and/or byproducts) with tolerance of a variation up to two degrees centigrade (2°C) measured at their core center.

SEASONED: this is the process of adding seasonings and/or spices duly authorized by DIPOA, and subsequently submitted to refrigeration only (cooling or freezing).

DISINFECTION: this is the operation carried out after cleaning, to destruct pathogenic microorganisms and to reduce the number of microorganisms to a level at which the product is not subject to contamination. Hygienically satisfactory chemical and/or physical products are used in this process. It is applied on the environment, personnel, vehicles and various equipment pieces, which may be directly or indirectly contaminated, by animals and products of animal origin.

LABELING: this is the process of identifying the product by using a label.

LABEL: this is an inscription, legend, image or all descriptive or graphic material written, printed, stamped, engraved or applied through lithography or glued on the food packaging (Article 795 - RIISPOA, amended by Executive Order No. 2.244 of 06/04/97, published in the official gazette - DOU on 06/05/97).

PACKAGING: any format in which the food product has been packed, packaged or bottled.

PRIMARY PACKAGING: any packaging, which identifies the product on a primary stage.

SECONDARY PACKAGING: or "marking plan" is the identification of the product container already fully identified with a label, regardless of the nature of printing and packaging.

CONTAINER: all material involving or holding the product in full or partially, for marketing and distribution as an independent unit.

CLASSIFICATION: this is a scientific or commercial criterion used to establish a food class, as indicated in the corresponding identification and quality grade.

LOT OF BIRDS: this is a group of birds from the same origin and lodged in the same location and/or shed.

EDIBLE: all raw material and/or product used as food for human consumption.

INEDIBLE: this means any adulterated raw materials and/or products, not inspected or not destined to human consumption.

FI VET: this is the veterinarian doctor in charge of the Federal Inspection Service (SIF) in the establishment registered with DIPOA. All of the above definitions as well as the provisions in this standard comply with the International Recommended Code of Hygienic Practice for Poultry Processing (CAC/RCP 14-1976) CODEX ALIMENTARIUS.

ATTACHMENT II FACILITIES AND EQUIPMENT RELATED WITH THE "ANTE MORTEM" AND "POST MORTEM"

INSPECTION TECHNIQUE

1. LOCATION

The abattoir shall be located on the center of the site, at an elevated level of one meter (1 m), far from the public road preferably by five meters (5 m), with side accesses for, if possible, separate movement and circulation of vehicles bringing in live birds and those taking out products. Sufficient area should be available for the facilities contemplated in this standard. The circulation areas and other open areas should have a paved surface and be have an adequate infrastructure.

In addition to compliance with the above, poultry abattoirs located within the urban perimeter will be authorized to operate only upon the consent of the public health, environmental and municipal authorities (Article 48 of the Regulation for Industrial and Sanitary Inspection of Products of Animal Origin, hereinafter referred to as RIISPOA).

The construction or operation of poultry abattoirs near other establishments, which, due to their nature, may impair the quality of the products destined to human consumption, will not be authorized (articles 64 and 65 of the RIISPOA).

2. GENERAL CONSIDERATIONS ABOUT EQUIPMENT

Equipment and utensils shall preferably be made of metal. Adequate plastic material may be used. Wooden and brick-and-mortar recipients are not permitted. Equipment and utensils such as tables, chutes, carts and other containers receiving edible products shall preferably be made of stainless steel plate, hard aluminum alloys or other material approved by the Federal Inspection Service. Boxes and trays or similar recipients, if not made of stainless steel material, may be made of a proper plastic for the use intended. Generally, surfaces in contact with meats, including weldings and seams should be smooth.

Fixed equipment such as scalding and plucking machines, eviscerating chutes, pre-chillers, tanks, conveyor belts, etc., shall be installed in such a way as to permit their easy cleaning as well as of the surrounding areas, keeping a minimum distance of one meter and twenty (1.20 m) from the wall and thirty centimeters (0.30 cm) from the floor . Overhead rails should be installed at a minimum distance of thirty centimeters (0.30 cm) from walls or columns and the evisceration chute specifically should have one of its sides, where employees and the Final Inspection area will be positioned, installed at least two meters (2.0 m) far from the wall and the other side should be at least one meter (1.0 m) far from the opposite wall, provided that no activity is carried out on this other side.

3. GENERAL CONSIDERATIONS ABOUT FACILITIES

Construction should comply with the following specifications:

3.1. FLOORS (article 33, item 3 and article 94 of RIISPOA).

- 3.1.1. Floors should be of impervious, smooth and non-slip material, shock-, acid- and abrasion-resistant, with a one and a half to three percent (1.5 to 3%) slope leading to troughs for perfect drainage.
- 3.1.2. Materials used in flooring may be of the "gressit" or "korodur" type or industrial tiles, cement or other, provided that approved by the Federal Inspection.
- 3.1.3. The floor of the chilling chambers should have a slope towards the antechambers and the installation of siphoned grids at the entrance to the chambers is permitted.
- 3.1.4. The angles formed by the walls and the junction between walls and the floor should be rounded.

3.2. SEWERAGE

- 3.2.1. Waste disposal lines should carry inedible residue to trunk lines through sumps and siphons.
- 3.2.2. Discharge outlets should be equipped with a metallic rodent-proof grid or devices of similar efficiency.
- 3.2.3. The return of wastewater is not permitted. The confluence of the wastewater from the pre-coolers to conduct other inedible residue may be permitted provided that it is evidenced that such connections do not cause any technological, hygienic and sanitary inconvenience.

4. WALLS, DOORS AND WINDOWS (article 33, items 4 and 15 of RIISPOA)

- 3.3.1. As a general rule, walls should be smooth, resistant and impervious up to a minimum height of two meters or their full height and, whenever required, with tiles of a light color or similar lining using material of the "gressit" type or other approved by the Federal Inspection. They should be joined by cement (or other appropriate paste) in a white or other light color, keeping a minimum space between tiles.
- 3.3.1.1. Materials such as open tiles or "combogo" cannot be used in the total or partial construction of the walls of the industrial processing areas, including the bird incoming platform and greasing areas since the hygienization of these materials is difficult and they retain dust, debris, etc.
- 3.3.2. The entrance doors and doors to internal areas should be of the swing (impact) type, with a minimum width of one meter and twenty centimeters (1.20 m), with an opening (small door), equipped or not with air curtain, at the discretion of the Federal Inspection.
- 3.3.2.1. the doors should be made of unstainable and impervious material, unaffected by hygienizations.
- 3.3.3. Windows should have rust-resisting frames and be installed at least two meters (2 m) from the floor. Windowsills should be splayed at an angle and watertight (angle of 45°), equipped with millimetric screens, insect-proof, removable, and of adequate size to provide sufficient natural lighting and ventilation.
- 3.3.4. Air curtains should be installed whenever openings (doors and small doors) communicate directly with the outside or whenever they serve as connections to other rooms or areas with different temperatures.

3.4. CEILING (article 33, item 5 of RIISPOA)

3.4.1. The ceiling should be constituted of a concrete slab or other material providing a smooth surface, capable of withstanding humidity and steam, approved by the Federal Inspection.

- 3.4.2. Ceiling painting will not be permitted in the rooms where carcasses are being handled and have not received a packaging protection.
- 3.4.3. A ceiling will not be required where the roof is a metallic structure, with high sun reflectivity, properly sealed to exclude flying insects, birds, etc.

5. LIGHTING AND VENTILATION (article 33, items 2 and 15 of RIISPOA)

- 3.5.1. All areas should have adequate natural lighting and ventilation through windows and/or openings, always equipped with insect-proof screens, with the exceptions contemplated in this Regulation.
- 3.5.2. Artificial lighting, also needed, will be provided by "cold lamps". In the inspection lines and final inspection area the lighting fixtures should provide a perfect lighting of the area and accuracy of the examinations. Overall intensity should be at least 500 LUX, measured on the place where the carcasses will be, without causing shadows on the thoracicoabdominal cavity.
- 3.5.3. The use of lamps, which affect the colors of the carcasses or giblets, will not be permitted.
- 3.5.4. In the areas where the poultry meats and byproducts are produced, prepared and stored, it is mandatory that light bulbs and fixtures be protected.
- 3.5.5. If needed, as an additional care, an exhaust system may be installed to ensure a satisfactory air renewal at the rate of three (3) volumes per hour.

3.6. HEADROOM (article 34 - item 2 of RIISPOA)

- 3.6.1. All rooms of the abattoir should have a minimum headroom of four meters $(4.00 \ m)$.
- 3.6.2. Provided that the product processing rooms are climatized and the operations carried out therein permit it, headroom may be reduced to three meters (3.00 m).

4. PARTICULARITIES REGARDING FACILITIES AND EQUIPMENT

1. INCOMING BIRDS

- 4.1.1. A covered platform, duly protected from the wind and the direct incidence of solar rays shall be used.
- 4.1.2. At the discretion of Federal Inspection, this section may be partially or fully closed, observing regional climate conditions and provided that ventilation and lighting are not prejudiced.
- 4.1.3. A sufficient area considering the rate of slaughtering and the operations to be conducted there should be provided.

Whenever immediate slaughtering is not possible, the waiting time should be spent in a specific covered and ventilated place and, if applicable, with ambient humidification.

4.1.4. A device should permit easy movement of containers and/or pallets which, after being emptied shall be placed in a specific place.

After being hygienized and disinfected, the containers and/or pallets should not be stores in the same area of the containers and/or pallets with live birds.

4.1.5. Vehicles used to transport live birds cannot be hygienized in the unloading areas close to the incoming platform, except in the cases in which movable installations are used to seal the vehicle completely, characterized as a closed system, with its own flow and discharge of residue.

2. STUNNING AND BLEEDING

4.2.1. Stunning shall preferably be made by electronarcosis under immersion in liquid. The equipment should be provided with voltage and amperage recording and

those should be proportional to the species, size and weight of the birds, also considering the length to be run under immersion.

Stunning should not promote, in any way, the death of the birds and should be followed by bleeding within a maximum period of twelve (12) seconds.

Other methods may be adopted, such as stunning by gas, provided that approved by DIPOA, and that they comply with the provisions of Art. 135 of RIISPOA, amended by the Executive Order 2.244 of 06/04/97.

Slaughtering without prior stunning may be permitted to comply with religious principles or the requirements of importer countries.

4.2.2. Bleeding is carried out in a specific and exclusive area referred to as "bleeding area", oriented to incoming bird platform, with fully waterproof walls and ceiling. The bleeding operation is carried out with the birds hung by their feet in stainless material hooks, supported by mechanized overhead rails.

The tunnel length will correspond to the space run by the bird within the minimum time required for total bleeding, i.e., three (3) minutes, prior to which no other operation will be permitted.

- 4.2.3. The time during which the birds will remain hung by their feet should also be considered, prior to bleeding, so that blood flows to their heads.
- 4.2.4. In the proper area, the blood should be collected in a specific chute of stainless or brick material, totally impervious with smooth cement, referred to as "bleeding chute". The bottom or floor of the chute should have an acute slope towards the collection points, where two (2) drainage grids should be installed: one (1) destined to the blood and the other to the washing water.
- 4.2.5. The collected blood shall be destined to processing as inedible product or other convenient destination, at the discretion of the Federal Inspection.
- 4.2.6. After bleeding all operations should be carried out regularly and any delay or accumulation of birds in any stage should not be permitted up to the entry of the carcasses into the cold chambers.
- 4.2.7. The bleeding should be mandatorily provided with wahstands activated by a pedal (or other mechanism preventing the use of the hands), with sterilizers easily accessible by the operator.
- 4.2.8. The bleeding should be physically segregated from the incoming bird area and preferably have an independent access for the workers.

3. SCALDING AND PLUCKING

- 4.3.1. These operations should be carried out in specific premises and/or in the same premises for both activities but completely separated by walls from other operational areas.
- 4.3.1.1. The ambient shall have sufficient ventilation to exhaust the water steam from scalding and suspended impurities. The use of clerestories, flues or exhaustors is recommended whenever natural ventilation is insufficient. Ceiling may not be required in this area.
- 4.3.2. The scalding operation should be mandatorily carried out right after the completion of bleeding under defined temperature and time conditions adjusted to the birds under processing (chicken, hen, old rooster, turkey, etc.). The introduction of live birds into the system is not permitted.

One of the following processes may be used to scald birds:

- 4.3.2.1. hot water and steam spraying;
- 4.3.2.2. immersion in steam-heated tank;
- 4.3.2.3. other process previously approved by DIPOA;
- 4.3.3. Whenever scalding is carried out in a tank, the tank should be made of stainless material and the use of any waterproofing material in its internal surface is prohibited. Also, it should be equipped with temperature control and continuous water

renewal so that in each working shift (8 hours) the total volume of water is completely replaced. At the discretion of the Federal Inspection, the water in the scalding tank may be fully removed during breaks, whenever deemed required.

- 4.3.4. A proper equipment and/or area destined to feet and head scalding should be provided. The foot cuticle should also be removed when the feet are destined to edible purposes, observing the same criterion as to the continuous renewal of the water and frequency of total removal.
- 4.3.5. Complete plucking may be mechanized and should be carried out with the bird hung by its feet, right after scalding and delaying it is prohibited.
- 4.3.5.1. The accumulation of feathers on the floor is not permitted. A trough should be provided for continuous transportation of the feathers to the outside. The characteristics and dimensions of such trough may vary in accordance with the kind of equipment installed, whether it is built on the floor in such a way as to permit proper transportation of feathers and easy hygienization.
- 4.3.6. Whenever feet and/or heads are removed in the scalding and plucking areas, the installation of an "Inspection Station" is mandatory, observing the minimum requirements prior to these operations.

4. EVISCERATION

4.1.1. Evisceration activities, comprehending operations from cutting the neck skin up to final "toilette" of the carcasses, should be carried out in specific premises, separated through walls from the scalding and plucking areas.

This area may include the pre-cooling, dripping, primary packaging and classification stages, provided that its size permits the proper installation of the required equipment without causing any hygienic inconvenience for each operation.

- 4.4.2. Prior to evisceration, carcasses shall be washed under spraying showers with water under adequate pressure, with jets oriented in such a way that the whole carcass, including feet, are washed. In nonautomated evisceration systems, these showers may be located at the beginning of the evisceration chute or at the entrance of the evisceration room.
- 4.4.3. Non-automated evisceration shall, mandatorily, be carried out with the birds hung from stainless steel hooks attached to a mechanized overhead rail system under which a smooth, stainless steel anticorrosion chute of easy higienization will be installed so that inedible viscera are collected and directed to specific containers or conducted directly to the inedible material area (graxaria).

Automated equipment for evisceration (removal of the cloaca, abdominal cutting and eventration) shall observe the requirements contemplated in ATTACHMENT II, item 2, of this Regulations.

Whether automated or not, evisceration activities shall employ all care to avoid tearing the viscera and the contact of carcasses with contaminated surfaces.

- 4.4.4. The overhead rail should be arranged over the chute at such a height to prevent that in no way a hung bird will come into contact with the chute or residual water.
- 4.4.5. All evisceration operations and the Inspection Line functions shall be carried out along the chute, the length of which shall be at least one meter (1 m) by worker to permit the proper performance of the required activities, i.e.:
 - 4.4.5.1. cuts of neck skin and trachea;
 - 4.4.5.2. removal of the cloaca;
 - 4.4.5.3. abdominal incision;
 - 4.4.5.4. eventration (incision for the removal of viscera);
 - 4.4.5.5. sanitary inspection;
 - 4.4.5.6. removal of viscera;
 - 4.4.5.7. removal of lungs;

- 4.4.5.8. "toilette" (removal of pouch, esophagus, trachea, etc.);
- 4.4.5.9. final washing (externally and internally).
- 4.4.6. Removal of other organs and/or portions of the carcass prior to *post-mortem* inspection is not permitted, except as contemplated in 4.3.6 of subitem 4.3 (scalding and plucking).
- 4.4.7. The evisceration chute should have an adequate slope towards the grid to permit continuous removal of residue to the outside and prevent any accumulation in this area.
- 4.4.8. The edge-to-edge width of that chute should be a minimum of sixty cm (0.60 m) and the distance from the edge to the shackle projection point over the chute should be at least thirty centimeters (0.30 m).
- 4.4.9. The chute should be equipped with running water, under adequate pressure, fed from a system of perforated pipes, located in the internal side and along the length of the chute to provide ongoing cleaning and continuous removal of residue to the containers.
- 4.4.9.1.DIPOA may approve alternative hygienization systems for the evisceration chute, provided that the hygienic principles of the equipment are observed.
- 4.4.10. The evisceration chute shall have one waterspout for each two (2) workers for hand washing.
- 4.4.11. The installation of a device parallel and along the overhead rail, at the height of the upper half of the hook, to serve as support and guide, preventing the movement of the carcasses and reducing the possibility of the viscera coming into contact with the carcass is recommended for the area destined to abdominal cutting, eventration, sanitary inspection and removal of viscera.
- 4.4.12. The *post-mortem* inspection, carried out in the evisceration area, will require:
- 4.4.12.1. An inspection line area located along the evisceration chute, right after eventration, equipped with any and all tools required to provide efficiency, easiness and convenience of the sanitary inspection operations, under adequate lighting (500 LUX minimum) and minimum space of one meter (1 m) per Inspector, sinks and sterilizers.
- 4.4.12.2. A final inspection area contiguous to the evisceration chute, equipped with sufficient lighting fixtures to provide an overall intensity between 500 to 600 LUX.
- 4.4.12.3. A stainless steel hook system in the overhead rail or elsewhere, to permit easy deviation of suspect carcasses and an efficient sanitary inspection.
- 4.4.12.4. Carts, chutes or stainless steel containers provided with lids, for condemned carcasses and viscera, totally or partially identified by a red color and further, with the word "condemned".
- 4.4.12.5. Continuous coolers of chilled water or water with ice blocks for the carcasses or portions of carcasses released by inspection.
- 4.4.13. In addition to the above equipment, the inspection team should be provided with a scale to control water absorption by the carcasses in the pre-cooling operation and a thermometer to control the temperature.
- 4.4.14. Inedible viscera should be poured directly onto the evisceration chute to be conducted to specific containers or directly to the inedible byproduct area (graxaria). Edible viscera should be gathered in stainless steel or plastic or similar containers after being previously prepared and washed.
- 4.4.15. Feet and neck with or without head, when removed from the evisceration line for edible purposes, shall be immediately pre-cooled in continuous immersion coolers at the proper area, observing the principle of countercurrent water renewal at the maximum temperature of 4° C. (ATTACHMENT II, item 4.4.1).

- 4.4.16. Giblets (gizzard, heart and liver) shall be processed in a specific area with adequate flow. Gizzards should be opened to permit internal washing and total peeling. The pericardial sac (heart) and the bile sac (liver) should be removed. Giblets (gizzard, heart and liver) are then immediately pre-cooled. Accumulating giblets for processing is not permitted.
- 4.4.17. The inside the cavity and covering the gizzard may be used for edible purposes when removed during the evisceration process and prior to the pulling and opening of the gizzard, being subject to the same treatment given to edible giblets.
- 4.4.18. Lungs are mandatorily removed through a vacuuming or mechanical system. The equipment used should be suitably hygienized. In the vacuuming system, the negative pressure equipment and the lung containers shall be installed outside of the area.
- 4.4.19. After evisceration, the carcasses are thoroughly washed internally and externally by a spraying equipment.

Alternatively, the carcasses may be washed with a water gun or similar equipment providing an adequate water pressure.

- 4.4.19.1. The installation of a hydrometer to control the volume of consumed water is required. Pre-cooling through water immersion requires at least one and half liter (1.5 l) per carcass.
- 4.4.19.2. The spraying equipment should wash the carcasses (internally and externally), in the case of precooling though immersion in water, after the evisceration stage and immediately before pre-cooling. The carcasses cannot be handled after washing.
- 4.4.19.3. Carcasses containing residual water from washing or any kind of visible contamination on its external and internal surfaces should be prevented from going into the pre-cooling immersion bath.
- 4.4.20. The collection of bird ovaries (reproductive or commercial egg-laying birds) will be permitted provided that:
- 4.4.20.1. They are collected after the birds are released by the Federal Inspection (SIF)
- 4.4.20.2. The collection shall observe all the basic hygiene principles recommended by Federal Inspection (SIF).
- 4.4.20.3. After collection, the product should be immediately cooled to a maximum temperature of 4°C .
- 4.4.20.4. The product shall be stored and transported under refrigeration (0°C) and destined exclusively to pasteurization.
 - 4.5. PRE-COOLING
 - 4.5.1. Pre-cooling will can be made through:
 - 4.5.1.1. spraying of cold water.
 - 4.5.1.2. immersion in continuous water coolers, of the endless thread type.
 - 4.5.1.3. air cooling (refrigerating chambers).
 - 4.5.1.4. other processes approved by DIPOA.
- 4.5.2. The water or cold water in the endless thread-type continuous coolers should be renewed constantly countercurrent, i.e., in the direction contrary to the travel of the carcasses, to a minimum proportion of one and a half (1.5) liters per carcass in the first stage and one liter (1,0l) in the last stage.

The water used in the pre-cooling system through spraying or immersion in continuous coolers should comply with the potability standards contemplated in Article 62 of RIISPOA, and its recirculation is not permitted.

The water temperature in the pre-cooling by immersion system shall not exceed 4°C. If various tanks are used, the water inlet and outlet of each tank shall be adjusted

to be reduced progressively in the direction of the carcass travel. The water renewed in the last tank cannot be less than:

One liter (1.0 l) per carcass with a weight not exceeding two and a half kilos(2.5 kg).

One and a half liter (1.5 I) per carcass with a weight not exceeding two and a half kilos (2.5 Kg) to five kilos (5.0 kg).

Two liters (2.0 l) per carcass with a weight over five kilos (5 kg).

- 4.5.2.1. the water used to fill the tanks or used for the first time in the stages of immersion coolers (4.5.1.2) should not be included in the calculation of such quantities.
- 4.5.2.2. the ice added to the immersion pre-cooling system (4.5.1.2) should be considered in the calculation of quantities defined for constant renewal of water in the system.
- 4.5.3. In the immersion pre-cooling tanks (4.5.1.2) using ethanoglycol, ammonia and/or similar chemicals, the renewal of the water should be equally continuous, as contemplated in the above item "4.5.2" and cold water should be used.
- 4.5.4. the renewal water used in the immersion pre-cooling system (4.5.1.2) should be hyper chlorinated, and a maximum of 5 ppm of free chlorine is permitted.
- 4.5.5. The temperature of the resident water, measured at the inlet and outlet points of the das carcasses in the immersion pre-cooling system (4.5.1.2) should not exceed 16°C and 4°C, respectively, in the first and last stage, and the maximum period of time for carcasses to remain in the first stage is thirty minutes.
- 4.5.6. Each tank of the continuous immersion pre-cooling system should be completely emptied, cleaned and disinfected at the end of each working period (eight hours) or, whenever required, at the discretion of the Federal Inspection.
- 4.5.7. The reuse of water in the continuous immersion pre-coolers may be permitted provided that it again complies with the required potability standards, after the proper treatment.
- 4.5.8. The temperature of the carcasses at the end of the pre-cooling process should be equal to or lower than 7° C. A temperature of 10° C will be tolerated for carcasses destined to immediate freezing.
- 4.5.9. Giblets shall be pre-cooled in continuous immersion coolers, of the endless thread type, observing the maximum temperature of 4° C and constant water renewal in the direction opposite to their travel, at the minimum proportion of one and a half liters ((1.5 l) per kilo.
- 4.5.10. Whenever air injection is employed in the immersion pre-cooling tanks (4.5.1.2) to stir the water (bubbling) the air should be previously filtered.
- 4.5.11. The pre-cooling system of the continuous immersion coolers (4.5.1.2) should be equipped with a measuring device to permit constant control and recording of:
- 4.5.11.1. tank water temperature at the water inlet and outlet in the carcasses (thermometer).
- 4.5.11.2. the renewed water volume in the first and in the last stage of the system (a hydrometer or similar device).

4.6. DRIPPING

The water in the carcass will drip down during the pre-cooling stage. At the end of this stage, water absorption in the carcasses subject to immersion pre-cooling should not exceed 8% of their weights.

Dripping will start right after pre-cooling, when the carcasses are hung by their wings or necks, to a stainless steel equipment having a suspended chute, arranged along the length of the conveyance rail, to collect the dripping water.

Provided that approved by DIPOA, other technological processes may be used to remove the excess water from the carcasses, after the pre-cooling operation through immersion in water.

4.7 CLASSIFICATION AND PACKAGING

- 4.7.1. Classification may be carried out before or after packaging.
- 4.7.2. The tables used to package the carcasses should have a smooth surface, with elevated edges and be equipped with a drainage system. For better productivity and easier operations, the installation of a stainless steel or "sanitary rubber" conveyor belt (or similar equipment) is recommended. This equipment should be very strong, without stringy edges and have a light color.
- 4.7.3. Giblets and/or portions of carcasses, whether or not sold inside the carcasses, should receive specific individual packaging and, mandatorily, the head and feet should be packaged separately.
- 4.7.4. Carcasses shall, preferably, move from the packaging area to the antechamber through an opening (small door) equipped with an air curtain or, if none, a movable cover to prevent the unnecessary loss of cold temperature and the unnecessary circulation of carts and other containers between these areas.
- 4.7.5. Carcasses or portions of bird carcasses destined to institutions such as hospitals, rest homes, schools, military quarters, plants, hotels and restaurants may receive a collective packaging (bulk), duly identified, individual packaging not being required provided that they are destined to local preparation.
- 4.7.6. After receiving a primary packaging, the carcasses shall be packaged in secondary new packaging, used for the first time and such operation shall be carried out in a separate room from the primary packaging room.
- 4.7.7. For the purpose of packaging and/or transportation, and at the discretion of the Federal Inspection, boxes or containers made from a material which can be properly hygienized may be reused.
- 4.7.8. Carcasses, portions of carcasses and poultry giblets should be sold duly packaged and labeled in accordance with the provisions in Chapter II Labeling Section I General Labeling of RIISPOA and amendments.

5. CARCASS CUTTING AREA

- 5.1. Establishments carrying out cutting and/or deboning should have a specific climatized area with ambient temperature not to exceed 12°C.
- 5.2. The cutting operation can also be carried out in the primary packaging and weight classification area, provided that this area is climatized and separated from other areas and that the cutting activities do not interfere with the operational flow of packaging and classification:
- 5.2.1. The area destined to carcass cutting and/or deboning should be provided with a measuring equipment to control and record ambient temperature.
- 5.2.2. The area should have sinks and sterilizers (ATTACHMENT II, item 11.1, letter b) adequately distributed.
- 5.2.2.1. A system of controlling and recording the sterilization of utensils during the works should be in place.
- 5.2.3. The operation of putting the cuts and portions into secondary packaging shall be carried out in a specific area, separated from other areas.
 - 5.2.4. The temperature of the meats processed in this area cannot exceed 7°C.
 - 5.3. Establishments producing seasoned met should observe the following:
- 5.3.1. Have an exclusive area for the storage of spices and preparation of seasoning. The location of this area should observe the operational layout of the establishment and provide easy access to the ingredients.

- 5.3.2. Have a specific area for product preparation and packaging. This operation may be conducted in the Cutting and Deboning area provided that it does not interfere with the operational flow of the latter and that it does not prejudice it from the hygienic and sanitary point of view.
- 5.3.3. Comply with any other provisions relating to the Cutting and Deboning area.
- 5.4. In the case of processing of cooked, smoked, cured, sterilized and other products, these should comply with the applicable instructions issued by DIPOA.
- 5.5. The production of mechanically separated meat (MSM)should comply with the applicable instructions issued by DIPOA.

6. COLD-STORAGE FACILITIES

- 6.1. This is the set of antechamber(s), cooling chamber(s), fast freezing chamber(s) or tunnel(s), storage chamber(s) and site for the installation of the cold-producing equipment.
- 6.2. Such facilities shall be proportional to the slaughtering and production capacity.
- 6.3. The antechambers, which shall be climatized, will serve solely as a circulation area and its use for other purposes is not permitted.
- 6.4. Exceptionally, the operation of removal of carcasses from the containers in which they were frozen to be packaged in bags or secondary containers may be permitted provided that the area is available and that the regular operations are not affected.
- 6.5. Stevedoring of carcasses, i.e., stacking of carcasses without using their corresponding containers (boxes, trays, etc.) in the cooling chambers will not be permitted.
- 6.6. Carcasses stored in the cooling chambers shall have a temperature around minus one degree centigrade to four degrees centigrades (-1°C a 4°C), with a maximum tolerance of one degree centigrade.
- 6.7. Storage of frozen birds shall be made in specific chambers at a temperature not to exceed minus eighteen degrees centigrades (-18°C).
- 6.8. Even if on a temporary basis or due to technical reasons, freezing birds in the storage areas where there is previously frozen carcasses will not be permitted.
- 6.9. The carcasses of frozen birds shall not present, in their muscle core, a temperature higher than minus twelve degrees centigrades(-12°C), with a maximum tolerance of two degrees centigrades (2°C).
 - 6.10. Cold chamber facilities shall have the following characteristics:
 - 6.10.1. antechamber with minimum height of two meters (2 m).
- 6.10.2. easy hygienization walls, impact resistant and/or partially protected by tubular metallic structure, capable of withstanding the impact of carts against it.
 - 6.10.3. cold light lighting system, with splinter-proof protection.
- 6.10.4. doors with minimum width of one meter and twenty centimeters (1.20 m) of span, with smooth surface and stainless material.
- 6.10.5. a thermometer and, whenever required, other measuring and recording devices.
- 6.10.6. on an exceptional basis, wooden pallets may be permitted in the frozen product storage chambers for the placement of products with secondary packaging.

7. SHIPPING AREA (LOADING PLATFORM)

This area is destined to ship the products from the cold storage chambers to the carrier and it may be suppressed if the location of the antechamber permits direct access to the products.

7.1. It will have the following characteristics:

- 7.1.1. an area sized exclusively for weighing , as the case may be, with access to the carrier; the accumulation of products in this area will not be permitted.
- 7.1.2. fully isolated by walls, with openings only (doors or passages) at the points where the carrier will stop as well as access doors (entrance) for the personnel working in this area. The installation of air curtains in these openings is recommended to reduce the volume of hot air coming from outside.
- 7.1.3. protection (cover), three meter (3 m) at the minimum for the transporting vehicles as well as troughs for drainage of floor residue.
- 7.2. a hygienization cabinet for the personnel working exclusively in the coldchamber area.

8. TRANSPORTATION (Article 904 - RIISPOA)

- 8.1. Transportation shall be compatible with the nature of the products, so as to always preserve their technological conditions and, consequently, maintain their quality and preclude contamination and/or other conditions which may deteriorate them.
- 8.2. the vehicles employed in the transportation of carcasses and giblets should have a body made of proper material, with adequate insulation and internal lining made of anti-rust and impervious material which may easily be hygienized and be equipped with a refrigerating unit.
- 8.3 . The use of a vehicle with isothermal body may be tolerated for short distances in which the product temperature does not raise more than two degrees centigrades (2°C).
 - 8.4. The doors shall observe the same lining details and hermetically.
- 8.5. Whenever the floor is protected by estrades, these should be removable to permit adequate hygienization.

9. FACILITIES DESTINED TO THE MANUFACTURING OF INEDIBLE BYPRODUCTS (GRAXARIA)

9.1. These should be located in a building separated from the slaughterhouse by at least ten meters (10.0m) and be equipped with adequate and sufficient equipment to transform residue from slaughtering, including carcasses and condemned portions.

The conveyance of residue to this area should be, preferably, by gravity, through enclosed channels, isolated from the environment, or through mechanical conveyance means.

This area should be equipped with collection tanks for the separation and loading of digesters so that residue is not deposited directly on the floor.

9.2. Depending on the volume of residue, a transformation apparatus may not be required. This is applicable to those establishments where daily slaughtering does not reach ten thousand (10,000) birds or where municipal or state laws prevent their installations or in other cases at the discretion of the Industrial

Operation Division - Meats and Byproducts, at the time of approval of the construction design.

For these establishments, the Federal Inspection may permit, at its discretion, that the residue be transported to other establishments equipped with machinery for their transformation, provided that continuously removed from the establishment of origin and transported in proper vehicles, exclusive for this purpose and equipped with hermetic closing devices, observing all hygienic and sanitary principles and without prejudicing the final quality of the products to be obtained.

9.3. Even in those establishments where the volume of residue does not require the installation of an apparatus to make use of them, whenever projects are submitted, an area for their future installation should be included, given the need resulting from the increase in the volume of residues or hygienic and sanitary requirements.

- 9.4. In the establishments where there is no area for inedible products (graxaria), a furnace made of bricks or other appropriate material should be installed to incinerate carcasses condemned by Inspection as well as incoming dead birds or those dying in the reception platform.
- 9.5. The incoming residue area adjacent to the loading of digesters or autoclaves should be fully isolated by brick walls from the remaining operations (unloading, milling, etc.) . The construction should be oriented in such a way that the workers in the incoming and loading areas have no access to the other processing stages.
- 9.6. The flour, whether in the preparation stage ("crackling" or tancage), or in its final stage, cannot be poured directly onto the floor. Bags should always be stored over pallets, in an isolated, dry and ventilated area.

10. OTHER FACILITIES

- 10.1. The ice used in the industry, particularly in the pre-cooling of carcasses and giblets should be produced with potable water, preferably in the same establishment. The equipment shall be installed in a separated area, as much as possible near the place where it will be used.
- 10.2. Recipients for the transportation of carcasses, portions of carcasses and giblets, such as trays and carts, shall have a specific area for their hygienization, equipped with hot water (85°C) and steam.

Hygienized containers or recipients shall be placed on a specific area, isolated from the floor and segregated from the reception and hygienization area.

10.3. The primary packaging material shall be stored in an exclusive area which may be adjacent or not to the industrial area, to be defined at the time of project analysis.

There should be a specific and separate area for storing and/or mounting the carton boxes (secondary packaging) with an adequate flow of supply.

Packaging cannot be placed directly on the floor.

- 10.4. The "boiler house" should be built three meters (3.0 m) far from any constructions and should comply with specific legislation.
- 10.5. The installations destined to washing and disinfecting vehicles for the transportation of live birds shall be located in the very establishment, in an area not causing any hygienic or sanitary problem.
- 10.6. Where the vehicles for the transportation of products are washed in the premises, the installations shall be independent and far from those destined to the hygienization of vehicles for the transportation of live birds and crates.
- 10.7. Nonindustrial, auxiliary rooms such as lockers and cafeterias, the headquarters and offices of the Federal Inspection, chemical deposits shall be constructed in buildings separated from the slaughterhouse, preferably adjacent to or near the main entrance, observing:
- 10.7.1. Lockers shall be independent, for each sex, with installations proportional to the number of employees. The areas destined to the exchange of clothes shall be equipped with devices for individual storage of belongings and, if lockers are provided, these should be of metallic structure or other adequate and easily cleaned material and sufficiently ventilated. This area shall be separated from sanitary installations (toilets and showers). Regardless of the means used for individual storage of belongings, common clothes should be separates from the working clothes.
- 10.7.1.1 Workers handling fresh meats shall wear clean working clothes at the beginning of each workday or whenever required.

- 10.7.1.2. Separate lockers, washstands and toilets should be provided for the workers handling live birds and for those handling inedible residue.
- 10.7.1.3. MenJ s urinals should be provided at the rate of one (1) for thirty (30) and toilets at the rate of one (1) to twenty (20). For women, the proportion is one (1) to fifteen (15). Showers, at the rate of one (1) to twenty (20) workers, should have cold and hot water and be separated from the toilets.
- 10.7.1.4. All toilets, washstands and other sanitary installations shall be kept hygienized and in a satisfactory maintenance state.
- 10.7.2. The cafeteria shall be installed in a convenient place and its use is mandatory for all persons making their meals in the premises and the use of other rooms for this purpose is prohibited.
- 10.7.3. The headquarters of the Federal Inspection shall be provided with working room(s), laboratory, file(s), lockers and toilets to a sufficient number and dimensions as required for the work needs.
- 10.7.3.1. An exclusive access, separated from any other room of the establishment should be provided.
- 10.8. The storerooms and repair shops should be constructed and located in areas which do not obstruct the industrial activities and their adequacy should be analyzed at the time of submission of designs.
- 10.9. The industrial sewerage network should be linked to two trunks and there to the general discharge system provided with channels and installations to retain fats, residue and floating matter as well as artificial purging and treatment, if applicable, discharging into a permanent watercourse or other system, always subject to the approval of the pertinent sanitary authority.
- 10.9.1. The trunk system will be formed by closed pipelines to the proper diameter, with manholes.
- 10.9.2. The sewerage network should be always independent from the industrial sewerage and will be subject to approval by the pertinent sanitary authorities,

11. HYGIENIC AND SANITARY INSTALLATIONS AND EQUIPMENT

These are destined to provide the hygiene of the environment, of personnel and of the operations developed in the abattoir before, during and after the working activities in order to ensure the hygienic and sanitary quality of the products.

11.1. Equipment:

11.1.1. Sterilizers:

These are stainless steel boxes with a longitudinal opening in the top to receive knives, scissors and "pliers" and small circular openings for the introduction of knife sharpening steel. In its bottom there is a discharge stopper for box cleaning. They should be mandatorily installed in areas such as bleeding, abdominal incision, "post mortem" inspection lines and cutting and deboning. Whenever required, this obligation may be extended to other areas, at the discretion of the Federal Inspection.

11.1.2. Washstands:

To be installed in the hygienization stations, lockers and toilets, handling areas (strategically located so as to facilitate their use by the workers), accesses to the areas and wherever required, at the discretion of the Federal Inspection. The taps should be activated by a pedal or other mechanisms not requiring the use of hands; soap liquid and disposable towels should be provided (or another hand drying device).

11.1.3. Water fountains:

To be installed inside the various rooms, activated by pedal and conveniently located.

11.1.4. Water and Steam Lines:

- 11.1.4.1. To wash the floor and walls as well as to disinfect equipment, it is recommended that steam and water mixers be installed in convenient places in the rooms with fast connections to hoses.
- 11.1.4.2. The water consumed in the establishment, whatever the purpose, should mandatorily present the potability characteristics specified in article 62, of the Regulation for Industrial and Sanitary for Products of Animal Origin RIISPOA. It should be chlorinated and its microbiological purity should be ensured, regardless of origin (surface water, water from reservoirs, springs, regular wells or deep tubular wells, public supply network). The compulsory chlorination referred to herein does not exclude previous chemical treatment (flocculation, sedimentation, filtration and neutralization) as technically required for certain impure water, mainly surface water, the need for which shall be judged by Federal Inspection.
- 11.1.4.3. Average water consumption in poultry abattoirs shall be calculated based on the volume of thirty (30) liters per slaughtered bird, including all abattoir areas. An average lower volume may be permitted provided that the technological, hygienic and sanitary requirements contemplated in this standard are complied with and upon previous approval by DIPOA.
- 11.1.4.4. A sound alarm system should be installed close to the dosage of chlorine in the industrial supply water.
 - 11.1.5. Hygienization Station:

This is the place destined to hygienization of hands, equipped with a device for washing and disinfecting boots, provided in sufficient number for the workers and strategically located.

ATTACHMENT III

HYGIENE OF THE ANTE MORTEM AND POST MORTEM INSPECTION ENVIRONMENT

1. OVERALL CONSIDERATIONS

- 1.1. Floor, walls, equipment, machinery and working tools, particularly in the rooms where edible products are handled, must be hygienized immediately after the end of the industrial activities or between shifts.
- 1.2. The internal rooms and the areas surrounding the establishment shall be kept free from insects, rodents, dogs and other animals, particularly infestations of flies and cockroaches.
- 1.3. Machinery, cars, tanks, tables, containers and other utensils shall be conveniently identified to prevent any confusion between those destined to edible products and those used in the deposit of inedible or condemned products.
- 1.4. Personnel handling condemned products must disinfect their hands, tools and clothes with adequate substances. The same is applicable to workers handling inedible (graxaria) raw materials (residue).
- 1.5. Whenever required, Federal Inspection will order the replacement, scraping, painting and reform of floors, walls, ceilings, equipment, etc.

2. HYGIENE OF FACILITIES

- 2.1. Washing equipment for trucks and crates:
- 2.1.1. The installations destined to the washing and disinfection of trucks which transport live birds and crates shall contemplate an independent treatment of residual waters prior to discharge into the main sewerage trunk.
- 2.1.1.1. Washing will use high water pressure equipment and disinfection will be preferably made with sprayers.
- 2.1.1.2. Disinfections will use the agents prescribed by the Animal Sanitary Defense Service of the Ministry of Agriculture.

- 2.1.1.3. In the case of infectious and contagious diseases, the measures prescribed in Art. 92 , para. 3 of RIISPOA will be observed.
 - 2.2. Incoming Bird Platform:
- 2.2.1. Generally, the hygienization of this area will include the removal of fecal matter (and other dirt), washing and disinfection.
- 2.2.2. Washing will use water pressure devices to ensure proper cleaning of surfaces.
- 2.2.3. Birds in the incoming platform or during transportation will be promptly removed in closed containers to the firing furnace or to the residue area, always under the control of Federal Inspection.
 - 2.3. Floors, walls and ceilings:
- 2.3.1. Prior to the beginning of any working day, the floor should be meticulously clean in all places of the room and annexes. Such cleaning should maintained as much as possible. Thus, frequent washing, particularly of the areas where dirt is more frequent, with water to a sufficient volume and conveniently distributed is required. All care should be taken to prevent spillage over the carcasses and giblets. The removal of dirt to troughs and grids and drying the floor with rubber rakes should be a continuous operation.

It is important to prevent the formation of pools of waste water in any of the areas and it should be a concern that the floor should be kept clean and dry as much as possible. Troughs should be constantly washed and swept since a frequent removal of solid residue will facilitate the flow and discharge of the washing water.

- 2.3.1.1. As soon as the working day ends, the floor, grids and troughs shall be submitted to a careful washing with hot water under pressure.
- 2.3.2. Upon the end of the working day, the walls too should be equally washed and, at the discretion of the

Inspection, they should be hygienized with detergents.

2.3.3. Ultraviolet lamps and ozonization of the chambers for hygienic purposes will be regulated by a specific instruction.

3. EQUIPMENT HYGIENE

3.1. All abattoir equipment with direct or indirect contact with meats shall be rigorously cleaned in the beginning of the work, and this is a condition for the Federal Inspection to authorize work in the areas.

Accordingly, hygiene should be kept throughout the course of the operations. Further, whenever there is a break for meals, the same procedure is applicable.

- 3.2. Generally, cleaning and disinfection of equipment are carried out using hot water under pressure, applied by adequate means, coupled to water and steam mixing nozzles. In addition, soaps or detergents as well as various bactericide solutions may be used, provided that they are of the approved type, followed by effective rinsing.
- 3.3 . Rooms and equipment will be washed only after the area is free from edible products.
- 3.4. The use of utensils with wooden handles is not permitted. Brushes used in the cleaning of floors and walls cannot in any way whatsoever be used to clean any equipment.
 - 3.5. The following equipment requires special care:
 - 3.5.1. Scalding:

These should be fully emptied at the end of each working day pr whenever required, at the discretion of Federal Inspection, any accumulated residue should be thoroughly removed and they should be hygienized.

3.5.2. Plucking:

In the same manner, plucking equipment shall be fully cleaned and the feathers adhered to its surfaces or to the plucking fingers should be removed.

3.5.3. All automatic equipment (used in cloaca extraction, cutting and neck disarticulation, abdominal incision, eventration and/or other), shall be continuously hygienized throughout the processing.

3.5.4. Gizzard cleaner:

The hygienization of the gizzard cleaner should be completed with under pressure water jets.

3.5.5. Lung extractor:

Pipelines and deposits shall provide means for the removal of lungs and proper cleaning of the equipment.

3.5.6. Continuous chilling ("CHILLER"):

After being emptied, its surfaces and mainly the internal parts, shall be cleaned with brushes.

3.5.7. Carcass and giblet conveyor belts

Whenever used, they should contemplate a system of continuous washing, preferably with warm water.

3.5.8. Engines:

All machines should have their engines fully protected and shielded to ensure efficient cleaning and safety of the workers.

3.5.9. Recipients:

- 3.5.9.1. recipients, as much those reserved for edible products as well as those used for inedible products, when becoming full, shall have their contents removed and disposed of to the proper destination.
- 3.5.9.2. the capacity of the recipients shall not be exceeded, in order to prevent overflow of the matter onto the floor.
- 3.5.9.3. recipients destined to transportation and deposit of edible products shall never be used for other purposes.
- 3.5.9.4. whenever the working conditions do not permit mechanized transportation of residue (including condemned matter) to the inedible matter area, the recipients shall be hygienized with hot water and steam prior to their return, in an area specific for this purpose.
- 3.5.9.5. recipients of condemned matters shall be subject to rigorous disinfection upon the completion of the works.
 - 3.5.10. Overhead rails, chains and hooks:
- 3.5.10.1. the overhead rails shall be cleaned whenever required to remove crusts formed by blood, feathers, dirt, etc; water and nylon brushes should be used and be located in the return of the overhead conveyors.
- 3.5.10. 2. in the *post mortem* inspection, the hooks used for final inspection shall be properly hygienized.

3.5.11. Sterilizers:

The water in the boxes, whenever in use, shall be at a minimum temperature of eighty-five degrees centigrade (85°C) and the immersion time is at least three (3) minutes. For this reason, the workers should be supplied with extra knives and/or scissors. These sterilizers shall be cleaned daily with steam jets and the water shall be renewed continuously and, whenever this cannot be achieved, at least twice per shift.

- 3.5.12. Trucks for product transportation:
- 3.5.12.1. After transporting the products, the vehicles shall be washed with water (preferably hot water) and detergents, and then disinfected and it will be incumbent upon Inspection to verify, at the time of loading, compliance with these hygienic requirements.
- 3.5.12.2. If these vehicles are washed in the establishment, an exclusive and adequate area should be provided within the premises to wash these vehicles, using under pressure water around one (1) atmosphere.

3. HYGIENE OF OPERATIONS:

Among the various operations developed in the establishment, the following are highlighted due to their hygienic peculiarities:

- 4.1. Bleeding:
- 4.1.1 Frequent removal of blood and water so that the area shows the best cleanliness possible.
- 4.1.2. Rigorous compliance with the requirements relating to the bleeding time and beginning of scalding.
 - 4.1.3. Perfect operation of the trough sewerage to permit a rapid blood flow.
- 4.1.4. Bleeding equipment and tools should be properly hygienized at the required frequency.

4.2. Cloaca extraction:

The cloaca should be extracted in such a way that the cloaca is not separated from the entrails and urogenital connections in order to reduce contamination of the carcasses by fecces as caused by the traditional means of extracting the cloaca. This operation shall performed while the bird is hung by the feet and a round incision is made to remove the cloaca, displacing it from the carcass while not separating it from the final portion of the entrails.

The automatic or mechanized devices performing this operation shall be equipped with self-washing with running water under pressure.

The mechanical device (cloaca extracting gun) shall be equipped with a self-washing system using running water, activated at each operation, avoiding discharge on the carcasses.

4.3. Abdominal cutting:

It shall be made in such a way so as not to rupture viscera and to facilitate their removal.

The automatic devices to perform this operation should be equipped with self-washing systems with running water under pressure.

4.4. Interruption of the industrial activities:

The industrial activities may be interrupted solely when all birds, already bled, have had their regular processing completed and the works may be restarted only after installations and equipment have been duly cleaned.

4.5. Evisceration:

Hygienic care should be observed in the evisceration procedures and especially after sanitary inspections.

4.6. Handling of meats and viscera:

The procedures for handling meats and viscera shall comply with basic hygiene principles.

5. PERSONNEL HYGIENE

The hygiene of the workers is of fundamental importance in the abattoir activities. The measures relating to hygienization of installation and equipment prescribed so far would be of little value if they were not accompanied by those relating to personnel. In this connection, a matter of concern to the Federal Inspection - FI is the health state of the employees who handle the products directly or indirectly, their cleanliness, adequacy of clothes and hygienic habits, not only with themselves but also in the manner how they perform their duties.

The establishment shall organize a training program on Industrial Hygiene for its personnel and the Federal Inspection Service - SIF shall participate in its conception and implementation.

5.1. Health state:

Federal Inspection shall observe with maximum the precepts of article 92 of RIISPOA and its paragraphs, transcribed below in full:

"Article 92 - Workers in the industry of Products of Animal Origin shall have health cards supplied by the official sanitary authorities. They should be healthy and have hygienic habits and undertake an annual examination by the public health authority, submitting to the Federal Inspection the pertinent annotations in their cards, which evidence that they have no disease preventing them from working in the processing of food products.

- § 1° Where there are no Public Health Services, certificates supplied by private doctors may be accepted by DIPOA, at its sole discretion.
- § 2° Medical inspection is mandatory, as many times as requested, for any worker in the establishment, including its owners, if they exercise industrial activities.
- § 3º Whenever the existence of dermatosis, infectious and contagious or similar diseases are found as well as nonapparent carriers of Salmonella, the workers are immediately removed from the works and it will be incumbent upon the Federal Inspection to communicate this fact to the Public Health Authorities.
 - 5.2 . Working Clothes and Tools:
- 5.2.1. The use of white uniforms by the works is mandatory (men: caps, trousers, shirt or dungarees), preferably protected by overalls. Women shall wear a cap, trousers and blouse or dungarees, protected by overalls). Uniform in a dark color may be used by maintenance workers who will not handle edible products.

The use of dark color clothes under the working uniform will not be permitted.. Employees performing the hygienization of installations and equipment should be duly identified.

- 5.2.2. Whenever the workers leave the handling areas during the working hours they should leave their overalls and gloves on proper hangers and their working tools in the proper place.
- 5.2.3. All persons working in the abattoir must use rubber boots or equivalent, preferably white or of a light color and resistant to hygienization.
- 5.2.4. The working uniform should be used in the working environment only. Whenever an employee has to leave the establishment, the worker must change his/her clothes and keep his/her uniform in a proper place. If the establishment has no laundry, the uniforms may be washed by an industrial laundry, at the companyJ s discretion.
- 5.2.5. Working tools (knives, hooks and sharpeners (fuzis) should be kept in metallic sheaths (stainless steel or duraluminium), the use of sheaths made of leather or similar material being barred..
 - 5.2.6. The use of protection on working tools is barred.
- 5.2.7. The use of nail varnish, rings, earrings, bracelets and other adornments, as well as watches is not permitted for workers who handle unprotected (not packaged) carcasses and giblets.
- 5.2.8. Benches, chairs, etc. shall be provided in the rest areas, to prevent that uniformed workers sit on the ground or other improper places.
 - 5.3. Hygienic habits:

Workers should come to work with trimmed nails and without bandages on their hands, to protect them.

When entering the industrial rooms and after using the toilets they must wash their hands with water and soap liquid and subsequently disinfect them in a recipient strategically located and using the products approved by DIPOA, and in compliance with articles 84 and 85 of RIISPOA.

6. HYGIENIZATION (WASHING AND DISINFECTION)

The hygienization of the establishment, including installations, equipment and utensils should be part of a specific program, including a description of all procedures, detailed by area and specifying all substances to be employed for this purpose.

Washing and disinfections of installations, equipment and utensils should observe the following:

- 1. Pre-washing with water under pressure for the removal of solids
- 2. Physical removal with mechanical action or using detergents.
- 6.3. Washing for the removal of detergents and solids.
- 6.4. Application of disinfectants, whenever required and always preceded by a thorough rinse.
- 6.5. The procedures for washing and disinfection shall be performed after the removal of edible products from the rooms.
- 6.6. The solutions employed in the hygienization of the installations, equipment and personnel should be those registered with the Ministry of Health, the use of which has been authorized by DIPOA.
- 6.7. All care should be taken in handling disinfectant concentrates, particularly avoiding contact with ocular and nasal mucosa.
- 6.8. In the intervals, not to exceed one (1) hour, for meals and rest of the works, the areas, equipment and utensils should be washed only with water under pressure.
- 6.9. SIF should be informed and get acquainted with the nature, periodicity and results of the Industrial Hygiene Program developed by the establishment.
- 6.10. The SIF veterinarian shall carry out from time to time an analysis of the Industrial hygiene of the establishment and conduct any additional exams which may be required.
- 6.11. Findings shall be reported and conclusions and recommendations shall be communicated to the establishment.
- 7. The establishment shall develop a Control of Insects and Rodents as part of the Industrial Hygiene Program.
- 7.1. A monthly report shall be prepared, including daily data about the follow-up of the matters of concern and control devices.
- 7.2. It will be incumbent upon SIF to analyze the reports on the control program and recommended procedures.

ATTACHMENT IV ANTE MORTEM INSPECTION

- 1. This the function of the Veterinarian Doctor in charge of Federal Inspection and comprehends the visual examination of the lots of birds for slaughtering as well as the actions required to qualify them to industrial processing.
 - 2. The objective of the ante mortem inspection is:
- 2.1. Prevent the slaughtering of birds with full gastrointestinal tract and thus cause contaminations during the industrial processing (article 227 of RIISPOA). Therefore, birds destined to slaughtering should have their feed suspended for a minimum period of six (6) to eight (8) hours.
- 2.2. Know the history of the lot, through the Sanitary Report, to prevent the slaughtering of a group of birds with any diseases which could require immediate separate emergency slaughtering (article 123 RIISPOA).
- 2.3. Detect any disease which cannot be identified in the *post mortem* examination, particularly, those affecting the nervous system.

- 2.4. Identify lots of suspected birds which may require a reduction in the regular slaughtering rate for a more accurate examination.
- 2.5. Enable the identification of lots treated with antibiotics (through the Sanitary Report) for the purpose of sequestration with the objective of performing laboratorial analyses due to the possibility of residue in the meat..
- 3. The *ante mortem* inspection shall be performed beside the incoming platform and a specific and isolated area shall be provided for necropsy, if required.
- 3.1. The necropsy area shall be provided with the necessary equipment and utensils to collect materials to be sent to the laboratory. The birds and/or remains after necropsy shall be placed in stainless steel recipients with hermetic lids.
- 3.2. Whenever the necropsy area is contiguous to the platform, it should be well isolated from the platform or industrial body so as not to permit interference with the reception of birds in the operational flow chart of the plant.
- 3.3. After necropsy, the birds should be incinerated in a furnace or processed with inedible byproducts.
- 3.4. The furnace in this case should be isolated from the plant, and preferably in an area close to the fat deposit (*graxaria*).
- 4. Jointly with the previous slaughtering notice, or accompanying each lot of birds, the establishments must send the Sanitary Report to Federal Inspection, including the following data: (article 129 of RIISPOA).
- 4.1. Origin of the birds, name and address of the poultry farm and the number of the lot or shed.
 - 4.2. Quantity of birds (initial and final).
 - 4.3. Diseases detected in the lot.
- 4.4. Kind of treatment to which the lot was subject, specifying the therapeutic agent used and duration of treatment.
 - 4.5. Date of suspension of feed with antibiotic and/or coccidiostats.
 - 4.6. Date and hour of suspension of feed.
 - 4.7. Other data deemed required.
 - 4.8. Signature of the Veterinarian Doctor responsible for the flock.
- 5. Lots in which birds seemed suspect or, showed evidence of diseases requiring immediate separate slaughtering shall be slaughtered at the end of regular slaughtering (Immediate Emergency Slaughtering). As required in the case, meats may be considered fit or unfit for consumption.
- 6. Whenever Immediate Emergency Slaughtering is required, all hygienic and sanitary care should be taken and, upon completion, installations, equipment and utensils should be hygienized and, if required, disinfected and the water in the precoolers and scalding equipment should be fully replaced.
- 7. In lots in which there is evidence of birds with zoonosis, the SIF/DIPOA Veterinarian Doctor shall authorize the sacrifice of the lot upon the completion of slaughtering if such precautions are required to minimize the risk of disseminating the agents which caused the disease, observing all other provisions issued by the official Sanitary Defense authorities and in this case the meats should be condemned.
- 8. The slaughtering of birds under treatment with medication, although the period of time recommended between suspension of application and the date of slaughtering having expired, will not be permitted.
- 9. The condition of transportation of live birds and the ideal number of birds per cage should be checked during the *ante mortem* inspection.

ATTACHMENT V POST MORTEM INSPECTION

- 1. This is carried out individually after slaughtering through visual macroscopic examination of carcasses and viscera and, as the case may be, palpation and cuts.
- 2. The places in the slaughtering area where such examinations are conducted are referred to as "Inspection Lines" and should be located along the evisceration chute, and be provided with the following conditions:
- 2.1. Adequate lighting, as specified in the ATTACHMENT II, subitem 3.5, item 3.5.2.
 - 2.2. Minimum spacing of one meter (1 m) for each Inspector.
- 2.3. Devices for washing and sterilizing tools and hand washstands for the hands.
- 2.4. Control and recording of the occurrences relating to diseases and destination of carcasses and viscera.
- 3. Only after the completion of the *post mortem* inspection, the carcasses and/or portions and giblets may be removed and/or processed.
- 4. The installation of other inspection places for the carcasses or other operation of this nature outside of the evisceration chute is permitted.
- 5. A system for the identification of birds showing any sanitary problem requiring additional exams to be held in the final inspection area (ATTACHMENT II, item 4, line 4.4.12) shall be in place to deviate immediately the birds from the slaughtering line (Final Inspection).
- 5.1. The inspection line is staffed by professional trained for this function, however, final judgment is incumbent solely upon the official veterinarian.
- 5.2. The identification of each carcass and viscera deviated from the slaughtering line to Final Inspection shall be maintained up to the final examination by SIF veterinarian.
- 6. The official veterinarian responsible for Federal Inspection at the slaughterhouse is also responsible for the mission of specifying the rate of the shackles in the evisceration line, so that the regular performance of *post mortem* examination be possible throughout slaughtering.
- 6.1. It is important to emphasize that the aforementioned rate should be adjusted so as to permit an adequate sanitary inspection, not only in accordance with the proven capacity of the installations and equipment but also observing the number of variables in relation to the healthy condition of each lot of birds.
- 6.2. Thus, whenever the *ante* or *post mortem* inspection detects diseases in the birds which require more accurate examination, the rate of slaughtering will be conditional upon the perfect performance of the activities.
- 6.3. The slaughtering rate affects all activities, comprehending technological, hygienic and sanitary considerations. Thus, it should be adjusted to the equipment capacity and to the number and technical qualification of the workers in charge of the various tasks.
- 7. The examinations conducted in the Inspection lines are preceded by a so-called preparatory aimed at presenting the carcasses and viscera in a state of being examined, facilitating internal and external visualization and preserving, from the hygienic viewpoint, the edible portions. The perfect performance of this operation is the responsibility of the plant.
- 8. The *post mortem* inspection of the birds is carried out in three stages or "Inspection lines", i.e.:
 - 8.1. Line A Internal examination:
- 8.1.1. Conducted through visualization of the thoracicoabdominal cavity (lungs, air sacs, kidneys, sexual organs) observing a minimum time of two (2) seconds per bird.
 - 8.2. Line B Examination of viscera:

- 8.2.1. Examination of heart, liver, gizzard, spleen, ovary and oviducts in egglaying hens.
- 8.2.2. Visualization and palpation, as required by the case, verification of odors and of the incision.
- 8.2.3. Thus, when examining organs, the aspect (color, format, size), consistency and, in certain cases, the odor are verified.
- 8.2.4. The period of time to be observed for the above examination is about two (2) seconds per bird.
 - 8.3. Line C External Examination:
- 8.3.1. Visualization of external surfaces (skin, articulations, etc.). In this line, bruises, fractured members, surface abscesses, callosities, etc., are removed. The minimum examination time per bird to be observed is also two (2) seconds.
- 9. Number of Employees in the Inspection lines in relation to the Slaughtering Rate in the Evisceration line
- 9.1. Types of establishments in relation to capacity and slaughtering rate TYPE 1 Rate up to 1,000 birds/hour
 - TYPE 2 Rate of 1,000 a 2,000 birds/hour
 - TYPE 3 Rate of 2,000 a 3,000 birds/hour
 - TYPE 4 Rate of 3,000 a 4,000 birds/hour
 - TYPE 5 Rate of 4,000 a 5,000 birds/hour
- 9.2. Slaughtering at rates above 5,000 birds/hour shall be governed by specific instructions, supplementary to this regulation.
- 9.3. The number of employees specified in the table below refers solely to the inspection line requirements and do not consider other needs and therefore the provisions of Ordinance No. 082, de 27 February 27, 1976 are applicable.

The particularities of each plant, however, should be observed and, therefore, may constitute a basic reference, although not absolute.

INSPECTION NUMBER OF EMPLOYEES
LINES TYPE 1 TYPE 2 TYPE 3 TYPE 4 TYPE 5
LINE A
Internal Exam
1 1 1 2 3
LINE B
Viscera Exam
- - 1 1 2
LINE C
External Exam
- 1 1 1 1
LINE
REPLACEMENT
1 1 1 1

ATTACHMENT VI WORKING PROCEDURES OF THE FEDERAL INSPECTION SERVICE IN POULTRY SLAUGHTERING

1. PRIOR TO THE BEGINNING OF SLAUGHTERING

- 1.1. ANTE MORTEM INSPECTION
- 1.1.1. Reception and checking of the Sanitary Report, observing whether it complies with the provisions of item 4 of Chapter III.

- 1.1.2. Observe the health status of the birds as well as any other of the above items prior to authorizing slaughtering.
- 1.2. Assignment of personnel to the Inspection lines, by the responsible veterinarian.
- 1.3. Verification of the hygienic conditions of the installations and equipment in the slaughtering room: floor and drainage systems, walls, ceilings, adjoining sanitary installations, washstands (with soap and paper towels), tables, recipients, carts (including their identification), overhead lines, hooks and sterilizers.
- 1.4. Verification of the regular operation of the hygienization devices: knife sterilizers and steam hoses.
 - 1.5. Verification of the appearance of the workers as to:
- 1.5.1. Adequacy and cleanliness of working uniform (including caps), with two or more weekly changes, the use of plastic or transparent overalls being permitted.
- 1.5.2. Absence of purulent lesions in the hands and arms, whether or not protected by bandaids, bandages, etc..
- 1.5.3. Hygienic conditions of hands (trimmed and clean nails, without varnish or any fabric or leather protection).
- 1.6. Verification of the appearance of Federal Inspection employees as to adequacy and state of the official uniform.

2. DURING SLAUGHTERING

- 2.1. Verify if crates and the vehicles are washed and disinfected after use.
- 2.2. Verify that stunning has been correctly applied, considering the intensity of shock, compatible with the weight of the birds and the slaughtering rate.
- 2.3. Verification of minimum bleeding time, prior to which no work can be done in the bird. Idem, as to the exsanguination technique to ensure the maximum flow of blood.
- 2.4. Verification of the maintenance of cleanliness in the bleeding and other areas of the Slaughterhouse as well as the regular removal of products and residue from the room.
- 2.5. Verification of the state and operation of the sterilizers located at various places of the room, whether they have a complete load of clean water (renewed whenever required) and a temperature which is never lower than 85°C, never permitting their use for other purposes, observing the frequency and opportunity of their use by the IF employees and plant workers, with special attention to bleeding, abdominal incision and Inspection lines.
- 2.6. To prevent contamination of carcasses, viscera or any other portion destined to edible purposes and mandatory condemnation, demand compliance with the following requirements:
- 2.6.1. Adequate operation of showers for external washing of carcasses coming into the clean are for evisceration.
- 2.6.2. Adequate use of the cloaca gun avoiding the rupture of entrails and providing its systematic automatic washing.
- 2.6.3. The abdominal incision is very important since it will determine the presentation of the carcass and viscera to sanitary inspection, bearing in mind that most of the contamination cases occur in this stage.
- 2.6.4. Do not permit that the floor is washed with hoses where birds are being handled to prevent contamination by spillage on the carcasses and overhead rail, or where the height of the tables prohibit it.
- 2.7. Verification of the work of the IF employees in the Inspection lines: complete and correct performance of examinations in accordance with established techniques, correct procedures in rejections made in the lines and seizure of portions

for Final Inspection. observing the causes given in the marking tables, observance of hygienic care when condemning or seizing portions (hand washing, disinfection of knives).

- 2.8. Verification of compliance by the works of hand washing and disinfection of knives during the evisceration activities.
 - 2.9. Verification of the correct use of recipients for edible products.
- 2.10. Verification of the hygienic behavior of workers, particularly washing hands with water and soap whenever entering the room, coming from the toilets or from any other plant room (not expectorating or spitting, not smoking), washing and hygienizing their boots with a disinfectant.
- 2.11. Verification of the condition of washstands; whether they are clean, unobstructed, supplied with liquid soap and disposable towels.
- 2.12. Maintenance of cleanliness and organization of the works in the Federal Inspection area.
- 2.13. Verification of efficiency of external washing of carcasses at the exit of the evisceration chute. The carcass should enter into the pre-cooling tube free from any dirt or any foreign matter.
- 2.14. Control of the perfect operation of the pre-cooling water immersion system observing the following items:
 - 2.14.1. Correct temperatures in the various stages.
- 2.14.2. Constant water renewal at the specified proportion, in a countercurrent to the movement of carcasses and giblets.
- 2.14.3. Control of the hyper chlorination of the water renewal in the system within the recommended parameters.
- 2.14.4. Control of the correct temperature of carcasses and giblets when leaving the system.
- 2.15. Control of the rate of absorption of the water by the carcasses in the precooling water immersion system within the permitted limit.

The absorption ratio is the percentage of water remaining in the carcasses during slaughtering and other technological operations, mostly in the pre-cooling immersion system, and considering that a small percentage of water is absorbed during scalding, plucking and the various washes in the evisceration line (an average of 3%). The control system for the absorption of water by carcasses subject to pre-cooling immersion should be efficient and effective, without leaving any margin for loss in the quality of the end product.

The official methods of performing such control are the Internal Control Method, performed at the industrial processing level by the local IF and the Dripping method for the control of water absorption in frozen carcasses submitted to pre-cooling immersion.

2.15.1. Internal Control Method:

The control specified herein refers to the water absorbed during pre-cooling immersion and is directly related to water temperature in the chillers, time of permanence in the system, type of abdominal cut, air injection in the system (bubbling) and other less significant factors.

The quantity of water determined by this method is expressed as a percentage of the total weight of the carcass up to the maximum limit of 8% of its weights.

- 2.15.2. Technique: Based on the comparison of duly identified carcass weights, before and after pre-cooling immersion:
 - 2.15.2.1. No of carcasses: a minimum of 10 carcasses in each test.
- 2.15.2.2. The carcasses to be tested are segregated when leaving the last shower in the evisceration chute.
 - 2.15.2.3. Provide for the previous flow of the water retained in the cavities,

- 2.15.2.4. Weigh the carcasses to be tested individually or collectively and thus determine their initial weight (IWi).
- 2.15.2.5. Identify the carcasses under testing before they enter the pre-cooling immersion system.
 - 2.15.2.6. Remove the carcasses under test to weigh them after dripping.
- 2.15.2.7. Weigh the carcasses under test individually or collectively to determine their ending weight (EW).
- 2.15.2.8. The difference (D) between the Initial Weight (IW) and the Ending Weight (EW) multiplied by 100 and divided by the Initial Weight will determine the percentage of water absorbed (A) during processing. D X 100

FORMULA: $A = D = E$:W -	ΙVV
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2.15.2.9. Frequency of tests: it is recommended at least one (1) test for each working shift (four hours)

B - DRIP TEST:

This method is used to determine the quantity of water resulting from thawing the frozen carcasses. If the resulting quantity, expressed in a percentage of the carcass weight with all giblets/edible portions in the packaging exceeds the limit of 6%, it is considered that the carcass(es) absorbed excess water during the pre-cooling immersion in water.

Definition: The quantity of water determined by this method is expressed as a percentage of the total weight of the frozen carcass with the giblets / edible portions.

Base: The frozen carcass, with or without giblets/edible portions, is thawed under controlled conditions permitted to calculate the weight of lost water.

Equipment and Utensils:

A scale weighing up to 5kg with an accuracy of more or less 1g. Plastic bags of an adequate size to hold the carcass, with a safe locking system.

A recipient with a bath of water controlled by a thermostat and an equipment in which the carcasses can be placed as described and identified as carcass for examination. The bath of water should contain a volume of water not lower than 8 tomes the volume below for the carcass to be tested and the water should kept at a temperature of 42°C, more or less 2°C. Paper filter or absorbent paper.

Procedure:

Maintain the birds at a temperature of -12°C up to the time of analysis. Dry the external side of the packaging to eliminate all liquid and ice. Weight it rounding to the nearest integer. This will give the "M0" measurement. Remove the frozen bird from the packaging (with viscera). Dry the packaging and weight it to obtain the measurement "M 1". The weight of the slaughtered bird is determined by subtracting "M1" from "M0". Place the slaughtered bird plus viscera, if any, inside a plastic packaging (bag) with the abdominal incision downward, to the bottom of the packaging. The packaging with the bird and viscera should be immersed in a bath of water at a temperature of 2° C, in such a way that the water does not flow inside it. The packaging shall remain immersed in water until the bird temperature reaches 4° C. The following table is used to determine the immersion time:

Weight of bird plus viscera (in grams) Immersion Time (in minutes)

Up to 800 65

801 a 900 72

901 a 1000 78

1001 a 1100 85

1101 a 1200 91

1201 a 1300 98

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1301 a 1400 105
1401 a 1500 112
1501 a 1600 119
1601 a 1700 126
1701 a 1800 133
1801 a 1900 140
1901 a 2000 147
2001 a 2100 154
2101 a 2200 161
2201 a 2300 168
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Over 2300 grams, add 7 minutes per each additional 100g or portion. After the immersion period, remove the plastic packaging from the bath. Make a hole in the bottom to discharge the water released by thawing. Then, the packing and its content shall remain for 1 hour in ambient temperature around 18 and 25° C.

Remove the thawed bird from the packaging leave it draining. Remove the viscera and dry it. Weigh the thawed bird with its viscera and packaging. Thus, the measurement "M2" is obtained. Weigh the packaging which held the viscera to obtain the "M3" measurement.

Calculation:

% of lost liquid = $M0-M1-M2 \times 100$

of the frozen bird M0-M1-M3

N.B.: For lots with different weights place first the heavier birds in the bath of water. For each 100g less, 7 minutes should be elapsed and then the next lot is introduced and so on. Eventually, all birds should be removed at the same time.,

Evaluation of the Result:

- If, for the 6 carcass sample, the average quantity of water resulting from thawing is higher than 6%, n it should be considered that the quantity of water absorbed during pre-cooling immersion exceeds the limit.
 - 2.16. Control of the renewed water volume in the continuous coolers.
 - 2.17. Control of water supply chlorination.
 - 2.18. Control of rate and volume of slaughtering.
- 2.19. Actions taken by the Veterinarian Doctor to correct the gaps found in relation to the previously discussed items.

3. AFTER SLAUGHTERING:

- 3.1. Overall washing with hot water, under pressure with a proper detergent:
- 3.1.1. Floors, walls.
- 3.1.2. Equipment
- 3.1.3. Overhead rails

4 .COLD CHAMBER AREA

- 4.1. Storage:
- 4.1.1. Recording and control of chamber temperatures.
- 4.1.2. Recording and control of stored products.
- 4.1.3. Hygienic aspects (washing and disinfection of chambers and antichambers)
 - 4.1.4. Verification of proper storage conditions. Pallets.

Adequate distribution or stored products

Packaging condition of stored products.

- 4.2. Cutting and deboning:
- 4.2.1. Recording and control of ambient temperature (no higher than 15°C).
- 4.2.2. Compliance with hygienic principles when performing industrial activities
- 4.2.3. Control and recording of temperatures of sterilizers and meats

- 4.3. Shipping:
- 4.4. Verification of hygienic and functional conditions of vehicles.
- 4.4.1. Verification of product shipping temperature.

5. OTHER CONTROLS:

- 5.1. Program of Control of Insects and Rodents:
- 5.1.1. Site mapping.
- 5.1.2. Frequency
- 5.1.3. Type of system used.
- 5.1.4. Characteristics of the product used.
- 5.1.5. Report on effectiveness of the measures adopted based on conclusions in the reports.
 - 5.2. Control of the washing and disinfection program for water supply reservoirs
 - 5.2.1. Frequency
 - 5.2.2. Type of system used.
 - 5.2.3. Characteristics of the product used.
 - 5.3. Control of the list of chemicals stores and used in the plant
 - 5.3.1. Storage site.
 - 5.3.2. Safety criteria.
 - 5.3.3. Descriptive report in using the product.
 - 5.4. Control of registered labels and products.
 - 5.5. Control of results from official laboratorial analyses.
- 5.6. Control of recording of daily occurrences in the proper forms and recording of the actions taken.
 - 5.7. Control of plant employee health and Federal Inspection employee health.
- N.B.: Models of forms and maps to be used by FI will be standardized and governed by DIPOA.

ATTACHMENT VII

ANTE MORTEM INSPECTION CONTROL OF THE ORIGIN OF THE BIRDS, VEHICLES AND CORRELATION WITH POST MORTEM INSPECTION

ESTABLISHMENT:

SIF:

DATE: SHIFT:

LOT PRODUCER CITY VEHICLE N° OF BIRDS DEAD BIRDS RESPONSIBLE PARTY: " SIF ON DUTY:

ATTACHMENT VIII

MONTHLY MOVEMENT OF THE DESTINATION OF SLAUGHTERED BIRDS PASSING FINAL INSPECTION ESTABLISHMENT:

SIF:

CITY:

Code Causes of Seizure DESTINATION OF SLAUGHTERED BIRDS

Disease CONDEMNATION TOTAL % PARTIAL %

Abscess

Airsacculitis

Arthritis

Repugnant Aspect

Cachexia

Celllulitis

Colibaccilosis

Contamination

Contusion/Fracture
Dermatosis
Excess Scalding
Delayed Evisceration
Neoplasia (Tumor)
Salpingitis
Improper Bleeding
Septicemia
Ascitic Syndrome
Hemorrhagic Syndrome
TOTAL

N.B.: Other causes for seizure and condemnation not specified above should be listed in the blanks. Blanks should be provided as much as required.

TOTAL DEAD BIRDS: TOTAL SLAUGHTERED BIRDS:

DATE: SIGNATURE OF EMPLOYEE::

ATTACHMENT IX DESTINATIONS AND CRITERIA FOR THE JUDGMENT OF BIRDS ABSCESSES (Article 233 of RIISPOA)

Article 233 (RIISPOA) - "Abscesses and suppurated injuries whenever not affecting the general state are cause for rejection of the altered portion."

AIRSACCULITIS

Bird carcasses with evidence of extensive involvement of the air sacs with airsacculitis or those with systemically affected shall be totally condemned. Less affected carcasses may be partially rejected after the removal and total condemnation of all tissues involved in the injury, including the exudate. In case of airsacculitis, viscera are always totally condemned.

INFLAMMATORY PROCESSES (Arthritis, Cellulitis, Dermatitis, Salpingitis and Colibaccilosis) Any organ or portion of the carcass which is affected by an inflammatory process should be condemned and if there is evidence of a systemic nature, the carcass and viscera should be fully condemned.

TUMORS (Articles 234 and 197 of RIISPOA)

Any organ or portion of the carcass which is affected by a tumor shall be commended whenever there is evidence of metastasis or whenever the general condition of the bird is affected by the size, position and nature of the tumor, the carcass and viscera should be totally condemned.

Article 197 (RIISPOA) - "Malignant tumors - carcasses, portions of the carcass or organ showing malignant tumors, with or without metastasis, should be fully condemned."

REPUGNANT ASPECT (Articles 172 and 236 of RIISPOA) - Hemorrhagic Syndrome

Article 172 (RIISPOA) - "Repugnant Meats - are so considered and condemned the carcasses with a an ugly appearance, abnormal color or medicinal, excrementitious, sexual or other abnormal odors."

Article 236 (RIISPOA) - "Birds, including game, showing putrefactive changes, with ammoniacal and sulfhydrical odor, revealing gaseous crackling or change in the color of muscles should be condemned."

CACHEXIA (Article 232 of RIISPOA) - "Cachectic animals should be rejected regardless of the causes related to the malnutrition process.".

CONTAMINATION (Article 165 of RIISPOA) - "Contaminated carcasses - carcasses or portions of carcasses contaminated by fecces during evisceration or in any other stage of the process should be condemned."

- $\S1^{\circ}$ Carcasses, portions of carcasses, organs or other edible products contaminated by contact with the floor in any way and when a thorough cleaning is not possible, should be condemned."
- §2º In the cases of the above paragraph, the contaminated material should be destined to sterilization by heat, at the discretion of the Federal Inspection, considering the cleaning already carried out."

CONTUSION / FRACTURES (Article 235 of RIISPOA)

Article 235 (RIISPOA) - "Traumatic injuries, when circumscribed, imply the rejection of the affected portion only."

Article 173 (RIISPOA) - "Sole Paragraph - Whenever hemorrhagic or congested injuries are due to contusions, traumatism or fracture, the rejection may be limited to the affected parts."

DERMATOSIS

Bird carcasses showing evidence of skin and/or meat injury should have the affected part rejected or whenever the overall condition of the bird is affected by the size, position or nature of the injury, carcasses and viscera should be condemned.

EXCESS SCALDING

Extensive mechanical injuries, including those caused by excessive scalding, cause the total condemnation of carcasses and viscera.

DELAYED EVISCERATION (Article 236 of RIISPOA)

Procedures: "This is established as from 30 minutes from bleeding."

The following criterion is observed:

- 1. Between 30 and 45 minutes, speed up line evisceration, even if on off-handedly . Observe carefully the internal organs and the organoleptic state of the carcass. If the carcass and viscera have been affected under the organoleptic aspect, they should be condemned. If not, both are released.
- 2. Between 45 and 60 minutes, the internal organs are totally condemned and a careful evaluation of the carcass is carried out, based on the following criterion:
 - 2.1 Release.
 - 2.2 Conditional use of the carcass (heat treatment)
- 2.2 Total condemnation of the carcasses as to the organoleptic aspects, if altered..
 - 3. After 60 minutes:
 - 3.1 Internal organs should be condemned.
- 3.2 Careful evaluation of the carcass under the organoleptic aspect and application of the following criterion depending on what degree the organoleptic aspects have been affected:

- 3.2.1 Conditional use.
- 3.2.2 Total condemnation.

IMPROPER BLEEDING (Article 236 of RIISPOA) THINNESS

Article 169 (RIISPOA) - "Lean meats - thin animals, free from any pathologic process, may be destined to conditional use (canning or sausages)."

Article 231 (RIISPOA) - "Endo and ectoparasitosis, when not accompanied by thinness, should determined the condemnation of the viscera or of the altered portions."

SEPTICEMIA

Article 229 (RIISPOA) - "All birds presenting, in the *ante* or *post mortem* examination, suspect symptoms of tuberculosis, pseudo-tuberculosis, diphtheria, cholera, variola, avian typhus, white diarrhea, paratyphosis, leucosis, pest, general septicemia, psittacosis and staphylococcal infections should be condemned."

ASCITIC SYNDROME (Circular Letter SECAR/DIPOA/CIPOA Nº 160/91, 07/10/91)

SPECIAL DISEASES (Article 229 of RIISPOA)

Bird carcasses showing evidence of any disease characterized by the presence of organisms or toxins harmful for human consumption, in the meat or other edible portions should be totally condemned. Inspection of Product of Animal Origin