

**SEA FISHERIES (FISH INSPECTION AND QUALITY
ASSURANCE) REGULATIONS**

[S.1. 22 of 1995.)

under section 14

[13th November, 1995]

[Commencement.)

1. Fishing vessel certification

(1) No person shall use a vessel for fishing or for transportation of fish unless the vessel displays a certificate that has been issued by Fish Inspection as such certifying that the vessel meets the requirements of Schedule I of these regulations.

[Schedule I.]

(2) The certificate on a vessel may be withdrawn by a fish inspector where the vessel is not maintained or operated in compliance with the requirements of Schedule I to these Regulations.

2. Fish unloading handling and holding

(1) No person shall discharge or hold fish unless the unloading, handling or holding meets the requirements of Schedule 11 to these Regulations.

[Schedule 11.]

(2) No person shall import or export any fish unless the unloading, handling and holding have been conducted in accordance with Schedule 11 to these Regulations.

[Schedule 11.]

(3) (a) No person shall unload or discharge fish from a fishing vessel or fish transport vessel in the absence of a fish inspector;

(b) It is the responsibility of the owner of the fish to ensure that a fish inspector is present when fish is discharged or unloaded.

3. Fish establishment and cold room registration

(1) No person or a corporate body shall operate a fish establishment or coldroom by handling, processing, storing or sale of fish or fishery products without being validly registered with the Fish Inspection Branch, Federal Department of Fisheries after meeting the requirements of Schedules III and IV of these Regulations.

[Schedules III and IV.]

(2) (a) The registration certificate issued to a fish establishment or coldroom may be withdrawn and the premises sealed where the fish establishment or cold room is not maintained or operated in compliance with the requirements of Schedule III and IV to these Regulations.

[Schedules III and IV.]

(b) Where this happens, the coldroom or establishment ceases to have any valid registration certificate and so cannot operate.

4. Handling and processing of fish products

No person or corporate body shall place for sale any fish or fishery products unless the product has been landed in very hygienic manner and in full compliance with the requirements of Schedule IV to those Regulations.

[Schedule IV.]

5. Prohibition of certain fish and fishery product

No person or corporate body shall import, export, or attempt to import, export, process, move or place for sale in Nigeria the following-

(a) any fish that is tainted, decomposed or unwholesome or otherwise fails to meet the requirements of Schedule IV to these Regulations;

[Schedule IV.]

(b) poisonous fish of the following families: Tetradontidae, Molidae, Diodontidae and Canthigasteridae;

(c) fish containing biotoxines;

(d) radioactive fish or fishery products.

6. Preservation storage and display for sale

(1) No person shall preserve, store or display fish for sale unless in accordance with Schedule II and IV to these Regulations.

[Schedule 11 and IV.]

(2) Fresh fish shall be preserved, stored and displayed in ice in very hygienic manner.

(3) Where fish is displayed for sale it shall be covered and exclude insects and pests.

(4) Display tables shall be made of smooth, non-absorbent and easy to clean surfaces.

(5) Fish shall not be thrown on floors, stepped on or handled in a manner calculated to damage or contaminate it.

7. Fish storage cold rooms

(1) No coldroom used for storage of frozen fish or fishery products shall operate at a temperature higher than 30 °C and must comply with requirements in Schedule VII to these Regulations.

[Schedule VII.]

(2) No coldroom used for storage of frozen fish or fishery products shall fail to keep and produce on demand by fish inspectors, records of product stored and temperature charts for the duration of storage.

8. Fish transportation

(1) No person or corporate body shall transport fish unless in accordance with the requirements in Schedule VII to these Regulations.

[Schedule VII.]

(2) Fish shall not be transported in an open vehicle.

9. Fish packaging and identification marks

(1) No person or corporate body shall package fish or fishery products unless the requirement in Schedule VI to these Regulations are fully complied with.

(2) No person or corporate body shall package fish or fishery products either for export or sale in Nigeria without stating unambiguously, on the label of each package, the name and address of the owner of the product in Nigeria.

(3) Where size classification is used for labelling the type of product, each size classification should be approved by the Federal Department of Fisheries.

10. Import and export of fish or fishery products

(1) No person or corporate body shall import or export fish or fishery products without satisfying all the requirements contained in these Regulations.

(2) No person or corporate body shall load a vessel for export or unload vessel of imported fish or fishery products unless the consignment has been duly inspected by fish inspectors and records taken.

(3) No person or corporate body shall discharge, unload or place for sale an imported fish or fishery product unless the following documents have been screened by the fish inspectors for the purposes of inspecting the assignment-

- (i) valid licence from the Federal Department of Fisheries;
- (ii) copy of bill of lading;
- (iii) copy of Health Certificate issued by competent authority of the country of origin;
- (iv) certificate of being radioactive free by a competent authority in Nigeria;
- (v) evidence of storage facilities and distribution channels for the consignment within Nigeria;
- (vi) total quality and value of the import.

(4) No person or corporate body shall unload a vessel for export of fishery products unless the consignment had been inspected by the fish exporters, records taken and the following information supplied to the fish inspectors branch of the Federal Department of Fisheries-

- (i) name and address of buyer to whom shipment is to be made;
- (ii) description of product to be shipped;
- (iii) quantity of product to be shipped;
- (iv) name of vessel carrying the shipment and date of departure;
- (v) port of departure in Nigeria and port of unloading outside Nigeria;
- (vi) total value of the exported product.

(5) No person or corporate body shall fail to report to the Federal Department of Fisheries any incident of rejection of fish or fishery products exported by him giving full reasons and other details for the rejection.

11. Designation of fish inspectors

For the purpose of enforcing these Regulations, the Federal Department of Fisheries shall have and maintain a branch called "Fish Inspection and Quality Assurance Branch". Fisheries officers with food science or food technology or fish technology background shall be designated as "fish inspectors".

12. Duties and powers of fish inspectors

(1) No person or corporate body shall hinder, obstruct, interfere, prevent, or attempt to or conspire, to hinder, obstruct, interfere, or prevent any fish inspector from carrying out his duties in enforcing these Regulations.

(2) The fish inspector has powers to carry out duties as specified in Schedule V to these Regulations without hindrance.

[Schedule V.]

(3) The fish inspector may take free samples of fish or fishery products for the purpose of paragraph II, Schedule V to these Regulations.

(4) The fish inspector may detain a suspected fish or fishery product and embargo its sale and the owner notified further checks give conclusive state of the product.

(5) The fish inspector has power to seize and destroy fish or fishery product that is not fit for human consumption or fail to comply with paragraphs 5 and 10 of these Regulations or in pursuance of paragraph 14 of these Regulations.

(6) The fish inspector has power to withdraw certification from a vessel as in paragraph I of these Regulations until full compliance is maintained.

(7) The fish inspector has power to withdraw registration certificate from a coldroom or fish establishment as in paragraph 3 of these Regulations until full compliance is maintained.

13. Guidelines on compliance with regulations

The Federal Department of Fisheries shall issue guidelines as and when deemed necessary for the purpose of facilitating compliance to these Regulations, It shall be an offence not to follow any guidelines so issued.

14. Offences and penalties

Where any person contravenes the provisions of these Regulations, the following shall apply-

- (a) any vessel involved in contravening regulation 1 of these Regulations shall be grounded for non-certificate until compliance is effected. A fine of ₦50,000 shall be paid on conviction in a court;
- (b) penalty for the contravention of regulation 2 of these Regulations shall be the seizure and disposal of the fish or fishery products involved; and or payment of ₦25,000 on conviction in a court;
- (c) penalty for the contravention of regulations 3 and 4 of these Regulations shall be sealing of the establishment or coldroom; and payment of ₦25,000 on conviction in a court;
- (d) penalty for the contravention of regulations 5 and 6 of these Regulations shall be the seizure of the fish, and the fine of ₦ 50,000 on conviction in a court;
- (e) penalty for the contravening of regulations 7 and 8 of these Regulations shall be the sealing of the coldroom, the seizure of vehicle and or the fish stored, and a fine of ₦20,000 on conviction in a court;
- (f) penalty for the contravening of regulation 9 of these Regulations shall be seizure of packed products (fish) and a fine of N25,000 on conviction in court;
- (g) penalty for the contravening of regulations 10 and II of these Regulations shall be the seizure of the fish or fishery product; and a fine of ₦50,000 on conviction;

- (h) penalty for contravening of regulations 12 and 13 or any other regulation of these Regulations shall be the closure of the establishment or coldroom, or grounding of the fishing vessel, or seizure of the fish as the case may be, and the payment of ₦50,000 on conviction in court.

15. Disposal of seized fish or fishery products

All seized fish or fishery products in enforcing these Regulations shall be disposed of by the Federal Department of Fisheries as follows -

- (a) sale by auction of fish still fit for human consumption and the revenue paid to the Federal Government; and
- (b) destroying any fish unfit for human consumption.

16. Compliance requirements

The compliance requirements contained in the Schedules to these Regulations are an integral part of these Regulations.

17. Interpretation

In these Regulations, unless the context otherwise requires -

"coldroom" means the same as coldstore used for storage of frozen fish or fishery products;

"consignment" means the quality of fishery products bound for one or more customers in the country of destination;

"establishment" means the premises authorised for the handling and packing of fresh or procured products;

"fish inspection" means the use of all methods and procedures available in effectively measuring the adequacy and value of quality control measures;

"fishery products" means all sea water and freshwater animals or parts thereof, including their food, excluding aquatic animals, frogs;

"fishery samples" means statistically taken fish samples which shall not be paid for by the Inspectors;

"fresh products" means fishery products, whether whole or prepared, which have not been submitted to any treatment to ensure preservation other than chilling;

"frozen products" means fishery products which have been submitted to a freezing process to reach a temperature of 18°C or lower.

"packaging" means the procedure of protecting fishery products by a wrapper, a container or any suitable device;

"prepared products" means fishery products having undergone an operation affecting their physical wholeness such as gutting, heading, slicing, filleting, chopping, etc.;

"processed products" means fishery products which have been submitted to a chemical or physical process such as heating, smoking, salting, dehydration or marinating of fresh products, whether or not associated with other foodstuffs or to a combination of these various processes;

"quality assurance" means all activities and functions concerned with the attainment of quality including functions of administration and management as well as technical operations such as inspection, testing and quality control;

"quality control" means steps taken to inhibit or retard deteriorative changes of quality in fish by any procedure, method, technique and process available;

"regulations" refers to the Fish Inspection and Quality Assurance Regulations.

18. Citation

These Regulations may be cited as the Sea Fisheries (Fish Inspection and Quality As-

SCHEDULES

SCHEDULE 1

[Paragraph I.]

Compliance requirements

CONDITIONS APPLICABLE TO VESSELS USED FOR FISHING OR TRANSPORTING FISH

Protection of catch

1. Areas where fish and ice are stored shall-

- (a) have covers to protect the fish and ice from the weather;
- (b) be provided with drainage to effectively remove ice melt water and ensure that fish and ice do not come into contact with bilge water or other contaminants; and
- (c) where it is necessary to prevent physical damage to the fish, be divided into pens which shall be shelved vertically at intervals of 90 cm or less.

Construction of storage areas

2. Fish and ice storage areas shall be of non-absorbent, non-corrodible materials and so constructed as to preclude physical damage to the fish and state cleaning, and any surfaces that contact fish shall be smooth and free from tracks and crevices.

3. Boxes for fish other than live shell fish shall be of smooth, non-absorbent, non-corrodible materials, other than wood, free from cracks and crevices and so constructed as to provide drainage and protect the fish from damage by crushing when the boxes are stacked.

Construction of bulkheads

4. Fish storage areas shall be separated from the engine compartments and other heated areas of a vessel by water tight, insulated bulkheads and well surfaces; deckheads and bulkheads in frozen storage areas of a vessel shall be well insulated. Minimum "R" factor of 20 for insulation is to be ensured in fish storage areas.

Fish handling equipment and practices

5. Fish handling equipment, such as chutes, conveyors, fish washers, tables and utensils, shall be of smooth, non-absorbent, non-corrodible materials other than wood, free from cracks and crevices and so constructed as to facilitate cleaning.

6. Forks, pumps, tools or other equipment and practices that pierce, tear or otherwise damage or contaminate the edible portion of fish shall not be used.

Preservation of catch

7. Fish, while on board a vessel, used for fishing or transporting fish, shall be-

- (a) preserved by the use of fine ice sufficient to reduce and hold the temperature at 4°C or lower, and such ice shall be made from water from a source approved by the Fish Inspection Branch; or
- (b) preserved by such other methods as may be approved by the Federal Department of Fisheries.

8. Where chilled water systems are installed on a vessel, such system shall be of materials approved by the Federal Department of Fisheries and constructed to facilitate proper cleaning and be capable of holding fish at 1°C

Freezing facilities and practices

9. Freezing facilities on a vessel shall be capable of freezing the daily catch at a rate equivalent to at least the freezing rate of a 25 mm thick block of fish when the temperature of the thermal center is reduced from 0°C to 20°C in two hours or less.

10. (i) Fish on board a vessel shall be freezing at a rate not less than the rate prescribed by paragraph 9 of this Schedule.

(ii) In the case of a packaged fish product on board a vessel, the time required to reduce the thermal center of a packaged product to 20°C shall not exceed 36 hours.

11. (i) Except for brine frozen fish, the thermal center of the fish on board a vessel shall be reduced to a temperature of 20°C or lower before the fish can be removed from the frozen to

the cold storage area.

(ii) In the case of brine frozen fish on board a vessel, the thermal center of the fish shall be reduced to 12 °C before the fish can be removed from the freezer to the cold storage area.

12. After freezing, fish on board a vessel shall be glazed or packaged to protect it against dehydration and oxidation.

13. Storage areas in which frozen fish held on board a vessel shall be maintained at a temperature of 20 °C or lower.

Sanitation

14. Fish-receiving areas and equipment, containers and utensils used in the hauling of fish on board a vessel shall be thoroughly cleaned with water from a source approved by the Fish Inspection Branch and disinfected at least once daily.

15. Following the discharge of fish from a vessel, all equipment used in the handling of fish and the storage areas, chilled water system, such containers, pegboards and shelf boards shall be forthwith thoroughly cleaned with water from a source approved by the Fish Inspection Branch and disinfected.

Storage records

16. A storage record of the fish catch shall be kept on all fishing vessels and the identity of each day's catch shall be maintained. Similarly the temperature chart of the cold storage area shall be maintained on an hourly basis.

Hand washing and toilet facilities

17. Hand-washing and marine-type toilet facilities shall be provided on vessels of 13 m length overall and above that have sleeping accommodation and shall be maintained in a clean and sanitary condition.

SCHEDULE II

[Paragraphs 2 and 6.]

Requirements during and after landing on shore

Fish handling equipment and practices

1. Unloading and landing equipment shall be constructed of material which is easy to clean and disinfect and shall be of non-corrodible materials, free from cracks and crevices, and shall be kept in a good state of repair and cleanliness.

2. During unloading and landing, contamination of fishery products shall be avoided. It shall be ensured that-

- (a) unloading and landing operations proceed rapidly;
- (b) equipment and handling practices that cause damage to the edible parts of the fishery products are not allowed.

Construction of receiving and sales areas

3. Parts of auction or wholesale markets where fishery products are displayed for sale shall-

- (a) be covered and have walls which are easy to clean;
- (b) have waterproof flooring which is easy to wash and disinfect and laid in such a way as to facilitate the drainage of water and have a hygienic waste water disposal system;
- (c) be equipped with sanitary facilities with as appropriate number of wash basins and flush lavatories. Wash basins shall be supplied with materials for cleaning the hands and single-use hand towels;
- (d) be well lit to facilitate the inspection of fishery products;
- (e) when they are used for display or storage of fishery products, not to be used for other purposes;
- (f) be cleaned regularly, crates shall be cleaned and rinsed inside and outside with portable water and shall be disinfected after each sale;

- (g) have displayed in a prominent position signs prohibiting smoking, instituting, eating and drinking;
- (h) be closable and kept closed when the fish inspection branch considers it necessary;
- (i) have facilities to provide adequate potable water supplies;
- (j) have special water-tight receptacles made of corrosion-resistant materials for fishery products which are unfit for human consumption.

4. After landing or, where appropriate, after first sale, fishery products shall be transported without delay under conditions laid in Schedule VII of these Regulations, to their place of destination.

[Schedule VII]

5. The general conditions of hygiene laid down in Schedule III paragraph 2 with the exception of point B I (a) of this Annex shall apply *mutatis mutandis* to the markets in which fishery products are displayed for sale or stored.

[Schedule III]

6. The general conditions of hygiene laid down in Schedule III, section 11 of this Annex shall apply *mutatis mutandis* to wholesale markets.

SCHEDULE III [Paragraph 3.]

General conditions for establishments on land

General conditions relating to premises and equipment

Establishment shall afford at least the following facilities

1. Working areas of sufficient size for work to be earned out under adequate hygiene conditions, Their design and layout shall be such as to preclude contamination of the product and keep quite separate the clean and contaminated parts of the building.
2. In areas where products are handled, prepared and processed-
 - (a) waterproof flooring which is easy to clean and disinfect and laid down in such a way as to facilitate the drainage of the water;
 - (b) walls which have smooth surfaces and are light in colour, easy to clean, durable and impermeable;
 - (c) ceilings or roof linings which are easy to clean;
 - (d) doors in durable materials which are easy to clean;
 - (e) adequate ventilation and, where necessary, good steam and water-vapour extraction facilities;
 - (f) adequate lighting;
 - (g) an adequate number of facilities for cleaning and disinfecting hands, in work rooms and lavatories taps shall not be hand-operable. These facilities shall be provided with single one hand towels;
 - (h) facilities for cleaning plant, equipment and utensils.
3. In cold rooms where fishery products are stored-
 - (i) the provisions set out under sub-paragraph 2 (a), (b), (c) and (i) shall apply;
 - (ii) there must be a sufficiently powerful refrigeration plant to keep the products at temperatures prescribed in these Regulations.
4. Appropriate facilities for protection against pests such as insects, rodents, birds, etc.
5. Instruments and working equipment such as cutting labels, containers, conveyor belts and knives made of corrosion-resistant materials, easy to clean and disinfect.
6. Special watertight, corrosion-resistant containers for fishery products not intended for human consumption.
7. Facilities to provide adequate supplies of potable water under pressure.

8. A hygienic waste water disposal system.

9. An adequate number of changing rooms with smooth, waterproof, washable walls and floors, wash basins and flush lavatories, The latter should not open directly on to the work rooms. The wash basin shall have materials for cleaning the hands and disposable towels, the wash basin taps shall not be hand-operable.

GENERAL CONDITIONS OF HYGIENE

General conditions of hygiene applicable to premises and equipment

1. Floors, walls and partitions, coiling or roof linings, equipment and instruments used for working on fishery products shall be kept in a satisfactory state of cleanliness and repair, so that they do not constitute a source of contamination for the products.
2. Rodents, insects and any other vermin shall be systematically determined in the premises of on the equipment. Rodenticides, insecticides, or disinfectants and any other potentially toxic substances shall be stored in rooms or cupboards which can be locked; their use shall not present any risk of contamination of the products.
3. Working areas, instruments and working equipment shall be used only for work in fishery products unless authorised by the Fish Inspection Branch.
4. Permitted and authorised detergents, disinfectants and similar substances shall be used in such a way that they do not have adverse effects on the machinery, equipment and products.

General conditions of hygiene applicable to staff

1. The highest possible standard of cleanliness is required of staff as follows -
 - (a) staff shall wear suitable working cloths and headgear which completely enclose their hair. This applies particularly to persons handling exposed fishery products;
 - (b) staff assigned to the handling and preparation of fishery products shall be required to wash their hands at least the time work is to be resumed; wounds on the hands shall be covered by a waterproof dressing;
 - (c) smoking, spitting, eating and drinking in work and storage areas of fishery products are prohibited.
2. The employer shall take all the requisite measures to prevent persons liable to contaminate fishery products from working on and handling them until there is evidence that such person can do so without risk.
3. When recruited, any person working on and handling fishery products shall be required to prove, by a medical certificate, that there is no impediment.

SCHEDULE IV

SPECIAL CONDITIONS FOR HANDLING FISHERY PRODUCTS ON SHORE

Conditions for fresh products

1. (a) When chilled unpackaged products are dispatched, prepared or processed immediately after reaching the establishment, they shall be stored or displayed under ice in the establishment.
 - (b) Re-icing shall be carried out as often as is necessary.
 - (c) The ice used shall be made from potable water and be stored under hygienic conditions in receptacles provided for the purpose.
 - (d) Prepacked fresh products shall be chilled in ice or refrigerated chill rooms.
2. Operations such as heading, gutting and dressing shall be carried out -
 - (a) hygienically and washed thoroughly with potable water;
 - (b) in such a way as to avoid contamination or spoilage of fillets and slices;
 - (c) not in a place other than that used for heading and gutting operations.
3. Guts and parts that may constitute a danger to public health shall be separated from and removed from vicinity of products intended for human consumption.
4. Containers used for the dispatch or storage of fresh fishery products shall be designed in such a way as to ensure both their protection from contamination and their preservation under sufficiently hygienic conditions and, more particularly, they shall provide adequate drainage of

melt water.

5. Waste shall either be continuously disposed or be placed in leakproof, covered containers which are easy to clean and disinfect waste shall not be allowed to accumulate in working areas. The containers, receptacles or premises set aside for waste shall always be thoroughly cleaned and if appropriate disinfected after use.

Conditions for frozen products

1. Plants shall have-

- (a) freezing equipment sufficiently powerful to achieve a rapid reduction in the temperature so that the temperature laid down in these Regulations can be obtained in the product;
- (b) freezing equipment sufficiently powerful to keep products in storage rooms at a temperature not exceeding those laid down in these Regulations, whatever the ambient temperature may be.

2. Fresh products to be frozen shall comply with the requirements of section 1 of this Schedule.

3. Storage rooms shall have a temperature recording device in a place where it can easily be read. The temperature sensor of the recorder shall be located in the area further away from the cold source, that is where the temperature in the storage room is the highest.

4. Temperature charts shall be available for inspection by fish inspectors at least during the period in which the products are stored.

CONDITIONS FOR THAWING PRODUCTS

Establishments that carry out thawing operations shall comply with the following requirements

1. Fishery products shall be thawed under hygienic conditions; their contamination shall be avoided and there shall be adequate drainage for any melt water produced; during thawing, the temperature of the products shall not increase excessively.

2. After thawing, fishery products must be handled in accordance with this requirement-

- (a) when they are prepared or processed, these operations shall be carried out without delay;
- (b) if they are put directly onto the market, the unsold consignment cannot be put back into coldrooms for frozen products. They shall be stored only in chill rooms.

Conditions for processed products

1. Fresh, frozen and thawed products used for processing shall comply with the requirements of sections I and II of this Schedule.

2. Where the processing treatment is carried out to inhibit the development of pathogenic organisms, or if it is a significant factor in the preservation of the product, the treatment shall be scientifically recognised and in accordance with the internationally recommended codes of practice by the *Codex Alimentarius* Commission for such a product; employing good manufacturing practice.

The person responsible for an establishment shall keep a register of the processing carried out. Depending on the type of process employed, beating time and temperature, salt content, PH, water content, etc., shall be monitored and controlled. Records shall be kept at least for the expected storage life of the products and be available to the fish inspectors.

3. For products which are preserved for a limited period by a treatment such as salting, smoking, drying or marinating, the appropriate conditions for storage shall be clearly marked on the packaging.

In addition, the following conditions shall be compiled with-

Canning

4. In the case of fishery products which have been subjected to moralisation in hermetically sealed containers-

- (a) the water used for the preparation of cans shall be potable water;
- (b) (i) the process used for local treatment shall be appropriate, having regard to such major criteria as the heating time, temperature, filling, size of containers, etc.; a record of which must be kept;

- (ii) the heat treatment should be capable of destroying or inactivating pathogenic organisms and the spores of pathogenic micro-organisms;
- (iii) the heating equipment must be fitted with devices for varying whether the containers have in fact undergone appropriate heat treatment;
- (iv) potable water shall be used to cool containers after heat treatment, without prejudice to the presence of any chemical additives used in accordance with good technological practice to prevent corrosion of the equipment and containers;
- (c) further checks shall be carried out at random by the manufacturer to ensure that the processed products have undergone appropriate heat treatment viz microbiological examination of contents and containers in the establishment's laboratory or in another approval laboratory;
- (d) samples shall be taken of production each day at predetermined intervals, to ensure the sufficiency of sealing. For that purpose, appropriate equipment shall be available for the examination of cross-sections of the can-seams;
- (e) checks are carried out in order to ensure that containers are not damaged;
- (f) all containers which have undergone heat treatment under practically identical conditions shall be given a batch identification mark.

Smoking

5. Smoking shall be carried out in separate premises or a special place equipped, if necessary, with a ventilation system to prevent the smoke and heat from the combustion from affecting other premises or places where fishery products are prepared, procured or stored-

- (a) materials used to produce smoke for the smoking of fish shall be stored away from the place of smoking and shall be used in such a way that they do not contaminate the products;
- (b) materials used to produce smoke by burning wood that has been painted, varnished, glued or has undergone any chemical preservation treatment is prohibited;
- (c) after smoking, products shall be cooled rapidly to the temperature required for their preservation before being packaged.

Salting

6. (a) Salting operations shall take place in different premises and sufficiently removed from the premises where the other operations are carried out.

(b) Salt used in the treatment of fishery products shall be clean and stored in such a way as to preclude contamination. It shall not be re-used.

(c) Any container used for salting or curing shall be constructed in such a way as to prevent contamination during the salting or curing process.

(d) Containers or areas used for salting or curing shall be cleaned before use.

Cooked crustaceans and molluscan shellfish products

7. Crustaceans and molluscan shellfish shall be cooked as follows -

- (a) any cooking shall be followed by rapid cooling; water used for this purpose shall be potable water, clean sea water, if no other method of prevention is used, cooling shall continue until the temperature approaching that of melting ice is reached;
- (b) (i) shelling or shucking shall be carried out under hygienic conditions avoiding the contamination of the product;

- (ii) where such operations are done by hand, workers shall pay particular attention to the washing of their hands and all working surfaces shall be cleaned thoroughly;
 - (iii) if machines are used, they shall be cleaned at frequent intervals and disinfected after such working day;
 - (iv) after shelling, or shucking, cooked products shall immediately be frozen or kept chilled at a temperature which will preclude the growth of pathogens, and be stored in appropriate premises;
- (c) every manufacturer must carry out microbiological checks on his production at regular intervals, complying with the approved standards.

Mechanically recovered fish flesh

8. The mechanical recovery of fish flesh shall be carried out under the following conditions-

- (a) mechanical recovery of gutted fish shall take place without undue delay after filleting, using raw materials free of guts. Where whole fish are used, they shall be gutted and washed beforehand;
- (b) the machinery shall be cleaned at frequent intervals and at least every two hours;
- (c) after recovery mechanically recovered flesh shall be frozen as quickly as possible or incorporated in a product intended for freezing or stabilizing treatment.

Conditions concerning parasites

1. During production and before they are released for human consumption, fish and fish products shall be subject to a visual inspection for the purpose of detecting and removing any parasites that are visible.

2. Fish or parts of fish which are obviously infested with parasites, and which are removed, shall not be placed on the market for human consumption.

SCHEDULE V

[Regulation 12.]

QUALITY CONTROL AND MONITORING OF PRODUCTION CONDITION

General monitoring

Arrangements for checking and monitoring shall be made by the Federal Department of Fisheries "Fish Inspection and Quality Assurance Branch" so as to establish whether the requirements laid down in this Fish Inspection and Quality Assurance Regulation's policy are complied with. Such arrangements shall include in particular-

- (1) Check on the fishing vessels during their stay in the port.
 - (2) A check on the conditions of landing and first sale.
- (3) An inspection at regular intervals of establishments to check, in particular-
- (a) whether the conditions for approval and registration are still fulfilled;
 - (b) whether the fishery products are handled correctly;
 - (c) the cleanliness of the premises, facilities and instruments and staff hygiene;

- (d) whether identification marks are put correctly.
- (4) An inspection of the wholesale and auction markets.
- (5) A check on storage and transport conditions.
- (6) A check on fish or fishery products whether they are fit for human consumption.

SPECIAL CHECKS

Sensory assessment

Each batch of fishery products shall be submitted for inspection by fish inspectors of Federal Department of Fisheries "Fish Inspection and Quality Assurance Branch" at the time of landing or before first sale to check whether they are for human consumption. This inspection comparison sensory assessment carried out by sampling.

If the sensory examination reveals any doubt as to the freshness of the fishery products, use may be made of laboratory checks.

Laboratory checks

A. Chemical checks

(1) Samples shall be taken and subjected to laboratory analysis for the control of the following parameters -

- (a) TVB-N (Total Volatile Basic Nitrogen) and TMA N (Trimethylamine Nitrogen);
- (b) Histamine.

Nine samples shall be taken from each batch. These shall fulfil the following requirements -

- (i) the mean value shall not exceed 100 ppm;
- (ii) two samples may have a value of more than 100 ppm but less than 200 ppm;
- (iii) no sample may have a value exceeding 200 ppm.

(2) Contaminants present in aquatic environment

Without prejudice to other legislation concerning water protection and management, fishery products shall not contain in their edible parts contaminants present as the square environment such as heavy metals and organochlorinated substances at such a level that the calculated dietary intake exceeds the acceptable daily or weekly intake for humans.

A monitoring system shall be established by the Federal Department of Fisheries to check the level of contaminations of fishery products.

(3) The methods of analysis to be used to check the chemical parameters as well as sampling plan, and the acceptance levels for the chemical parameters are to be approved.

B. Microbiological analysis

Without prejudice to other legislation, the microbiological criteria, including samples, plans and methods of analysis, are to be laid down and approved when there is a need to protect public health.

SCHEDULE VI
[Regulation 9.]

Packaging and identification marks

Without prejudice to other legislation relating to fishery product packaging, these conditions shall also apply in addition.

1. Packaging shall be carried out under satisfactory conditions of hygiene, to preclude contamination of the fishery products.
2. Packaging materials and products liable to enter into contact with fishery products shall comply with all the rules of hygiene, and in particular-
 - (a) they shall not be such as to impair the organoleptic characteristics of the fishery products;
 - (b) they shall not be capable of transmitting to the fishery products substances harmful to human health;
 - (c) they shall be strong enough to protect the fishery products adequately.
3. With the exception of certain special containers inside of impervious, smooth and corrosion resistant material which are easy to clean and disinfect, which may be re-used after cleaning and disinfecting, packaging materials may not be re-used. Packaging materials used for fresh products held under ice shall provide adequate drainage for melt water.
4. Unused packaging materials shall be stored in premises away from the production area and be protected from dust and contamination.
5. It must be possible to trace for inspection purposes the establishment of dispatch of consignments of fishery products by means of both labelling and accompanying documents. For that purpose, the following information shall appear on the packaging and in accompanying documents in English language-
 - (a) the full address indicating the location of the establishment (street name and number, city, state and country);
 - (b) identification of the establishment by its official registration number with the Federal Department of Fisheries;
 - (c) the net weight in kilogramme of product in the package or bag;
 - (d) description of the fish, e.g. Large, Medium, Small or Mixed, and the species name (e.g. Small Croaker),
6. Fish shall be stored and packaged or boxed for sale according to species and size. The size ranges for large, medium or small for any species shall be in accordance with that approved by the Federal Department of Fisheries.

SCHEDULE VII
[Regulations 7 and 8.]

Storage and transport

1. Fishery products shall, during storage and transport, be kept at the temperature laid down in these Regulations and in particular-
 - (a) fresh or thawed products and cooked and chilled Crustacean and molluscan shellfish products shall be kept at the temperature of melting ice;
 - (b) frozen fishery products shall be kept at an even temperature of 30 °C or less in all parts of the products allowing for the possibility of brief upward fluctuations of not more than 3 °C during transport.
2. Vehicles used for the transport of fishery products shall be constructed and equipped in such a way that-

- (a) the temperatures laid down in these regulations can be maintained throughout the period of transport;
- (b) if ice is used to chill the products, adequate drainage shall be provided in order to ensure that water from melted ice does not stay in contact with the products;
- (c) the inside surfaces do not adversely affect the fishery products;
- (d) they shall be smooth and easy to clean and disinfect.

3. Means of transport used for fishery products shall not be used for transporting other products likely to impair or contaminate fishery products.

4. Fishery products are not to be transported in a vehicle or container which is not clean or which should have been disinfected

5. Fishery products are to be transported in vehicles with covered and insulated body. Frozen products travelling over a distance of more than 30 kilometres should be transported in refrigerated vehicles.