THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

REGULATIONS
(under section 37 (1))

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

(Made by the Minister on the 9th day of May, 2000)

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PART I—*Preliminary*

1. These Regulations may be cited as the Aquaculture, Inland and Marine Products and By-Products (Inspection, Licensing and Export) Regulations, 2000. Citation.

2. In these Regulations— Interpretation.

"amenities" includes toilets, showers, locker rooms, change rooms, canteens, kitchens, smoking rooms for staff and sleeping quarters on a vessel;

"approved analyst" means an analyst approved by the competent authority;

"batch" means a quantity of prescribed products of the same type consisting of one or more lots, or parts of lots, from the same licensed processing establishment or licensed vessel or harvested from a production area;

"can" means an immediate container made of metal, glass or other material suitable for use as a hermetically sealed container;

"canned" means preserved by thermal processing and enclosed in a hermetically sealed can;

"carton" means an outer container, case or crate used for packaging an immediate container;

"chemical compound" means any chemical substance that is used in a licensed processing establishment or on a licensed vessel for any purpose other than as a product ingredient;

"chilled", in relation to prescribed products, means cooled by a process so that the temperature of the product is held between -1° and +4° Celsius;

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"clean" means to remove soil, product residues, dirt, grease or other objectionable matter that may cause contamination of prescribed products;

"clean sea water" means sea water or brackish water which is free from microbiological contaminants or other toxic substances;

"coastal zone" means that part of the coast or an estuary or area of sea water which consists of homogenous hydrological systems;

"Codex" means the **Codex Alimentarius** published by the Codex Alimentarius Commission of the United Nations as amended from time to time;

"cold store" means a place at a licensed processing establishment or on a licensed vessel in which chilled or frozen prescribed products are stored;

"container", in relation to a prescribed product, means the principal covering in which the product is packed;

"critical control point" means a step, practice, procedure, process or location, that can be controlled in order to prevent, reduce or eliminate a hazard, or minimize the likelihood of its occurrence;

"declared net contents" means a declaration in a trade description of the net contents of an immediate container of prescribed products;

"defective", in relation to a sample unit of prescribed products, means that the sample unit fails to meet tolerance or sample plan conditions specified in Part XIV;

"depuration" means the removal of impurities from marine species;

"disinfect" means reduce, by means of hygienically satisfactory chemical agents or physical methods or both, the number of micro-organisms to a level that will not lead to contamination of prescribed products;

"distribution system" means the public water supply;

"domestic distribution system" means the pipe-work, fittings and appliances within the curtilage of a licensed processing establishment which are installed between the distribution network and the taps to facilitate the provision of water for human consumption;

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"E.coli" means faecal coliforms which form indole from tryptophan at 44° C plus or minus 0, 2°C within 24 hours;

"essential services" include water, gas, electricity, sewerage drainage and water disposal;

"external cold storage facility" means a cold storage facility that is not located within a licensed processing establishment or on a licensed vessel;

"faecal coliform" means facultative, aerobic gram-negative, non-spore forming, cytochrome oxidase negative, rod-shaped bacteria that are able to ferment lactose with gas production in the presence of bile salts, or other surface active agents with similar growth-inhibiting properties, at 44°C plus or minus 0.2°C within 24 hours;

"fillet" means a portion of the flesh, with or without skin or bone or both, of a prescribed product;

"freezer" means a chamber or equipment used solely for the purpose of freezing prescribed products;

"frozen", in relation to a prescribed product, cooled in such a manner that the temperature of every part of the product is -18° Celsius or below after thermal stabilization;

"HACCP plan" means Hazard Analysis Critical Point plan prepared pursuant to regulation 93;

"hazard" includes any potential risk to the safety or wholesomeness of a prescribed product or its ingredients that may arise form the presence of biological, microbiological, chemical or physical property during the handling, harvesting and processing of the product;

"housing vessel" means a vessel used only for the housing of fishermen and their equipment at sea;

"identification code" means a letter, number or combination of letters and numbers that, together with a trade description, uniquely identifies the prescribed products in a carton;

"immediate container", in relation to a prescribed product, means the container of the product that is not separated from the product by any intervening covering, except lining material;

"ingredient", in relation to a prescribed product, means any substance (including a product additive) that is—

(*a*) a constituent of the product; or

(*b*) present in the product as a result of processing;

"labeling", in relation to a chemical compound, includes any printed direction, relating to—

(*a*) the uses, storage or disposal of that chemical compound;

(*b*) the means of removal of any residue; or

(*c*) the means of disposal of any waste or packaging in which the chemical substance was contained,

that is affixed to or enclosed in the packaging;

"lot" means a quantity of prescribed products of a given species that has been subjected to the same or similar treatment and has come from the same population area or vessel;

"MPN" means Most Probable Number;

"marine biotoxins" means poisonous substances accumulated by bivalve molluscs feeding on plankton containing toxins;

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"monitoring" includes inspection, measuring, sampling and analysis, whether periodically or continuously;

"noxious substance" means any chemical residue, marine biotoxin or other contaminant or prohibited substance;

"pest" includes any insect, rodent, bird or other vermin;

"port" includes an airport and a seaport;

"potable water" means water which meets the standard specified in regulation 75;

"prescribed products" means aquaculture, inland or marine products and their by-products, for export;

"product handling area" means an area on a licensed vessel or in a processing establishment in which prescribed products are handled, processed or packaged;

"sample unit" means such quantity of prescribed products, as may be determined by the competent authority, drawn from a batch for the purpose of representing the batch;

"shellfish" means oysters, mussels, clams, cockles or scallops, but does not mean the adductor muscle which is extracted from the scallop;

"sterilization" means the subjecting of equipment diagnostic media or any other like material to heat treatment using water at a specified temperature and for a specified time;

"storage area" means an area solely used for the storage of packed prescribed products, packaging materials and ingredients;

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"water intended for use in the processing of prescribed products" means—

(*a*) potable water intended for food preparation, cooking or other domestic purposes, regardless of its origin (including wells, ponds and streams) and whether it is supplied from a public or private distribution system, from a tanker, or in bottles or other containers; and

(*b*) water used in any licensed processing establishment or vessel for the manufacture, processing, preservation or marketing of prescribed products or substances intended for human consumption; and

"wholesome", in relation to water, prescribed products or an ingredient thereof, means free from micro-organisms, parasites, disease, damage, mould, decay, contamination, deterioration or any other defect which renders the water, prescribed products or ingredients thereof, unfit for human consumption;

Exception.

3.—(1) These Regulations shall not apply to prescribed products—

(*a*) that are ships' stores or aircraft stores, which are brought into Jamaica for the service of a ship while on a voyage, or on an aircraft on a flight to or from Jamaica;

(*b*) that have not been produced, processed or manufactured in Jamaica, being products that have been imported into Jamaica and are in transit or held in bond for re-export;

(*c*) that are imported into Jamaica and re-exported in the same covering and under the same trade description as the covering and trade description in or under which they were imported;

(*d*) subject to paragraph (2), that are exported in a consignment that does not exceed—

(i) 1 litre in the case of liquid; or

(ii) 1 kilogram in any other case;

(*e*) that are being imported—

(i) as a commercial sample in the quantities specified in sub-paragraph (d); or

(ii) in such circumstances as are determined by the competent authority for the purposes of assisting it in the discharge of its functions under the Act or these Regulations.

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(2) Paragraph (1) (*a*) and (*b*) shall not apply to prescribed goods referred to therein that are deemed by the competent authority to be a health hazard.

(3) Paragraph (1) (*d*) shall not apply to products referred to therein that are exported with such frequency or in such manner as to suggest that they are being exported for commercial purposes.

(4) These Regulations shall not apply to—

(*a*) natural mineral waters; and

(*b*) waters which are medicinal products;

Official Stamp and List

Stamp. First Schedule. Form 1.

4. The official stamp of the competent authority shall be in the form set out as Form 1 in the First Schedule.

Official register. Second Schedule.

5.—(1) The official register of licences and operating certificates granted by the competent authority shall contain the information specified in the Second Schedule, and each entry therein shall be signed by the person authorized for that purpose by the competent authority and stamped with the official seal.

Third Schedule.

(2) The official register may be inspected by any member of the public upon payment of the appropriate fee specified in the Third Schedule.

Inspection and Approval of Production Areas

Inspection and demarcation of production area.

6.—(1) The competent authority may, from time to time, conduct or cause to be conducted the inspection, sampling, testing and analysis of the waters of production areas to ensure that there is no noxious substance present therein in such quantities as would be harmful to human health.

(2) Where any such inspection indicates—

(*a*) that the waters contain no noxious substance in the quantities referred to in paragraph (1), the competent authority may demarcate and approve that production area as one from which prescribed products may be harvested for export;

(*b*) the presence of any such substance above acceptable levels, the competent authority shall forthwith take such steps as are necessary to notify interested persons of the results of that inspection.

(3) Production areas in which bivalve molluscs, tunicates, echinoderms and marine gastropods are reared or harvested shall be demarcated in such a manner as to indicate—

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(*a*) the areas from which those products may be harvested for export for human consumption;

(*b*) subject to paragraph (4), the areas in relation to which harvested products—

(i) are required to undergo purification in a relay area before being exported;

(ii) can only be exported over such period (not being less than two months) as the authority may determine whether or not those products undergo purification; or

(iii) can only be exported after undergoing extensive purification.

(4) Harvested products from areas—

(*a*) referred to in paragraph (3) (*b*) (i) shall not exceed the limits of a five-tube, three-dilution MPN-test of 300 faecal coliform per 100 gram of flesh or 230 E.coli per 100 gram of flesh in 90% of any sample; and

(*b*) referred to in paragraph (3) (*b*) (ii) shall not exceed the limits of a five-tube, three-dilution MPN-test of 300 faecal coliform per 100 gram of flesh.

(4A) Notwithstanding the tests specified in paragraph (4), an equivalent test which is internationally recognized may be applied to determine the limits; applicable, to the harvested products referred to in that paragraph.

(5) The competent authority shall keep records of all inspections, sampling, testing and analysis carried out pursuant to paragraph (1).

Unsuitable growing or harvesting areas.

7.—(1) Prescribed products for export shall not be grown in or harvested from areas where there is a presence of pesticides, fungicides or heavy metals.

(2) Shellfish with depuration shall not be harvested for export from areas where faecal material, pathogenic micro-organisms, noxious substances, phytoplanktons or radionuclides are present in concentrations that are harmful to human health.

(3) Shellfish shall not be harvested from any production area in which—

(*a*) the concentration of paralytic shellfish poison equals or exceeds 80 micrograms per 100 grams of edible portion of raw shellfish; or

(*b*) poison is found in detectable harmful levels in the shellfish.

(4) Oysters intended for depuration shall not be harvested from production areas in which—

PART I—*Preliminary, contd.*

(*a*) the total coliform median MPN exceeds 700 per 100 ml or more than 10 per cent of the samples of the water exceed an MPN of 230 per 100 ml for a five-tube decimal dilution test; or

(*b*) the faecal coliform median MPN exceeds 88 per 100 ml or more than 10 per cent of the samples of the water exceeds an MPN of 260 per 100 ml for a five-tube decimal dilution test.

(4A) Notwithstanding the tests specified in paragraph (4), an equivalent test which is internationally recognized may be applied to determine the limits applicable to oysters.

(5) The species of fish specified in paragraph (6) shall not be harvested from coral reef areas at any time when those areas are affected by *Gamberdiscus toxicus* and other blooms of dinoflagellates producing ciguatoxins.

(6) The species of fish referred to in paragraph (5) are as follows—

(*a*) spanish mackerel;
(*b*) barracuda;
(*c*) coral trout;
(*d*) coral cod;
(*e*) surgeon fish;
(*f*) grouper;
(*g*) red snapper;
(*h*) red bass;
(*i*) red emperor;
(*j*) amber jack;
(*k*) paddletail;
(*l*) chinaman fish;
(*m*) moray;
(*n*) such other species as the competent authority may, by order, prescribe.

PART II—*Inspectors*

Identification card. First Schedule. Form 2.

8.—(1) Each inspector shall be furnished with an identification card in the form set out as Form 2 in the First Schedule.

(2) Every inspector shall affix his identification card number near his signature on every document signed by him.

PART III—*Laboratories*

Laboratory standards.

9.—(1) There shall be provided in every laboratory operated and maintained by the competent authority—

(*a*) a competent administrative structure;

(*b*) a documented management system and procedure for—

PART III—*Laboratories, contd.*

(i) the tracing, storage and retention of records; and

(ii) the adequate reporting of all tests and studies to the competent authority;

(*c*) a log book.

(2) All records relating to the activities and operation of a laboratory shall be kept for a period of—

(*a*) five years, in the case of records relating to the monitoring of production areas and noxious substances; and

(*b*) three years, in any other case.

(3) The competent authority shall ensure that each laboratory is adequately staffed with qualified administrative, management and scientific personnel.

Good laboratory practices

10.—(1) Every laboratory to which this Part applies shall comply with the principles of established good laboratory practices.

(2) The competent authority shall, when submitting the result of a laboratory test to a foreign competent authority, certify that the tests were carried out in a laboratory operated and maintained by it or any collaborating laboratory and in accordance with the principles of good laboratory practices.

(3) The competent authority shall institute a system for monitoring the implementation of the principles of good laboratory practices as aforesaid.

Collaborating laboratory

11.—(1) The competent authority may contract the services of any other competent laboratory (hereinafter in this regulation referred to as collaborating laboratory) to carry out, on the authority's behalf, such functions as it may specify.

(2) Where the competent authority contracts the services of collaborating laboratory the authority shall—

(*a*) determine the competence of the collaborating laboratory to carry out a sampling, test or analysis before requiring it to do so;

(*b*) take such steps as are necessary to ensure that—

(i) any sampling is carried out in compliance with a sampling plan and the integrity of the sample is maintained throughout the period of its delivery and handling;

(ii) appropriate and analytical methods are used in carrying out any test or analysis;

(iii) the collaborating laboratory is suitably equipped and staffed and operates in compliance with established international standards;

(iv) reports are submitted in conformity with standards observed by laboratories operated by the competent authority.

PART IV— *Licensing of Exporters, Establishments and Vessels*

Application for licences. First Schedule. Form 3. Form 3A. Form 4.

12.—(1) An application for a licence to export or enter prescribed products for export shall be in the form set out as Forms 3 and 3A, respectively in the First Schedule.

(2) An application for a licence to operate a processing establishment shall be in the form set out as Form 4 in the First Schedule.

Form 5.

(3) An application for a licence to operate a factory vessel, freezer vessel or carrier vessel shall be in the form set out as Form 5 in the First Schedule.

Third Schedule.

(4) An application under paragraph (1), (2) or (3) shall be accompanied by the appropriate fee specified in the Third Schedule and, as the case may require, shall comply with the provisions of regulation 16.

Grant or refusal of licence.

13.—(1) The competent authority may on receipt of an application under regulation 12, grant or refuse to grant a licence.

Form 6. Form 6A. Form 6B. Form 6C.

(2) A licence granted under paragraph (1) shall be in the form set out as Form 6, 6A or 6B or 6C in the First Schedule.

Form 7.

(3) Where the competent authority grants a licence pursuant to an application made under regulation 12 (2) or (3), it shall issue an operating certificate to the licensee in the form set out as Form 7 in the First Schedule.

(4) The competent authority shall not license any place as a processing establishment that—

(*a*) does not comply with the provisions of the Public Health Act or any regulations made thereunder;

(*b*) subject to paragraph (2), is a dwelling house or any part thereof is appurtenant to any dwelling house;

(*c*) is on premises on which there is also a dwelling house or a facility that the competent authority determines is not suitable for processing or handling prescribed products; or

(*d*) has no system for the freezing and storing of prescribed products.

(5) Premises used for the housing of a caretaker or security personnel for a processing establishment shall not be regarded as a dwelling house for the purposes of paragraph (4) (*b*) or (*c*).

(6) The competent authority shall not license a vessel for the harvesting, handling or processing of prescribed products unless that vessel—

PART IV— *Licensing of Exporters, Establishments and Vessels, contd.*

(*a*) is owned or controlled by a citizen of Jamaica;

(*b*) has an appropriate system for the storage of prescribed products;

(*c*) has crew members duly certified under the Public Health Act or any regulations made thereunder.

Renewal of licence

Third Schedule.

14. An application for the renewal of a licence granted under regulation 13 shall be in the form set out as Form 3, 3A, 4 or 5, as the case may require, and accompanied by the appropriate fee specified in the Third Schedule.

Plans and specifications for processing establishment.

15.—(1) An application under regulation 12 (2) or (3) in respect of a processing establishment or vessel shall be accompanied by—

(*a*) a HACCP plan or such other system or procedure which, in the opinion of the competent authority, is equivalent to a HACCP plan;

(*b*) an outline of good manufacturing practices; and

(*c*) the plans and specifications specified in paragraphs (2) and (3).

(2) The plans referred to in paragraph (1) shall include—

(*a*) a map showing the location of the site and any factory industry or activity within one kilometre of the processing establishment that may affect the hygienic preparation of prescribed products;

(*b*) an appropriate site plan showing—

(i) the layout of the premises;

(ii) roads;

(iii) water supply;

(iv) storm water drainage;

(v) waste water drainage;

(vi) on-site waste disposal;

(vii) all salient features of the site;

(viii) adjoining sites including location of adjacent establishments;

(*c*) an appropriate floor plan, indicating the auxiliary areas in which prescribed products will be handled (including laboratories, stores, cold stores, amenities, permanent fixtures and layout of equipment);

(*d*) a product flow chart and the main features of the product flow;

(*e*) a list of all major items of equipment used in the processing of prescribed products;

(*f*) amenities to be used by inspectors.

PART IV— *Licensing of Exporters, Establishments and Vessels, contd.*

(3) The specifications referred to in paragraph (1) shall be accompanied by the statement referred to in paragraph (4) and shall contain details as follows—

(*a*) construction materials;

(*b*) construction materials of the equipment used in product handling areas;

(*c*) surface finishes;

(*d*) surfaces with which ingredients or prescribed products will come in contact;

(*e*) availability of electricity and water;

(*f*) operating temperatures, freezing rate and storage capacity of all refrigeration equipment and refrigerated rooms, holds and tanks;

(*g*) [*Deleted by L.N. 40/2006.*]

(*h*) in the case of vessels, the number of crew and persons carrying out harvesting, handling, processing and storage duties.

(4) The statement referred to in paragraph (3) shall be prepared by a qualified cold storage technician detailing the following—

(*a*) in relation to each cold store and chiller—

(i) the method of refrigeration;

(ii) the storage capacity in kilograms for relevant prescribed products; and

(iii) holding temperature; and

(*b*) in relation to each freezer—

(i) the method of refrigeration;

(ii) the storage capacity in kilograms for the relevant prescribed products; and

(iii) the time required to reduce a full load of a stated prescribed product (processed on a vessel or at the processing establishment and to be stored in the freezer) from a stated initial temperature to a temperature of -18°C;

(5) [*Deleted by L.N. 40/2006.*]

Approval of alterations

16.—(1) A licensee shall not make any alteration to his licensed processing establishment or licensed vessel without the prior written approval of the competent authority.

PART IV— *Licensing of Exporters, Establishments and Vessels, contd.*

(2) An application for such approval shall be made in writing to the competent authority which shall, on receipt thereof—

(*a*) cause an inspection to be carried out of the licensed processing establishment or licensed vessel; and

(*b*) grant the approval on the recommendation of the inspector.

(3) Paragraphs (1) and (2) shall not apply to a minor alteration, not being an alteration that, in the inspector's opinion—

(*a*) is likely to affect the hygienic condition of the licensed processing establishment or licensed vessel; or

(*b*) the manner in which prescribed products are inspected.

(4) An application under paragraph (2) in respect of a licensed vessel shall be accompanied by the plan specified in paragraph (5).

(5) The plan refereed to in paragraph (4) shall include—

(*a*) a layout of the vessel;

(*b*) [*Deleted by L.N. 40/2006.*];

(*c*) a product flow chart;

(*d*) [*Deleted by L.N. 40/2006.*]

(*e*) the potable water supply or provision for the use of clean sea water;

(*f*) toilet facilities and means of storage and disposal of solid waste;

(*g*) the numbers of dories and canoes, showing that will supply prescribed products to the vessel;

(*h*) the layout of dories and canoes, showing the separation of product handling and fuel handling areas; and

(*i*) in the case of a housing vessel, facilities for the hygienic storage of diving, fishing and other equipment and sleeping and first aid facilities.

PART V— *Processing Establishments— Building, Facilities and Location*

Location.

17.—(1) Every processing establishment shall be located in an area, which is—

(*a*) free from odours, smoke, dust or contaminants; and

(*b*) not prone to flooding.

PART V—*Processing Establishments—Building, Facilities and Location, contd.*

(2) Areas immediately surrounding buildings, roads, pathways and other areas serving a licensed processing establishment shall be suitably paved, graded, grassed, landscaped or otherwise treated and kept clean and tidy to avoid the risk of dust, pests or other contaminants entering handling, processing and storage areas.

(3) There shall be adequate drainage of the surroundings of a licensed processing establishment and provisions shall be made to allow for cleaning of drains and proper waste management systems.

(4) Where vehicles are cleaned on a processing establishment, a paved and drained area shall be provided for the purpose.

(5) Buildings and facilities of a licensed processing establishment shall be of sound construction and maintained in good repair.

(6) All construction materials shall be of such quality that they do not transmit any undesirable substances to the products.

(7) Adequate working space shall be provided to allow for satisfactory performance of all operations connected with the processing of prescribed products.

(8) The design of buildings and facilities shall be such as to permit easy and adequate cleaning thereof and to facilitate the hygienic processing of prescribed products.

(9) Buildings and facilities shall be so designed and maintained to prevent the entry and harbouring of pests and the entry of contaminants.

(10) Buildings and facilities shall be so designed as to provide separation of all operations, including waste disposal, which may cause cross-contamination of prescribed products.

(11) Laboratories shall be separated from product handling areas in order to prevent the contamination of food.

(12) Buildings and facilities shall be designed to facilitate a regulated flow of ingredients, products, packaging and waste products in the preparation process, from the arrival of the raw materials at the premises through to the finished prescribed products.

(13) Working areas shall be of sufficient size for the work to be carried out under adequate hygienic conditions and the design and layout thereof shall be such as to prevent contamination of the products so that the clean and contaminated areas can be kept separate.

(14) If an inspector is required to be present at a licensed processing establishment on a regular or permanent basis due to the volume of prescribed products handled, an adequately equipped room that can be locked shall be provided for the exclusive use of the inspector.

PART V—*Processing Establishments—Building, Facilities and Location, contd.*

(15) Adequate facilities for the cleaning and disinfecting of all means of transport shall be provided so, however, that such facilities shall not be compulsory if the means of transport may be cleaned and disinfected at external facilities authorized by the competent authority.

Floors

Floors.

18. Floors, including enclosed handling and processing areas on vessels, shall be—

(*a*) water-proof;

(*b*) non-absorbent;

(*c*) without crevices;

(*d*) washable and of non-slip materials; and

(*e*) easy to clean and disinfect.

Floor drains.

19.—(1) In any area of a licensed processing establishment or licensed vessel where water or other liquid is regularly used—

(*a*) floors shall slope sufficiently for liquids to drain to trapped outlets; and

(*b*) floor drains shall be provided and be adequate in size, number and location to cope with the maximum flow of water under normal working conditions.

(2) All drains shall—

(*a*) be effectively sealed by a water trap;

(*b*) where necessary, be adequately vented to the exterior of the building or licensed vessel; and

(*c*) have adequate access for cleaning.

(3) Solids traps installed in conjunction with floor drains shall be designed to enable adequate cleaning.

(4) Floor drains shall not be connected to sanitary drainage so as to avoid the introduction of gases or noxious fumes into the processing area.

(5) Where floor drains are connected to a storm water drainage system, they shall be designed and maintained to prevent or minimize the effects of flooding.

(6) All open drains shall flow away from product handling areas.

(7) Where there is insufficient provision made in product handling areas for the drainage of water, the owner or operator of the licensed processing establishment or licensed vessel shall provide suitable equipment for the removal of the water.

PART V— *Processing Establishments – Buildings, Facilities and Location, contd.*

(8) The floor and walls of tanks used for the purification of live bivalve mollusc, echinoderms, tunicates and marine gastropods and any water storage containers shall have a smooth, hard and impermeable surface and be easy to clean by scrubbing or use of pressurized water.

(9) The bases of purification tanks shall be—

(*a*) sufficiently sloped; and

(*b*) equipped with adequate drainage.

(10) For the purposes of paragraphs (1) (*a*) and (9) (*a*), the minimum slope shall be 45°.

Internal Walls

Internal walls.

20.—(1) Walls shall—

(*a*) have smooth surfaces and be made of durable and impermeable material;

(*b*) be constructed of water-proof, non-absorbent and washable materials that are incapable of transmitting substances harmful to prescribed products;

(*c*) be sealed in all joints so that there can be no ingress of water, pests or contaminants;

(*d*) be light in colour and painted with an approved food grade paint;

(*e*) be impact resistant or protected from impact damage (including damage by pallets, forklifts and crates);

(*f*) be smooth and without crevices;

(*g*) be easy to clean or wash and disinfect;

(*h*) maintained in good condition.

(2) In any area of a licensed processing establishment or licensed vessel where water or other liquid is regularly used, any angles between—

(*a*) walls; or

(*b*) walls and floors,

shall be sealed and covered to facilitate their cleaning.

(3) Any walls or partitions that do not abut the ceiling shall be capped to prevent the accumulation of dust.

(4) If a room, including a refrigeration facility, is built within a product handling area, any inaccessible cavity formed between the walls or ceilings of the inner and outer rooms shall be made pest-proof and dust-proof.

Ceilings

Ceilings.

21.—(1) Ceiling shall be so designed and constructed as to—

(*a*) be smooth and impervious to moisture;

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(*b*) prevent accumulation of dirt;

(*c*) minimize condensation, the development of mould, and flaking; and

(*d*) be easy to clean.

(2) The ceilings of product handling area shall be—

(*a*) designed and constructed in accordance with paragraph (1); and

(*b*) light in colour and free of ledges which may collect dust.

Windows, Doors, External Walls and Vents

Windows, doors, external walls and vents.

22.—(1) Subject to paragraph (2), the window of product handling areas shall not be capable of being opened.

(2) Windows and vents which can be opened shall be fitted with insect-proof screens which are—

(*a*) easily removable for cleaning; and

(*b*) kept in good repair.

(3) Doors and hatches shall—

(*a*) have smooth, non-absorbent surfaces;

(*b*) be close fitting;

(*c*) be impact resistant or protected from impact damage (including damage by pallets, forklifts and crates); and

(*d*) be of durable material and easy to clean.

(4) Hatches, doors and other passage ways shall be constructed in such a manner as to prevent the entry of pests and one or more of the following shall be installed—

(*a*) strip curtains;

(*b*) air curtains; or

(*c*) a self or manual closing device.

(5) Airlocks shall be designed to minimize movement of air into or between product handling areas.

(6) Any conveyors or chutes passing through external walls shall be designed, constructed and sealed so as to prevent entry of pests or dust into product handling areas.

(7) If conveyors or chutes pass through external walls, the gaps through which they pass shall be sealed against the entry of pests or dust.

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

Stairs, Catwalks, Stands, Platforms, etc.

Stairs, platforms and stands.

23. Stairs, catwalks, stands, platforms and ladders in product handling areas shall be—

(*a*) constructed from material that is impervious, non-slip, non-corrodible, easy to clean and impact resistant; and

(*b*) so situated and constructed as to prevent contaminants from falling into any prescribed product or onto processing equipment or packaging material.

Equipment, Utensils and Containers

Equipment, utensils and containers.

24.—(1) All equipment, utensils and containers used in product handling areas with which prescribed products or packaging material may come in contact shall be—

(*a*) made of materials which do not transmit odour, taste or toxic substances and designed to prevent contamination of the product;

(*b*) non-absorbent;

(*c*) resistant to corrosion;

(*d*) capable of withstanding repeated cleaning and disinfection;

(*e*) smooth; and

(*f*) free from pits and crevices;

(2) Wood and other materials which cannot be adequately cleaned and disinfected, shall not be used except when its use would clearly not be a source of contamination.

(3) All equipment and utensils shall be so designed and constructed as to prevent hygiene hazards and permit easy and thorough cleaning and disinfection and be accessible for inspection.

(4) Equipment and fixtures shall be installed in such a manner as to permit easy access and thorough cleaning.

(5) Equipment shall be installed as follows—

(*a*) where equipment or fittings are placed adjacent to a wall or other equipment—

(i) the gap may be sealed to prevent the entry of moisture, dirt and pests; or

(ii) sufficient space shall be left to permit cleaning;

(*b*) where equipment is placed directly on the floor, it may be—

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(i) sealed to the floor to prevent entry of moisture;

(ii) placed on a raised plinth covered at the junction of the floor and plinth; or

(iii) fitted with legs with a minimum of 100 mm clearance between the underside of the equipment and the floor.

(6) Storage containers for inedible materials and waste shall be—

(*a*) clearly identified;

(*b*) leak-proof;

(*c*) constructed of suitable impervious material;

(*d*) easy to clean; and

(*e*) capable of being closed securely if stored externally.

(7) Chutes and other enclosed transport systems shall be—

(*a*) constructed with inspection and cleaning hatches; and

(*b*) easy to clean.

(8) All overhead structures and fittings, including lighting, shall be—

(*a*) installed in such a manner as to prevent contamination, whether directly or indirectly, of prescribed products and raw materials by condensation or drip and facilitate cleaning operations;

(*b*) insulated where appropriate and be so designed and finished as to prevent the accumulation of dirt and minimize condensation, the development of mould and flaking; and

(*c*) easy to clean.

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(2) The covering of light bulbs shall be shatterproof.

Use of wood.

25.—(1) Except as provided in paragraph (2), wood shall not be used as a contact surface on which prescribed products may be handled for use in processing areas, ice rooms, freezers, cold stores or chillers.

(2) Where wood is used in doors, door jambs, windows, brooms, brushes in licensed processing establishments or licensed vessel, it shall be sealed by the application of a durable, non-toxic surface coating.

(3) Wooden pallets and clean timber dunnage may be used in container system units and transport vehicles for the carriage of prescribed products in sealed or enclosed containers.

Cleaning and disinfecting facilities.

26. Adequate facilities for cleaning and disinfecting a licensed processing establishment, licensed vessel, working implements and equipment shall be—

(*a*) constructed from corrosion resistant materials; and

(*b*) capable of being easily cleaned and disinfected.

Sterilizing facilities.

27.—(1) Where necessary, adequate facilities for sterilizing working implements and equipment shall be provided.

(2) Where water is not used as the sterilizing medium of a sterilizing facility, the competent authority shall approve the method of sterilization.

(3) Sterilizing facilities shall be—

(*a*) constructed from corrosion resistant materials;

(*b*) capable of being easily cleaned; and

(*c*) if the sterilizing medium is water, fitted with suitable means of supplying hot and cold water in sufficient quantities.

Refrigeration facilities.

28.—(1) Every licensed processing establishment shall be equipped with freezing equipment that is sufficient—

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(*a*) to achieve a rapid reduction in temperature in order that a prescribed product may maintain the temperatures specified in regulation 73;

(*b*) to maintain prescribed products in storage rooms at a temperature not exceeding those so specified whatever the ambient temperature may be,

so, however, that in the case of whole fish frozen in brine and intended for canning, temperatures not exceeding -9°C may be maintained.

(2) A temperature recording device shall be situated in every storage room in a place where it may easily be read.

(3) The temperature sensor of the recording device shall be located in an area farthest away from the cold source.

(4) Temperature charts shall be made available to an inspector for inspection.

(5) Every refrigeration chamber shall—

(*a*) have floors, walls, ceilings, doors and hatches that are constructed and maintained in accordance with the relevant provisions of these Regulations;

(*b*) with respect to the interior, be constructed of smooth, impervious and corrosion resistant material;

(*c*) be equipped with a refrigeration plant capable of reducing, or maintaining the temperature of prescribed products as specified in regulation 73;

(*d*) be equipped with an accessible and easily readable automated temperature measuring device, accurate to within 0.5°C and calibrated in accordance with the requirements of the manufacturer; and

(*e*) be designed to allow for adequate drainage of defrosted water away from the refrigeration unit.

PART V— *Processing Establishments – Buildings, Facilities and Location, contd.*

(6) Every cold storage facility shall be capable of storing frozen prescribe products at a temperature of 18°C or colder.

(7) A freezer located in a licensed processing establishment, used for the storage of prescribed products shall be—

(*a*) adequately refrigerated;

(*b*) made with materials and fitted with doors that ensure its efficient operation; and

(*c*) capable of reducing the temperature of prescribed products to -18°C or colder.

Chillers

28A.—(1) Subject to paragraphs (2) and (3), chilling in a licensed processing establishment shall be carried out in— Chilling in processing establishment.

(*a*) a chiller;

(*b*) chiller holds; or

(*c*) other suitable equipment

(2) The Chiller capacity shall be sufficient to rapidly cool prescribed products from an ambient temperature to a chill temperature between -1°C and 3°C within six hours after loading and to 0°C after sixteen hours and thereafter the products shall be so maintained.

(3) Every chiller shall be equipped with a temperature sensor positioned in the section of the chiller where the temperature is highest to record the temperature maintained by the chiller.

Non-Refrigerated Storage Facilities

29. A facility used as a non-refrigerated store for prescribed products shall be— Non-refrigerated storage facilities.

(*a*) of sound construction; and

(*b*) so designed and maintained as to prevent undesirable physical, microbial and chemical changes to any prescribed product and its packaging which could affect its fitness for human consumption.

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

Container Stores and Storage Racks

Cartons, wrapping materials, etc.

30. Areas for the storage of cartons, wrapping materials and empty product containers shall be—

(*a*) dust-proof and pest-proof; and

(*b*) constructed to prevent undesirable physical, micro-biological and bio-chemical contamination of the cartons, wrapping materials and empty product containers.

Storage racks.

31. Storage racks shall be designed to facilitate their cleaning and there shall be a space of 150 mm between the underside of the racks and the floor.

Changing Facilities, Toilets, Living Areas and Handwashing Facilities

Provision facilities.

32.—(1) Adequate, suitable and conveniently located changing facilities, toilets and hand washing facilities shall be provided in all establishments and changing facilities and toilets shall be completely separated from product handling areas and shall not open directly onto these areas.

(2) Changing facilities shall include sufficient storage space for personal effects and uniforms.

Toilets, etc.

33. Toilets and toilet areas shall—

(*a*) be designed to ensure hygienic removal of waste matter;

(*b*) be well lit and ventilated; and

(*c*) be kept clean and tidy.

Location of handwashing facilities.

34.—(1) Handwashing facilities shall be provided near toilets in adequate numbers for use by all workers and shall—

(*a*) be located adjacent to personnel entrances to product handling areas;

(*b*) be in such a position that employees shall pass them when entering product handling areas;

(*c*) provide an adequate supply of warm, or hot and cold water, over a sink;

PART V—*Processing Establishments—Building, Facilities and Location, contd.*

(*d*) provide for suitable hand-cleaning preparation;

(*e*) be equipped with non-hand operated taps and suitable and sufficient hygienic means of drying hands;

(*f*) be fitted with properly tapped waste pipes leading to drains; and

(*g*) where paper towels are used, be equipped with a sufficient number of dispensers or receptacles at each facility.

(2) Non-hand operated taps shall be provided in work areas and laboratories.

(3) Facilities for the washing, disinfecting and drying of hands shall be provided in areas where prescribed products are prepared.

(4) Notices shall be posted prominently in toilets directing personnel to wash their hands on entering product handling areas.

Effluent and Waste Disposal

Effluent and waste disposal.

35.—(1) Every licensed processing establishment shall have an efficient waste disposal system which shall at all times be maintained in good order and repair.

(2) All effluent lines and sewer systems shall be large enough to carry peak loads and shall be so constructed as to avoid contamination of potable water supplies.

Facilities for storage of waste and inedible materials.

36. Facilities for the storage of waste and inedible material shall be—

(*a*) provided and be separately stored prior to removal from the establishment; and

(*b*) designed to prevent access to such waste or inedible material by pests to prevent contamination of prescribed products, potable water, equipment, buildings or roadways in the licensed processing establishment premises.

Lighting

Lighting.

37.—(1) Adequate natural or artificial lighting shall be provided throughout every licensed processing establishment.

(2) Lighting intensity shall not be less than—

(*a*) 540 lux (50 foot candles) at every inspection point;

(*b*) 220 lux (20 foot candles) in work rooms; and

(*c*) 110 lux (10 foot candles) in other areas.

(3) Lights and light fixtures which are suspended over prescribed products in any stage of processing or exposed packaging material, shall be of

PART V—*Processing Establishments—Building, Facilities and Location, contd.*

a safety type with a shatter proof covering and protected to prevent contamination of products in case of breakage.

Ventilation.

38.—(1) Adequate ventilation shall be provided for the removal of contaminated air and the prevention of excessive build-up of heat, steam, condensation and dust.

(2) In areas where prescribed products are prepared—

(*a*) the direction of the air flow shall be controlled to prevent cross-contamination;

(*b*) an air flow system based on positive pressure or suitable screens or filters shall be provided to prevent contamination of prescribed products;

(*c*) every screen or filter so provided shall be easily removable for cleaning; and

(*d*) where necessary, efficient steam and water vapour extraction facilities shall be provided.

Hygienic Requirement for Establishments

Maintenance of establish-ments.

39.—(1) To prevent contamination of prescribed products, all equipment, utensils and surfaces with which prescribed products may come in contact shall be—

(*a*) cleaned as frequently as is necessary; and

(*b*) disinfected at least daily.

(2) Where detergent is used on any surface on which any prescribed products is likely to come into contact, the surface shall be adequately rinsed with potable water prior to any handling of the prescribed products.

(3) Adequate precautions shall be taken to prevent prescribed products from being contaminated during the cleaning or disinfection of rooms, equipment or utensils.

(4) Detergents and disinfectants shall be suitable for use on prescribed products in handling areas and shall not be capable of imparting any flavours or odours or leave any toxic residues.

(5) Staff changing facilities, toilets and lunch rooms shall be kept clean at all times.

(6) Roadways, yards and other areas in the immediate vicinity of and serving a licensed processing establishment shall be kept clean.

(7) Working areas, instruments and equipment shall be used only for work on prescribed products.

Hygiene control programme.

40.—(1) All cleaning personnel shall be suitably trained in cleaning techniques and procedures.

(2) The competent authority shall be provided with a cleaning and disinfection programme in writing by the operator of each licensed processing establishment.

Inedible by-products.

41. Inedible by-products and other material in a licensed processing establishment shall—

(*a*) be stored in such a manner as to avoid contamination of prescribed products; and

(*b*) be removed from the processing areas as often as necessary to avoid contamination of prescribed products.

Storage and disposal of waste.

42.—(1) Immediately after disposal of waste in a licensed processing establishment, receptacles used for storage and any equipment which have come into contact with the waste shall be cleaned and disinfected.

(2) The waste storage area shall be kept clean.

(3) All waste disposal bins shall be fitted with close-fitting lids which shall be kept closed.

Pest Control.

43.—(1) Pest control measures instituted in a licensed processing establishment shall not constitute a risk to human health and all rodenticides, insecticides, disinfectants and any potentially toxic substances used therein shall be stored in a separate room designed and marked specifically for the purpose.

(2) An operator shall keep accurate and legible records of the location and frequency of servicing of bait stations at the establishment.

Storage of hazardous substances.

44.—(1) Pesticides, cleaning agents or other substances which could represent a hazard to health shall be suitably labelled with a warning about their levels of toxicity and use and indications for their care shall be taken to avoid contamination of prescribed products.

(2) Hazardous substances shall be stored in rooms or cabinets used only for that purpose and handled only by authorized and properly trained persons or by persons under the supervision of such persons.

(3) Disinfectants, detergents and similar substances which are used at a licensed processing establishment shall be approved by the competent authority and shall be used in such a way as not to cause any adverse effect on machinery, equipment and products.

Personal cleanliness.

45.—(1) No person shall wear jewellery when engaged in the preparation of prescribed products.

(2) The fingernails of every person who handles prescribed products shall be cut short.

(3) No person who handles prescribed products shall wear fingernail polish or varnish.

PART V—*Processing Establishments—Building, Facilities and Location, contd.*

(4) Every person who proposes to engage in the handling of prescribed products in any area of a licensed processing establishment or licensed vessel shall wash his hands—

(*a*) on entering that area;

(*b*) immediately after using the toilet;

(*c*) after touching his nose or mouth;

(*d*) after handling contaminated material or any material capable of transmitting disease;

(*e*) whenever necessary, to avoid contaminating the prescribed products in the area; and

(*f*) each time work is resumed.

Protective clothing.

46.—(1) Every person in a prescribed product handling area shall at all times—

(*a*) wear suitable protective clothing and footwear;

(*b*) wear a covering for the head that encloses the scalp and hair;

(*c*) if the person has a beard or moustache, wear a face covering to cover the beard or moustache; and

(*d*) if gloves are worn, ensure that the gloves are in a sound, clean and sanitary condition.

(2) Disposable gloves or other disposable protective clothing worn in a product handling area, shall be discarded after each use and no person shall reuse them.

(3) Protective clothing worn in a product handling area shall not have an outer breast pocket and shall be—

(*a*) light in colour; and

(*b*) either washable or disposable.

(4) Every person in a product handling area shall keep protective clothing clean so as to prevent contamination of the prescribed products.

(5) Footwear, overalls, aprons, headwear, gloves and other protective outer clothing used in the product handling area shall not be worn outside the establishment.

Signs.

47. The owner or operator of a licensed processing establishment shall display in a conspicuous area, signs advising that smoking, eating, spitting and drinking in product handling or storage areas are prohibited.

Visitors.

48. A visitor to a product handling area shall comply with all requirements of personal cleanliness, including the requirements related to the wearing of protective clothing.

PART V— *Processing Establishments – Buildings, Facilities and Location, contd.*

Personnel in pathogen testing laboratories to change uniforms.

49. Where a laboratory is situated on the premises of a licensed processing establishment any person working therein shall change his uniform before entering the product handling area.

Supervision of personnel.

50. An operator of a licensed processing establishment shall allocate to the competent supervisory personnel, responsibility for ensuring compliance with the provisions of these Regulations.

Water Supply for Licensed Processing Establishments

Quality of Water supply.

50A.—(1) Potable water shall be used in every licensed processing establishment—

(*a*) with adequate pressure and in sufficient quantity;

(*b*) at a suitable temperature and suitably distributed;

(*c*) if used in a product handling area and on prescribed products, conform to the parameters and parametric values set out in the Tenth Schedule. Tenth Schedule.

(2) The parameters and parametric values set out in the Tenth Schedule shall be complied with—

(*a*) in the case of water supplied from a public or private supply system, at the point at which it emerges from the taps;

(*b*) in the case of water supplied from a tanker, at the point at which it emerges from the tanker; and

(*c*) in the case of water used in a licensed processing establishment, at the point where the water is used in the undertaking.

(3) Where water is chlorinated in a licensed processing establishment—

(*a*) the chlorine shall be added by the dosing or injection method for at least 30 minutes; and

(*b*) records of the residual chlorine level shall be maintained.

(4) Prescribed products shall not be washed, dipped, glazed or treated with water the chlorine content of which exceeds the levels prescribed for potable water.

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(5) Ice used in the handling or preservation of prescribed products shall be made from potable water and shall be manufactured, handled and stored in a manner that will protect it from contamination.

(6) The competent authority shall ensure that any supply of water intended for use in the processing of prescribed products which constitutes a potential risk to the wholesomeness of such products is prohibited.

Dissemination of information on water quality.

50B. The competent authority shall—

(*a*) publish an annual report on the quality of water intended for use in the processing of prescribed products in licensed processing establishments;

(*b*) take all measures necessary to ensure that the report referred to in paragraph (*a*) and other relevant and up-to-date information on the quality of water intended for use in the processing of prescribed products in licensed processing establishments is made available to every operator.

Notification by operators.

50C.—(1) An operator of a licensed processing establishment shall—

(*a*) notify the competent authority of the source of its water supply;

(*b*) ensure that the water used in his establishment is potable water;

(*c*) when required by an inspector, demonstrate the water distribution system in the licensed processing establishment;

(*d*) cause to be prepared a distribution and recirculation plan showing all pipes and outlets within the licensed processing establishment and identifying all outlets.

(2) The plan mentioned in paragraph (*d*) shall, when required by an inspector, be made available for inspection.

Use of non-potable water.

50D.—(1) Non-potable water—

(*a*) may be used in a licensed processing establishment for steam production, refrigeration and the cooling of refrigeration equipment, fire control and other similar purposes not connected with the processing of prescribed products; and

(*b*) shall be carried in separate and identifiable lines.

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(2) The operator of a licensed processing establishment shall ensure that—

(*a*) non-potable water is conveyed without causing cross-connection with, or back-siphonage into, any system carrying potable water; and

(*b*) the use of non-potable water does not present a risk of contamination to prescribed products.

(3) There shall be no cross connection between potable and non-potable water reticulation systems.

(4) All outlets and distribution lines for non-potable water in processing areas shall be clearly identified.

(5) All storage tanks, cooling towers and pipelines used in handling water in a licensed processing establishment shall be constructed in such manner as to facilitate their easy inspection and cleaning.

(6) All water storage tanks in a licensed processing establishment shall be effectively covered to prevent the entry of pests and potential contaminants.

Inspection and monitoring of water.

50E.—(1) The competent authority shall establish appropriate programmes to monitor the quality of water intended for use in the processing of prescribed products to parameters and ensure that the water conforms to the parametric values set in accordance with regulation 50A.

(2) In every inspection of a licensed processing establishment, the inspector shall carry out an initial examination of the water supply thereof in order to determine compliance with these Regulations.

(3) Any monitoring programme established under paragraph (1) shall involve examination of samples from the water sources in accordance with regulation 50F and shall meet the quality standard set out in the Eleventh Schedule.

Eleventh Schedule.

(4) The competent authority shall take or cause to be taken for examination samples of the water from the water sources—

PART V— *Processing Establishments – Building, Facilities and Location, contd.*

(*a*) at the point of entry;

(*b*) at the point of use; and

(*c*) during the processing of prescribed products.

(5) Where it is found, as a result of monitoring carried out under paragraph (1), that the water at source does not comply with the parameters and parametric values established in accordance with regulation 50A, the competent authority shall—

(*a*) launch an immediate investigation in order to determine the cause of the deterioration in the quality of the water;

(*b*) take all reasonable steps to promptly warn all operators where there is an unacceptable risk to public health;

(*c*) in the case of the national supplier of water, advise of the problem and prepare an action programme for the improvement of the quality of water as soon as practicable;

(*d*) in the case of a private water supply, notify the person responsible for the supply as soon as is practicable and advise of the measures to be taken for the improvement of the quality of the water; and

(*e*) ensure that immediate remedial action is taken to improve the parametric value of the water.

(6) If water intended for use in the processing of prescribed products does not meet the parameters and parametric values set in accordance with regulation 50A, the operator shall ensure that the necessary remedial action is taken as soon as possible to restore the quality of the water and shall give priority to cases based on the extent to which the parameters and parametric value has been exceeded and the extent to which the wholesomeness of the particular product has been compromised.

(7) Where an operator fails to apply the appropriate treatment techniques to reduce or eliminate the risk of dangerous levels of micro-organisms, parasites or other substances in the water, the competent authority shall cause the operator to suspend its processing operations pending compliance.

PART V— *Processing Establishments – Buildings, Facilities and Location, contd.*

(8) In the event of non-compliance with the parameters and parametric values set out in the Tenth Schedule, the competent authority shall consider whether that non-compliance poses any risk to the wholesomeness of any product. Tenth Schedule.

(9) Every operator shall ensure that additional monitoring is carried out on a case by case basis of the micro-organisms, parasites or other substances for which no parameters and parametric value have been set in accordance with regulation 50A.

50F.—(1) Subject to paragraphs (2) and (3) an operator shall carry out routine examinations of the water supply under the supervision of the competent authority and the analysis thereof may be done either in the operator's laboratory or in another laboratory approved by the competent authority. Operators to examine water quality.

(2) An examination under paragraph (1) shall be carried out—

(*a*) at least once per year in the case where the supply is from a public source and there is no intermediate storage system;

(*b*) at least once per week, in the case where the supply is from a private supply system or a public supply system with intermediate storage; and

(*c*) at least once per month in the case of a microbiological examination.

(3) If the results of any routine tests are unsatisfactory, an immediate investigation and further sampling shall be carried out.

(4) Where two consecutive sample from a source of water test positive for coliform organisms, that source of water shall not be used until the contamination has been eliminated.

(5) Notwithstanding the provision of regulation 50E (4)—

(*a*) the competent authority may, at such intervals as it may determine, require an operator to cause an examination of samples of water used in a licensed processing establishment; and

PART V— *Processing Establishments – Buildings, Facilities and Location, contd.*

(*b*) the operator shall notify the competent authority of the results of such examination within two working days of the receipt of those results and forward to the competent authority a written report of the results within five working days.

(6) Records of water testing results shall be kept by the competent authority and by the operator of a licensed processing establishment.

(7) An operator of a licensed processing establishment shall establish a system—

(*a*) to check the chlorine content in water used in the handling of prescribed products and such checks shall be carried out at least once every hour during the period of processing; and

(*b*) which shall be capable of identifying and dealing with abnormalities in the chlorine content of water.

Avoidance of contamination due to disinfection.

50G. Every operator shall take all measures necessary to ensure that, where disinfection forms part of the preparation or distribution of water intended for use in the processing of prescribed products the efficiency of the disinfection treatment applied is verified, and that any contamination from disinfection by-products is kept as low as possible without compromising the disinfection.

Operators to prevent contamination of water during installation of distribution system etc.

50H. Every operator shall take all measures necessary to ensure that no article used during the installation of any distribution system or equipment for the preparation or distribution of water intended for the processing of prescribed products or impurities associated with such articles remain in concentrations higher than is necessary for the purpose of their use and do not, either directly or indirectly, reduce the wholesomeness of any prescribed product.

Steam

Steam.

50I. Steam used in direct contact with prescribed products or a contact surface in a licensed processing establishment shall not contain any substance which may—

(*a*) be hazardous to health; or

(*b*) contaminate the products.

PART VI— *Requirement for Licensed Vessels*

Design and construction of product handling areas on vessels.

51.—(1) The provisions of regulations 18 to 23 shall apply in relation to design and construction of areas on licensed vessels in which prescribed products are handled.

(2) The area on any licensed vessel or the containers reserved for the storage of prescribed products shall—

(*a*) not contain objects or products which may transmit harmful properties or abnormal characteristics to the products; and

(*b*) be so designed as to—

(i) allow easy cleaning; and

(ii) ensure that water resulting from melted ice does not remain in contact with any products.

(3) Sea water intakes for licensed vessels shall be located—

(*a*) forward of any toilet or bilge discharge; and

(*b*) at not less than 5 metres from the surface.

(4) Unloading and landing equipment shall be—

(*a*) constructed of material, which is easy to clean and disinfect; and

(*b*) kept in a good state of repair and cleanliness.

Lighting on Vessels

Lighting on vessels.

52. The following requirements apply to every licensed vessel—

(*a*) the product handling areas shall be adequately lit during loading, handling and offloading of prescribed products;

(*b*) the inspection area shall be lit during an inspection of prescribed products; and

(*c*) the deck shall be fitted with floodlights with adequate shielding in order to confine illumination to the working area of the vessel.

Refrigeration Facilities

Refrigeration facilities on vessels.

53.—(1) Refrigerated holds and tanks of licensed vessels shall comply with the standards set out in regulations 54 to 59.

(2) Hatches and hatch plugs shall be sealed to prevent—

PART VI— *Requirements for Licensed Vessels, contd.*

(*a*) leakage of cold air from the refrigerated hold; and

(*b*) ingress of water into the refrigerated hold.

Chillers

Chillers on vessels.

54.—(1) Chilling on a licensed vessel shall be carried out in a—

(*a*) chiller;

(*b*) chiller holds;

(*c*) refrigerated sea water tanks; or

(*d*) other suitable equipment.

(2) Chiller capacity shall be sufficient to rapidly cool prescribed products from an ambient temperature to a chill temperature between -1°C to 3°C within six hours after loading and to 0°C after sixteen hours and thereafter the products shall be so maintained.

(3) The tank of licensed vessels equipped for the chilling of prescribed products in sea water chilled by ice or other means, shall—

(*a*) be equipped with adequate sea water filling and drainage installations;

(*b*) incorporate devices for achieving uniform temperature throughout the tanks; and

(*c*) be capable of recording temperatures from a temperature sensor positioned in the section of the tank where temperatures are highest.

Freezers

Freezers.

55.—(1) A freezer on a licensed vessel shall be—

(*a*) separate from any hold in which frozen prescribed products are stored; and

(*b*) provided with separate refrigeration.

(2) A freezer located in a hold of a licensed vessel in which frozen prescribed products are stored shall be—

(*a*) adequately capable of rapidly lowering the temperature of the prescribed products to achieve a core temperature between -18°C and -25°C; and

(*b*) provided with doors or material that—

(i) ensure its efficiency when operating; and

(ii) effectively divide the freezer from the hold.

(3) Plate freezers in freezer holds of licensed vessels shall be capable of reducing the temperature of prescribed products undergoing freezing to a temperature of -18°C or colder.

PART VI— *Requirements for Licensed Vessels, contd.*

Cold Storages

Cold storages on vessels.

56. Cold storages on licensed vessels shall be capable of storing frozen prescribed products at a temperature of -18°C or colder.

Holds, etc., to be separated from machinery space.

57. The holds, tanks and containers for the storage of prescribed products shall be separated from the machinery space and the quarters reserved for the crew by partitions which are impervious and are designed to prevent any contamination of prescribed products.

Interior surfaces of holds, etc.

58. The interior surfaces of holds, tanks and containers on licensed vessels shall be—

(*a*) waterproof, easy to wash and disinfect;

(*b*) smooth or smoothed and painted with an approved food-grade paint;

(*c*) maintained in good condition; and

(*d*) incapable of transmitting substances harmful to the prescribed products.

Standards for holds, etc.

59. Holds, tanks or containers used for the storage of prescribed products shall—

(*a*) be adequate to ensure their preservation under hygienic conditions and, in particular, allow for the unimpeded drainage of water;

(*b*) when used, be clean; and

(*c*) be designed to prevent contamination of the products by fuel used for the propulsion of the vessel or by bilge water, hydraulic oil or refrigeration gases.

Amenities

Amenities on vessels.

60.—(1) Staff assigned to the handling of prescribed products on licensed vessels shall maintain high standards of personal cleanliness.

(2) Subject to paragraph (3), an operator shall ensure that the toilet and shower facilities provided on a licensed vessel are sufficient for the normal crew complement.

(3) The ratio of toilets to the number of persons on board a licensed vessel shall be six to eight persons to one toilet.

Disinfection of hands.

61. Every operator shall provide—

(*a*) adequate facilities for the cleaning and disinfecting of hands;

(*b*) taps that are not hand operated in areas used for handling prescribed products;

PART VI— *Requirements for Licensed Vessels, contd.*

(*c*) single use hand towels.

Toilets to be equipped with basin.

62. Every room on board a licensed vessel in which there is a toilet shall be equipped with a hand basin located therein or immediately outside the door.

Berth to be provided.

63. A berth shall be available for the use by each member of the crew of the licensed vessel and an inspector, when aboard such vessel.

Gutting equipment.

64. All equipment used for gutting, heading and the removal of fins and all containers and equipment with which prescribed products come in contact on board a licensed vessel, shall be made of or coated with a material which is waterproof, resistant to decay, smooth and easily cleaned and disinfected.

Minimum Requirements for Vessels Processing Prescribed Products within 0.5 Nautical Miles of Land

Processing within 0.5 nautical miles.

65. Licensed vessels within 0.5 nautical miles of land on which prescribed products are processed shall comply with the requirements of these Regulations with respect to—

(*a*) pest-proofing;

(*b*) dust-proofing;

(*c*) water supply;

(*d*) waste disposal; and

(*e*) amenities for crew.

Minimum Requirements for Carrier Vessels

Standards on carrier vessels.

66.—(1) Every carrier vessel shall be equipped with refrigerated or insulated containers for storage of prescribed products which shall—

(*a*) be insulated;

(*b*) be smooth, light-coloured and impact and abrasion resistant;

(*c*) have covered internal corners;

(*d*) be of non-corrodible and non-toxic material;

(*e*) be covered and self-draining;

(*f*) be capable of holding an adequate supply of ice or have alternative means of cooling or chilling, as the circumstances may require;

(*g*) not be capable of transmitting any harmful properties or characteristics to prescribed products;

(*h*) be positioned to prevent contamination of the products by—

(i) fuel used for propulsion of the vessel;

(ii) oil;

PART VI—*Requirements for Licensed Vessels, contd.*

(iii) fumes or other contaminants present or otherwise used on board; or

(iv) bilge water.

(2) Choppers, knives and other tools used for post harvest handling of prescribed products on carrier vessels shall be—

(*a*) clean and free of rust and corrosion; and

(*b*) cleaned and disinfected after every use.

(3) Fishing and diving equipment used on carrier vessels for the handling of prescribed products shall be free of rust and corrosion.

Products to be protected from deterioration.

67. All prescribed products placed on carrier vessels shall be protected from deterioration, contamination and the effects of sun and other sources of heat.

Minimum Requirements for Factory Vessels

Reception area.

68.—(1) There shall be a reception area on board every factory vessel which shall be set aside for the onloading of prescribed products.

(2) The reception area referred to in paragraph (1) and any movable part thereof shall be—

(*a*) designed and arranged into pounds or pens that are large enough to allow each catch to be separated;

(*b*) easy to clean;

(*c*) designed in such a manner as to protect the products from the sun or the elements and from any source of dirt or contamination.

Conveying prescribed products.

69. The operator of every factory vessel shall implement a system that conforms with established rules of hygiene, for conveying prescribed products from the reception area to the work area.

Work areas, etc.

70.—(1) Every factory vessel shall—

(*a*) be equipped with work areas that are large enough for the preparation and processing of prescribed products in proper hygienic conditions;

(*b*) be designed and arranged in such a way as to prevent any contamination of the products;

(*c*) be equipped with storage areas for prescribed products that are large enough and so designed that they are easy to clean;

(*d*) if a waste processing unit is operated on board, be equipped with a separate hold mist designed for the storage of the waste;

(*e*) be equipped with a place for storing packaging materials that is separate from the place where prescribed products are prepared and processed;

PART VI—*Requirements for Licensed Vessels, contd.*

(*f*) be equipped with special equipment for pumping waste or prescribed products that are unfit for human consumption directly into the sea, or where circumstances so require, into a watertight tank reserved for that purpose;

(*g*) if waste is stored and processed on board with a view to cleaning, be equipped with separate areas for that purpose;

(*h*) be fitted with equipment for providing a supply of potable water in accordance with regulation 75.

(2) The sea water intake on a factory vessel shall be so situated that the water being taken in shall not be affected by any discharge into the sea of waste water, other waste or engine coolant.

Sanitary conveniences.

71.—(1) Every factory vessel shall contain a suitable number of changing rooms, wash basins and toilets.

(2) Toilets on a factory vessel shall not open directly into areas where prescribed products are handled.

(3) Wash basins shall be equipped with appliances for the washing and drying of hands.

(4) Wash basins taps shall be non-hand-operated.

Floors, fixtures, etc.

72.—(1) A non-slip floor shall be installed in every factory vessel and shall be—

(*a*) easy to clean and disinfect; and

(*b*) equipped for easy drainage of water.

(2) The structures and fixtures of every factory vessel shall contain limber holds that are large enough to prevent obstruction by product waste and to allow for the free drainage of water.

(3) The operator shall ensure that the walls and ceilings of the factory vessel are easy to clean, particularly in areas where there are pipes, chains or electricity conduits.

(4) Hydraulic circuits on a factory vessel shall be arranged or protected in such a manner as to ensure that there is no leakage of oil to contaminate prescribed products.

(5) Every factory vessel shall be equipped with adequate lighting and shall be adequately ventilated and, where necessary, proper vapour extraction units shall be installed therein.

(6) The operator shall ensure that—

(*a*) the vessel is equipped with—

(i) appliances for cleaning and disinfecting tools, equipment and fittings;

(ii) taps that are not hand operable and with single use towels;

PART VI— *Requirements for Licensed Vessels, contd.*

(*b*) all cutting benches, containers, conveyors, gutting or filleting machines and other equipment and tools are resistant to corrosion, easy to clean and disinfect and properly maintained.

Refrigeration plants.

73. Refrigeration plants on factory vessels shall be sufficiently powerful to—

(*a*) lower the temperature rapidly so as to achieve a core temperature of -18°C to -25°C;

(*b*) keep prescribed products in the storage holds at a temperature of 18°C.

Storage holds.

74. Storage holds shall be equipped with a temperature recording system Storage holds, which shall be so placed that it can be easily read.

Water Supply for Licensed Vessels

Quality of Water Supply.

75.—(1) Potable water shall be used in every licensed vessel—

(*a*) with adequate pressure and in sufficient quantity;

(*b*) at a suitable temperature and suitably distributed; and

(*c*) if used in a product handling area and on prescribed products, conform to the parameters and parametric values set out in the Tenth Schedule. Tenth Schedule.

(2) The parameters and parametric values set out in the Tenth Schedule shall be complied with—

(*a*) in the case of water supplied from a public or private supply system, at the point at which it emerges from the taps;

(*b*) in the case of water supplied from a tanker, at the point at which it emerges from the tanker; and

(*c*) in the case of water used in a licensed vessel, at the point where the water is used in the undertaking.

(3) Where water is chlorinated in a licensed vessel—

(*a*) the chlorine shall be added by the dosing or injection method for at least 30 minutes; and

(*b*) records of the residual chlorine level shall be maintained.

(4) Prescribed products shall not be washed, dipped, glazed or treated with water the chlorine content of which excels the levels permitted for potable water.

(5) Ice used in the handling or preservation of prescribed products shall be made from potable water and shall be manufactured, handled and stored in a manner that will protect it from contamination.

PART VI— *Requirements for Licensed Vessels, contd.*

(6) The competent authority shall ensure that any supply of water intended for use in the processing of prescribed products which constitutes a potential risk to the wholesomeness of such product is prohibited.

Dissemination of information on water quality.

76. The competent authority shall—

(*a*) publish an annual report on the quality of water intended for use in the processing of prescribed products in licensed vessels; and

(*b*) take all measures necessary to ensure that the report referred to in paragraph (*a*) and other relevant and up-to-date information on the quality of water intended for use the processing of prescribed products in licensed vessel is made available to every operator.

Notification by operator.

77.—(1) An operator of a licensed vessel shall—

(*a*) notify the competent authority of the source of its water supply;

(*b*) ensure that the water used on his vessel is potable water or clean sea water;

(*c*) when required by an inspector, demonstrate the water distribution system on his vessel; and

(*d*) cause to be prepared a distribution and recirculation plan showing all pipes and outlets within the licensed vessel and identifying all outlets.

(2) The plan mentioned in paragraph (1) (*d*) shall, when required by an inspector, be made available for inspection.

Use of non-potable water.

77A.—(1) Non-potable water—

(*a*) may be used on a licensed vessel for steam production, refrigeration and the cooling of refrigeration equipment, fire control and other similar purposes not connected with the processing of prescribed products;

(*b*) and shall be carried in separate and identifiable lines.

(2) The operator of vessel shall ensure that—

(*a*) non-potable water is conveyed without causing cross-connection with, or back-siphonage into, any system carrying potable water or clean sea water; and

(*b*) the use of non-potable water does not present a risk of contamination to prescribed products.

(3) There shall be no cross connection between potable water reticulation systems.

(4) All outlets and distribution lines for non-potable water areas shall be clearly identified.

PART VI— *Water Supply for Licensed Vessels, contd.*

(5) Where appropriate, clean sea water may be used in product handling areas.

(6) Clean sea water shall be supplied through a pump used only for the purpose or as an emergency pump and shall be extracted, not less than five metres below the surface.

(7) All storage tanks, cooling towers and pipelines used in handling water on a licensed vessel shall be constructed in such manner as to facilitate their easy inspection and cleaning.

(8) All water storage tanks on a licensed vessel shall be effectively covered to prevent the entry of pests and potential contaminants.

Inspection and monitoring of water.

77B.—(1) The competent authority shall establish appropriate programmes to monitor the quality of water intended for use in the processing of prescribed products to ensure that the water conforms to the parameters and parametric values set in accordance with regulation 75.

(2) An inspector in carrying out an inspection of a licensed vessel shall carry out an initial examination of the water supply thereof in order to determine compliance with these Regulations.

(3) Any monitoring programme established under paragraph (1) shall involve examination of samples from the water sources in accordance with regulation 77C and shall meet the quality standard set out in the Eleventh Schedule.

Eleventh Schedule.

(4) The competent authority shall take or cause to be taken for examination samples of the water from the water sources—

(*a*) at the point of entry;

(*b*) at the point of use; and

(*c*) during the processing of prescribed products.

(5) Where it is found, as a result of monitoring carried out under paragraph (1) that the water at source does not comply with the parameters and parametric values established in accordance with regulation 75, the competent authority shall—

(*a*) launch an immediate investigation in order to determine the cause of the deterioration in the quality of the water;

(*b*) take all reasonable steps to promptly warn all operators where there is an unacceptable risk to public health;

(*c*) in the case of the national supplier of water, advise of the problem and prepare an action programme for the improvement of the quality of water as soon as practicable;

(*d*) in the case of a private water supply, notify the person responsible for the supply as soon as is practicable and advise of the measures to be taken for the improvement of the quality of the water; and

PART VI— *Water Supply for Licensed Vessels, contd.*

(*e*) ensure that immediate remedial action is taken to improve the parameters and parametric value of the water.

(6) If water intended for use in the processing of prescribed products does not meet the parameters and parametric values established in accordance with regulation 75, the operator shall—

(*a*) ensure that the necessary remedial action is taken as soon as possible to restore the quality of the water; and

(*b*) give priority to cases based on the extent to which the parameters and parametric values have been exceeded and the extent to which the wholesomeness of the particular product has been compromised.

(7) Where an operator fails to apply the appropriate treatment techniques to reduce or eliminate the risk of dangerous levels of micro-organisms, parasites or other substances in the water, the competent authority shall cause the operator to suspend its processing operations pending compliance.

Tenth Schedule.

(8) In the event of non-compliance with the parameters and parametric values set out in the Tenth Schedule, the competent authority shall consider whether that non-compliance poses any risk to the wholesomeness of any product.

(9) Every operator shall ensure that additional monitoring of the micro-organisms, parasites or other substances for which no parameters and parametric values have been set in accordance with regulation 75 is carried out on a case by case basis.

Operators to examine water supply.

77C.—(1) Subject to paragraphs (2) and (3), an operator shall carry out routine examinations of the water supply under the supervision of the competent authority and the analysis thereof may be done either in the operator's laboratory or in another laboratory approved by the competent authority.

(2) An examination under paragraph (2) shall be carried out at least—

(*a*) once per year in the case where the supply is from a public source and there is no intermediate storage system;

(*b*) once per week, in the case where the supply is from a private supply system or a public supply system with intermediate storage; and

(*c*) once per month in the case of a microbiological examination.

(3) If the results of any routine tests are unsatisfactory, an immediate investigation and further sampling shall be carried out.

PART VI— *Water Supply for Licensed Vessels, contd.*

(4) Where two consecutive samples from a source of water test positive for coliform organisms, that source of water shall not be used until the contamination has been eliminated.

(5) Notwithstanding paragraph (4) of regulation 77B—

(*a*) the competent authority may, at such intervals as it may determine, require an operator to cause an examination of samples of water used in a licensed vessel; and

(*b*) the operator shall notify the competent authority of the results of such examination within two working days of the receipt of those results and forward to the competent authority a written report of the results within five working days.

(6) Records of water testing results shall be kept by the competent authority and by the operator of a licensed vessel.

(7) An operator shall establish a system—

(*a*) to check the chlorine content in water used in the handling of prescribed products and such checks shall be carried out at least once every hour during the period of processing;

(*b*) which shall be capable of identifying and dealing with abnormalities in the chlorine content of water.

Avoidance of contamination due to disinfection.

77D. Every operator shall take such measures as are necessary to ensure that, where disinfection forms part of the preparation or distribution of water intended for use in the processing of prescribed products the efficiency of the disinfection treatment applied is verified, and that any contamination from disinfection by-products is kept as low as possible without compromising the disinfection.

Operators to prevent contamination of water during installation of distribution systems, etc.

77E. Every operator shall take such measures as are necessary to ensure that no article used during the installation of any distribution system or equipment for the preparation or distribution of water intended for the processing of prescribed products or impurities associated with such articles remain in concentrations higher than is necessary for the purpose of their use and do not, either directly or indirectly, reduce the wholesomeness of any prescribed product.

PART VI— *Water Supply for Licensed Vessels, contd.*

Steam

Steam.

78. Steam used in direct contact with prescribed products or a contact surface on a licensed vessel shall not contain any substance which may—

(*a*) be hazardous to health; or

(*b*) contaminate the products.

Compressed Air and Other Gases

Compressed air and other gases.

79. Compressed air or any other processing gases that come directly or indirectly into contact with prescribed products shall—

(*a*) in the case of compressed air, be fitted with a filtered air intake located in a clean place;

(*b*) contain no oil or other substances hazardous to health; and

(*c*) not contaminate the prescribed products.

PART VII— *Harvesting and Production*

Harvesting and production of prescribed products.

80.—(1) Methods and procedures associated with harvesting and production of prescribed products shall be hygienic and aimed at preventing contamination.

(2) Equipment and containers used for the harvesting and production of prescribed products shall—

(*a*) be constructed and maintained so as not to constitute a hazard to health;

(*b*) if reusable, be of such material and construction as to permit easy and thorough cleaning; and

(*c*) be maintained in a clean condition and, where necessary, be sanitized.

PART VII— *Harvesting and Production, contd.*

(3) Containers used for toxic materials shall not be used for holding prescribed products or ingredients and equipment used for handling or processing those products.

(4) All prescribed products shall be harvested alive.

Removal obviously unfit prescribed products.

81. Prescribed products which are unfit for human consumption shall be—

(*a*) isolated during harvesting and processing for disposal;

(*b*) disposed of or handled in such a manner as to prevent their contamination of other prescribed products, water supplies or other product and packaging material

Protection of raw materials.

82.—(1) Packaging, ingredients and raw materials relating to prescribed products shall be protected during production, storage and transport from—

(*a*) contamination by—

(i) pests;

(ii) physical and chemical agents;

(iii) microbiological contaminants;

(iv) other objectionable substance; and

(*b*) deleterious changes due to temperature or other physical causes.

(2) Conveyances and equipment shall be suitable and adequate for the protection of prescribed products.

(3) Stocks of raw materials and ingredients shall be used so as to ensure that the oldest stock is used first.

Prevention of cross-contamination.

83.—(1) An operator shall take such measures as are necessary to prevent cross-contamination of prescribed products.

(2) The following provisions of this paragraph shall apply in relation to the processing of prescribed products—

(*a*) contaminated protective clothing shall not be worn by a person handling raw materials or prescribed products;

(*b*) to prevent contamination, the hands of every person who handles prescribed products shall be washed thoroughly at different stages of processing; and

(*c*) all equipment with which raw materials or contaminated material have been in contact shall be thoroughly cleaned and sanitized prior to being re-used.

(3) Potable water or clean sea water shall be used during the handling and processing of prescribed products and for the cleaning of all surfaces with which prescribed products may come in contact.

PART VII— *Harvesting and Production, contd.*

(4) All steps in the production process, including packaging, shall be performed without unnecessary delay and under conditions which will minimize the possibility of contamination, deterioration, or the development of pathogens and contamination by foreign matter.

(5) An inspector shall, during the business hours of a licensed processing establishment, take samples of prescribed products for examination at such times as are appropriate during preparation of the products to ensure that the products comply with the provisions of these Regulations.

(6) An operator shall keep records in respect of each batch of prescribed products stating—

(*a*) the quantity product processed;

(*b*) the temperatures and times at which products were processed;

(*c*) the details of sampling; and

(*d*) any other information that is relevant to showing that the food is processed in accordance with the provisions of these Regulations.

(7) Prescribed products shall be stored under appropriate physical conditions, including temperature and humidity, that will—

(*a*) minimize the contamination by, and proliferation of, micro-organisms; and

(*b*) protect the prescribed products from deterioration.

Calibration of Equipment

Calibration of equipment.

84. All measuring instruments, gauges and devices used in connection with the preparation of prescribed products shall be graduated in a manner which enables them to be read accurately and shall be calibrated by the appropriate regulatory body.

Depuration of Shellfish

Depuration of shellfish.

85.—(1) Shellfish shall be stored and handled before depuration in such a manner that their physiological activity is not adversely affected and their bacteriological quality does not deteriorate.

(2) Shellfish that are dead, damaged or gaping shall not be depurated.

(3) Shellfish shall be clean and free of mud and weed prior to depuration.

(4) Shellfish—

(*a*) from more than one growing area shall be kept separate during washing, culling, depuration and packing;

PART VII. *Harvesting and Production, contd.*

(*b*) from different batches shall not be placed in the same immediate container.

(5) Shellfish shall be evenly distributed throughout the depuration tank to ensure maximum water circulation and at a density which will permit the shellfish to open and undergo depuration.

(6) Shellfish shall be depurated for at least thirty-six hours and if any interruption occurs in the process of depuration the process shall be restarted.

(7) The maximum recommended capacity for a depuration tank shall not be exceeded.

(8) Depurated shellfish may be stored in depuration tanks for up to five days provided that no other shellfish are introduced.

(9) Water used for depuration shall be—

(*a*) maintained within the range 15°C to 25°C;

(*b*) free from turbidity or suspended silt load; and

(*c*) of a salinity, dissolved oxygen level and pH necessary for the normal physiological functioning of the shellfish at any point of the tank under maximum loading conditions, so, however, that the dissolved oxygen level shall be less than 50% of saturation.

(10) During the depuration process, there shall be a complete recirculation of water in the tanks every thirty minutes and—

(*a*) the water shall not be used for more than one thirty-six hour cycle; or

(*b*) the tank shall be of a flow-through design.

(11) Water circulation shall be such as to ensure adequate cross circulation in the tank.

(12) Water circulation and sterilization shall be maintained as long as shellfish are in the tank.

(13) Where there is breakdown of depuration equipment the duration thereof shall be recorded.

(14) After depuration shellfish shall be—

(*a*) protected from contamination; and

(*b*) held at a temperature no higher than 10°C.

Chilling and Freezing

Chilling and freezing.

86.—(1) The chilling and freezing of prescribed products shall be performed with sufficient rapidity to prevent any physical, biochemical or microbiological deterioration of the products.

PART VII. *Harvesting and Production, contd.*

(2) Freezing shall be carried out in a room or chamber specifically designed for the purpose and not in a cold store.

Cold storage.

87.—(1) Cold stores shall be operated so that they maintain frozen prescribed products in their frozen state.

(2) Frozen prescribed products shall be stored at a temperature of −18°C or colder.

(3) Prescribed products shall at all times be maintained in a frozen state during the transportation thereof to or from a licensed processing establishment.

(4) Where a rise in temperature occurs during storage or transportation of frozen prescribed products, the provisions of paragraph (5) shall apply.

(5) Where the temperature of the prescribed products—

(*a*) is between −17°C and −15°C, it shall be reduced to −18°C or colder as quickly as possible; or

(*b*) is between −14°C and −12°C, it shall be reduced to −18°C or colder as quickly as possible and the prescribed products shall be reassessed for wholesomeness, fitness for human consumption and compliance with the appropriate product standard; or

(*c*) rises above −12°C, the product shall be rejected for export.

Thawing of prescribed products.

88.—(1) Every licensed processing establishment that carries on thawing operations shall comply with the following requirements—

(*a*) prescribed products shall be brought to their thawed state as quickly as possible without causing undesirable physical, biochemical and microbiological changes to the products;

(*b*) prescribed products shall be thawed under hygienic conditions, in order to ensure the prevention of any contamination thereof and there shall be adequate drainage of any melt water produced;

(*c*) during thawing the temperature of prescribed products shall not be increased excessively and shall remain evenly distributed throughout the products.

(2) After thawing, prescribed products shall be handled and processed without delay in accordance with these Regulations.

(3) Fresh or thawed or cooked and chilled prescribed products shall be kept at the temperature of melting ice.

Refrigeration temperatures.

89. The air temperature of a refrigerator at a licenced processing establishment containing prescribed products for export or its ingredients shall be recorded at least once every hour.

PART VII. *Harvesting and Production, contd.*

90.—(1) Prescribed products shall be dried to a moisture content level low enough to prevent the growth of pathogenic micro-organisms. Dried prescribed products.

(2) Dried prescribed products shall be processed and transported in a manner which minimizes contamination, deterioration, spoilage or the development of pathogenic micro-organisms in them.

(3) Prescribed products for export may, if the competent authority approves, be sun dried in the open air.

VESSELS

Factory Vessels

91. Unloading and landing of prescribed products shall be done in such a way as to avoid contamination, and in particular, the following conditions shall be observed— Unloading and landing of factory vessels.

(*a*) prescribed products to be delivered to a factory vessel shall be harvested live;

(*b*) the operations shall take place rapidly and the products placed without delay in a storage area at a temperature appropriate for keeping the products frozen having regard to the nature of the products and their special characteristics; and

(*c*) equipment and handling practices that cause damage to the edible parts of the products shall be avoided.

92.—(1) The areas of a carrier vessel or freezer vessel reserved for the storage of prescribed products shall be kept completely clean. Carrier and freezer vessels.

(2) As soon as prescribed products are taken on board a carrier vessel or freezer vessel they shall be protected from contamination and from the sun or other sources of heat.

(3) Prescribed products on board a carrier vessel or freezer vessel shall be so handled and stored as to prevent bruising.

(4) Subject to paragraph (5), prescribed products which are not kept alive shall undergo cold treatment as soon as possible after landing.

(5) Prescribed products shall not be kept on board a licensed vessel for more than eight hours where the cooling system is not working efficiently.

(6) Ice used for the chilling of prescribed products shall be made from clean potable water or clean sea water and, before use, it shall be so stored as to prevent its contamination.

(7) After prescribed products are unloaded from a carrier vessel or freezer vessel, the container, equipment and section of the vessel, with which the prescribed products came in contact shall be cleaned and disinfected and washed with clean potable water or clean sea water.

PART VII. *Harvesting and Production, contd.*

(8) Post-harvest handling of prescribed products on board a carrier vessel shall be carried out in a hygienic manner.

(9) The viscera and non-edible parts of prescribed products which remain after post-harvest handling and which may pose a threat to public health shall be removed and set apart from prescribed products intended for human consumption and livers or roes intended for human consumption shall be refrigerated or frozen.

(10) Staff assigned to the handling of prescribed products on board a carrier vessel or freezer vessel shall maintain the highest standard of personal hygiene.

(11) Where prescribed products are kept on board a carrier vessel for more than twenty-four hours the following shall be observed—

(*a*) tanks, containers, or holds shall be in such condition that prescribed products are preserved in hygienic conditions and with adequate provision made for the drainage of melt water;

(*b*) all containers, holds, tanks, working decks and equipment shall be completely cleaned and washed with potable water or clean sea water after use;

(*c*) the vessel shall be disinfected at regular intervals and, where necessary, pest and vermin control measures shall be carried out;

(*d*) cleaning products, disinfectants and all potential toxic substances shall be stored in locked areas or cupboards, and shall be used in such a manner so as to prevent their contaminating the prescribed products;

(*e*) any brine or a tank used for freezing of prescribed products shall be in such condition so as not to cause contamination of the prescribed products;

(*f*) chilling prescribed products in cool sea water on a carrier vessel shall be done by means of ice or refrigeration and—

(i) after the tanks are unloaded, the circulation system shall be thoroughly cleaned and the containers shall be completely emptied and thoroughly cleaned and washed using potable water or clean sea water and then refilled with clean sea water;

(ii) the number of the tanks which are emptied and cleaned and the date thereof shall be appropriately recorded.

PART VIII—*Maintenance Standards System*

Maintenance system.

93.—(1) Every operator of a licensed processing establishment shall take such measures as are necessary to ensure that at all stages of the harvesting, handling, processing, packaging, storage, transportation and export of

PART VIII— *Maintenance Standards Systems, contd.*

prescribed products, there is compliance with the provisions of the Act and these Regulations.

(2) In ensuring that standards are maintained an operator shall—

(*a*) cause samples to be taken for analysis;

(*b*) prepare a HACCP plan or such other system or procedure which, in the opinion of the competent authority, is equivalent to a HACCP plan and shall document all information relevant to the systems and its verification, and shall include details concerning—

(i) the prescribed products;

(ii) the operating procedures;

(iii) the procedures for the monitoring of critical points and a review of the system;

(iv) the records to be kept maintained;

(v) the management process.

(3) The management process referred to in paragraph (2) (v) shall include—

(*a*) records of observation and measurements;

(*b*) results of verification activities;

(*c*) reports and written accounts of decisions relating to corrective action that has been taken;

(*d*) procedures for easy retrieval of all documents relating to an identified batch.

(4) The HACCP plan shall be examined as part of the inspection process.

(5) The competent authority may give to the operator such guidelines as may be necessary for the rectification of any deficiencies in the operation of the processing establishment or the HACCP plan.

(6) Any change in the operating procedures relevant to the harvesting, handling or the processing of prescribed products that would introduce a new critical control point to the system or substantially change an existing critical point in the system shall be documented in the HACCP or equivalent plan and the amended plan shall be submitted to the competent authority for approval and the provisions of paragraph (5) shall apply thereto.

(7) The competent authority shall advise the operator in writing within seven working days of his approval or non-approval of the changes.

PART IX— *General Product Standards*

Requirement for live bivalve molluscs.

94.—(1) Live bivalve molluscs and marine gastropods shall—

(*a*) be free of dirt;

(*b*) contain normal amount of intervalvular fluids; and

(*c*) show adequate response to percussion and other visual characteristics associated with freshness and viability.

PART IX— *General Product Standards*

(2) Live bivalve molluscs requiring relaying or purification before human consumption or processing shall meet the faecal coliform standards set out in these Regulations.

Fourth Schedule.

(3) The directives specified in the Fourth Schedule shall apply in relation to live bivalve molluscs.

(4) Total amnesic shellfish poisoning contents in the edible parts shall not exceed 20 mg of domoic-acid per gram using the HPLC methods.

(5) Paralytic shellfish poisoning and diarrhic shellfish poisoning in the edible parts of shellfish shall not exceed 90 mg per 100 gm and zero levels as determined by mouse bioassay.

Fresh or chilled products.

95. Fresh or chilled fish shall meet internationally accepted freshness standards.

Other products.

96.—(1) Prescribed products shall not be exported for human consumption where the total basic nitrogen limits (TVB-N) exceed—

Fifth Schedule. Part A.

(*a*) 25 milligrams of nitrogen per 100 gm of flesh for the species specified in Part A of the Fifth Schedule;

Part B.

(*b*) 2.3 milligrams of nitrogen per 100 gm of flesh for the species specified in Part B of the Fifth Schedule; and

Part C.

(*c*) 3.35 milligrams of nitrogen per 100 gm of flesh for the species specified in Part C of the Fifth Schedule.

(2) The microbiological standards applicable to cooked crustaceans and molluscs shall be in accordance with internationally accepted standards.

Sixth Schedule.

(3) The mean total mercury in the edible parts of prescribed products other than the species of fish listed in the Sixth Schedule shall not exceed 0.50 ppm of fresh product or 0.5 milligrams per kilogram of fresh weight.

(4) The average mercury content in the edible parts of the species listed in the Sixth Schedule shall not exceed 1 ppm of fresh product or 1 milligram per kilogram of fresh product.

(5) The mean value of total cadmium in the edible parts of the prescribed products shall not exceed—

(*a*) 0.005 milligrams per kilogram in the case of fresh fish;

(*b*) 1.0 milligrams per kilogram in the case of the fresh bivalve mollucs; and

(*c*) 0.5 milligrams per kilogram in the case of fresh crustaceans.

(6) The mean value of the total lead in the edible parts of the prescribed products shall not exceed—

(*a*) 0.2 milligrams per kilogram in the case of fresh fish;

(*b*) 1.0 milligrams per kilogram in the case of the fresh bivalve mollucs; and

(*c*) 0.5 milligrams per kilogram in the case of fresh crustaceans.

Additional ingredients or substances.

97.—(1) No substance or ingredient shall be added to prescribed products intended for export which is likely to be harmful to or presents a health risk to consumers of those products.

PART IX—*General Product Standards, contd.*

(2) Any substance or ingredient added to prescribed products shall not exceed the limits applicable to the products specified in— Seventh Schedule.

(*a*) the Seventh Schedule; or

(*b*) the Codex, Volume XIV, entitled "Food Additives" (First edition, 1983); and all revisions thereto.

98. Any pesticide, antibiotic or other residue present in prescribed products shall— Residue.

(*a*) not be harmful to health or be a health risk to consumers; and

(*b*) not exceed the limits applicable to the product specified in—

(i) these Regulations; or

(ii) Volume XIII of Codex, entitled "Codex Maximum Limits for Pesticide Residues" (Second edition, 1986) including Supplement 1 entitled "Codex Maximum Limits for Pesticide Residues" (Second edition, 1988) and Supplement 2 entitled "Codex Maximum Limits for Pesticide Residues" (Second edition, 1989) or any revised edition thereof.

Heavy Metals and Contaminants

99. Metals or other contaminants, of any kind present in prescribed products shall— Contents of heavy metal or contaminants.

(*a*) not be likely to be harmful or of a health risk to consumers; and

(*b*) not exceed the limits applicable to the products specified in—

(i) the Sixth Schedule; and Sixth Schedule.

(ii) Volume XII of the Codex, entitled "Codex Standards for Natural Mineral Waters and Edible Ices and Ice Mixes" (First edition, 1982); and all revisions thereof.

PART X—*Chemicals*

100. Where an operator applies to the competent authority for permission to use an additive specified in the Seventh Schedule on prescribed products, and the competent authority is of the opinion that there are reasonable grounds to believe that the addition of the additive to the prescribed product does not or is not likely to create a risk to public health, the competent authority may, in writing— Additives. Seventh Schedule.

(*a*) approve the additive for use in the prescribed products; and

(*b*) specify any condition subject to which the additive may be used.

PART X—*Chemicals, contd.*

Chemical compounds to be approved before use.

101. No person shall use a chemical compound in a licensed processing establishment or licensed vessel—

(*a*) in an area in which prescribed products are harvested, handled or processed; or

(*b*) in a manner that is likely to result in its direct or indirect contact with prescribed products, which is not approved by the competent authority.

Prohibited chemical compounds.

102.—(1) Chemical compounds containing—

(*a*) antimony, arsenic, cadmium, lead or mercury;

(*b*) substances known as or believed to be carcinogens, mutagens or teratogens; or

(*c*) any other substances that are generally recognized as being hazardous to human health,

shall not be approved for use for any purpose in a licensed processing establishment or on a licensed vessel.

(2) Chemical compounds containing potentially harmful compounds such as chromic acid, formaldehyde, hydrofluoric acid, hydrofluosilicic acid, oxalic acid, or the salts of these compounds, shall only be approved for use in a licensed processing establishment or a licensed vessel where its use will not or is not likely to contaminate prescribed products.

(3) Chemical compounds containing heavy perfumes, isomers of dichlorobenzene, pine oil or similar substances shall not be approved for use in any areas in licensed processing establishments or licensed vessels in or on which prescribed products are harvested, handled or processed.

(4) Hand-care preparations that leave a residual fragrance on the hands after rinsing shall not be approved for use by persons who work in areas of a licensed processing establishment or licensed vessel where prescribed products are handled.

Chemical compounds that do not require approval. Eighth Schedule.

103. The approval of the competent authority is not required for the use of chemical compounds specified in the Eighth Schedule.

Application for use of chemical compound.

104.—(1) An operator may, where he is desirous of using a chemical compound specified in paragraph (2) or (3) of regulation 102 or hand-care preparations referred to in paragraph (4) of the regulation apply to the competent authority for approval to use the chemical compound or hand-care preparations in the manner approved by the competent authority.

PART X—*Chemicals, contd.*

(2) An application shall be made in respect of each chemical compound for which approval is sought and shall be accompanied by the fee specified in the Third Schedule. Third Schedule.

(3) Details of any particular ingredient contained in the chemical compound shall be specified either as—

(*a*) a precise value, that is to say, expressed as a percentage; or

(*b*) a range of values, that is to say, expressed as the minimum and maximum percentages.

(4) The operator shall specify on the application the category of use specified in the Ninth Schedule. Ninth Schedule.

(5) An operator shall, upon being requested by the competent authority, provide the competent authority with a sample of the chemical compound.

(6) The competent authority may, on receipt of an application under paragraph (1), request the operator to furnish further information relating to the chemical compound.

105. The competent authority may— Grant of approval.

(*a*) grant approval for the use of chemical compound (hereinafter referred to as approved chemical compound) on such terms and conditions as it thinks fit; or

(*b*) refuse to grant approval and shall so inform the operator in writing giving the reasons therefor.

106. An approved chemical compound that is used at a licensed processing establishment or on a licensed vessel, shall be stored in a room or storage area set aside for that purpose, under conditions that ensure no risk of contamination of prescribed products or of any coverings therefor. Storage of chemical compounds.

107. Where after approval is granted under regulation 105 (*a*) an inspector takes a sample of the chemical compound for analysis and it is found on analysis that the formula thereof varies from the formula of the chemical compound submitted on application, the competent authority shall forthwith revoke the approval and notify the operator in writing of the revocation forwarding a copy of the certificate of analysis with the notification. Analysis of samples.

108. An operator shall, on request, provide an inspector with— Inspector to be provided with information.

(*a*) a list of all the approved chemical compounds in use at the licensed establishment or on the licensed vessel;

(*b*) details of the use or intended use of the chemical compound;

(*c*) details of the place and manner of storage of the approved chemical compound; and

(*d*) a copy of the instrument of approval for each chemical compound.

PART XI—*Packaging*

General requirement for packaging.

109.—(1) Prescribed products shall be packaged or wrapped under satisfactory hygienic conditions so as to prevent their contamination.

(2) The materials used for packaging or wrapping prescribed products shall be suitable for such use and shall—

(*a*) not cause any physical, biochemical or micro-biological deterioration of the prescribed products;

(*b*) not contaminate the prescribed products;

(*c*) not contain or transmit to the prescribed products a substance that could cause a health hazard;

(*d*) not cause exposure of the prescribed products during storage or transportation;

(*e*) be sufficiently strong to withstand the handling ordinarily incurred by packaging, during transit to the final destination.

Time between processing and packing.

110. The time that elapses between processing and packing of prescribed products shall be such as to prevent physical, biochemical or microbiological deterioration of the prescribed product.

Inks and colourants.

111.—(1) Descriptive markings shall be applied to packaging of prescribed products by means of indelible ink.

(2) Only food colourings which are approved by the competent authority can be used in plastic packaging for prescribed products.

(3) Inks and pigments or colourants in inks used on packaging for prescribed products shall be non-toxic and shall not contain—

(*a*) lakes or pigments;

(*b*) chromium;

(*c*) chemical compounds specified in regulation 106 and any other toxic substances.

Labels and tags.

112. Labels and tags or any adhesive matter used on packaging for prescribed products shall be so used as to prevent contamination of the products.

Foreign objects in packages.

113. No container of prescribed products shall contain any foreign matter or thing.

Fresh products.

114. Material or wrappers used for the packaging of fresh prescribed products on ice shall provide adequate drainage for water from melted ice.

Storage of packaging material.

115. Unused packaging material shall be stored in a hygienic manner away from product handling areas.

Wrapping of live bivalve molluscs.

116.—(1) Live bivalve molluscs, echinoderms, tunicates and marine gastropods shall be wrapped under the most ideal hygienic conditions.

PART XI—*Packaging, contd.*

(2) The wrapping material or container used in the packaging of live bivalve molluscs shall—

(*a*) not impair their organoleptic characteristics;

(*b*) not be capable of transmitting substances harmful to human health;

(*c*) provide adequate protection.

(3) Oysters shall be wrapped with the concave shell downwards.

Reuse of packaging and wrapping.

117. Packaging and wrapping material shall not be reused so, however, that containers made of impervious, smooth and corrosion resistant material, which are easy to clean and disinfect, may be reused after cleaning and disinfecting.

PART XII—*Transport*

Transport.

118. The operator of a licensed processing establishment shall not receive prescribed products from an unlicensed vessel or an unlicensed processing establishment for the purposes of processing those products for export.

Conditions of transport.

119.—(1) Prescribed products shall be transported from one licensed processing establishment or licensed vessel to another licensed processing establishment, or licensed vessel, or to a port of shipment in accordance with the following conditions—

(*a*) the prescribed products shall be handled and carried in such a manner so as not to breach any conditions or restrictions applicable to them;

(*b*) chilled or frozen prescribed products shall remain chilled or frozen, as the case may be, during its transportation in accordance with regulation 87 (4); and

(*c*) any health mark affixed to the products or their packaging shall be kept intact.

(2) Prescribed products shall be transported under such conditions that—

(*a*) prevent their contamination;

(*b*) protect the prescribed products from deterioration; and

(*c*) prevent damage to the container.

General requirements for transportation of prescribed products.

120. Vehicles used for the transportation of prescribed products shall be clean and shall meet the following requirements—

(*a*) all internal surfaces of the cargo area shall be constructed from smooth and impervious materials and shall be free of cracks and crevices;

PART XII—*Transport, contd.*

(*b*) all internal surface joints shall be smooth and sealed to prevent the entry of moisture;

(*c*) the cargo area shall be effectively proofed against pests and dust;

(*d*) ramps, where provided, shall not be stowed within the cargo area;

(*e*) the cargo area shall be constructed in such a manner that it is capable of being effectively drained;

(*f*) if lighting is supplied in the cargo area, the light source shall be covered by shatterproof shields; and

(*g*) animals shall not be carried in the cargo area.

Health mark removal, etc.

121.—(1) No person shall handle prescribed products where the health mark thereon or other packaging has been removed, broken, altered or otherwise interfered with, until so authorized by an inspector.

(2) Vehicles used for the transportation of chilled or frozen prescribed products shall be effectively insulated, constructed and equipped to maintain prescribed products in a chilled or frozen condition.

Transporting of live fish.

122. Vehicles used for the transportation of live fish shall—

(*a*) be clean; and

(*b*) be constructed to maintain the fish in a healthy condition during transportation.

Live bivalve molluscs and marine gastropods.

123.—(1) Consignment of live bivalve molluscs and marine gastropods intended for human consumption shall be transported in sealed parcels.

(2) The vehicles used for the transportation of live bivalve molluscs and gastropods shall conform with the following specifications—

(*a*) the interior or any parts with which they may come into contact shall be made of corrosion resistant material and shall be smooth and easy to clean;

(*b*) suitable equipment shall be provided to ensure efficient protection against extreme conditions, contamination and damage to the shell caused from vibration or abrasion;

(*c*) closed vehicles or containers shall maintain the prescribed products at a temperature which will not adversely affect their quality or viability.

Transport of fresh or frozen products.

124.—(1) Prescribed products shall not be stored with or transported with other products which may contaminate them or affect their hygienic conditions.

(2) If ice is used to chill the prescribed products, adequate drainage shall be provided in order to ensure that water from melted ice does not stay in contact with the products.

PART XII— *Transport, contd.*

Export certificate, etc.

125.—(1) The operator of a licensed processing establishment or a licensed vessel shall not transport prescribed products from a licensed processing establishment, factory vessel, freezer vessel or carrier vessel for export unless the operator has obtained in relation to those products an export licence and an export health certificate.

(2) A customs officer, master of a vessel or pilot of an aircraft shall not accept prescribed products for export unless the documents referred to in paragraph (1) are presented to him along with the prescribed products.

PART XIII— *System of Inspection and Monitoring*

Inspection system.

126. An Inspector shall, upon completion of an inspection of a processing establishment, factory vessel, freezer vessel or carrier vessel to which an application for a licence relates, make a report in writing of the assessment to the competent authority.

Inspection of prescribed products, etc.

127.—(1) An Inspector shall ensure that—

(*a*) only live aquaculture, inland and marine products are harvested;

(*b*) licensed vessels are offloaded at designated ports;

(*c*) prescribed products are properly placed in batches and that sampling thereof is carried out as required;

(*d*) an operator has in relation to prescribed products valid transport certificates and has affixed correct identification codes on the batches;

(*e*) harvesting, handling and processing activities are properly carried out;

(*f*) an operator implements systems to ensure proper monitoring of all activities carried out in a licensed processing establishment or licensed vessel.

(2) An Inspector shall, on the directive of the competent authority, carry out inspections of licensed establishments and licensed vessels.

(3) An inspection under paragraph 2 (*c*) shall be carried out in accordance with internationally accepted procedures.

(4) An operator may request the competent authority to carry out an inspection of a licensed processing establishment or a licensed vessel, and the competent authority shall cause an inspection to be carried out on payment by the operator of the appropriate fee specified in the Third Schedule.

Third Schedule.

(4A) The operator of a licensed vessel shall, as far as is practicable, land his prescribed products during the normal working hours of the inspector and where a vessel lands outside of such normal working hours, the operator shall ensure that the prescribed products remain in the vessel until the arrival of an inspector.

(5) Where an inspector carries out an inspection outside of his normal working hours the operator shall pay to the competent authority such sum as is agreed between the competent authority and the operator.

PART XIII— *System of Inspection and Monitoring, contd.*

(6) The operator of a licensed processing establishment or a licensed vessel shall not prevent an inspector at that licensed processing establishment or on that licensed vessel from observing or interviewing any employee, agent or contractor or licensed vessel, as the case may be.

(7) Where a batch fails an inspection that batch shall be rejected and the provisions of regulation 157 shall apply.

(8) An operator shall not export any batch of prescribed products which has failed an inspection.

(9) An inspector shall, upon completion of an inspection of a batch of prescribed products, submit a specimen of the product to the competent authority for testing and where the batch is rejected as being unfit for human consumption, the competent authority shall so advise the operator in writing

(10) After withdrawal of a notice of suspension the operator of the licensed processing establishment or licensed vessel whose licence was suspended may resume operations of the licensed processing establishment or licensed vessels.

Inspection of fishing vessel at sea.

128. The competent authority may cause an inspection and audit of licensed vessels, which harvest, handle or process prescribed products for export, to be carried out during operations at sea, at such time as the competent authority may determine and the operator thereof shall not prevent the carrying out of such inspection audit.

Inspection of licensed vessel in port.

129.—(1) The competent authority may request an operator of a licensed vessel to make that vessel available for inspection and audit at a specified port, within the time specified.

(2) Where the operator of a licensed vessel is unable to make the vessel available for inspection under paragraph (1) he shall, within forty-eight hours before the inspection and audit, so notify the competent authority.

(3) The competent authority shall notify the operator of the new place or time for inspection where the competent authority is notified under paragraph (2).

(4) Prescribed products which are harvested, handled or processed on board a licensed vessel, shall not be sent to a licensed processing establishment or entered for export or exported, between the date of the request and the date the licensed vessel is presented for inspection at the specified port.

Plastic seal.

130.—(1) The competent authority shall, at the commencement of every fishing trip, provide an inspector or captain of every licensed vessel with a non-reusable plastic seal which shall be affixed to the locking device of the cold storage hold at the end of the fishing trip.

PART XIII—*System of Inspection and Monitoring, contd.*

(2) A seal shall only be removed at the port of offloading or, in the case of an emergency, by or in the presence of an inspector.

(3) Where a seal is removed in contravention of paragraph (2), the prescribed products shall not be transported to or be accepted in a licensed processing establishment for processing for export.

PART XIV—*Sampling and Analysis*

Sampling Plans

Samples for micro-biological examination.

131. Samples taken from a batch for the purpose of microbiological examination or chemical analysis sampling shall be taken in a manner that is representative of the entire batch.

Sample units.

132. Sample units of frozen aquaculture products and shellfish, including chilled and frozen cooked prawns shall be examined using the procedures set out in regulations 133 to 136.

Sampling procedures.

133.—(1) Every sample shall be—

(*a*) labelled, tagged or marked as to be easily identified;

(*b*) kept under such conditions so that a true result of any analysis, inspection or examination thereof can be obtained; and

(*c*) kept in the custody or control of an inspector until it is—

(i) dispatched to an approved analyst for analysis, inspection or examination; or

(ii) analyzed, inspected or examined by an inspector; or

(iii) destroyed or otherwise disposed of.

(2) Every batch from which samples are to be obtained and assessed shall be so marked as to be readily identified, and may be identified by reference to the product identification code.

Selection and assessment of sample units.

134.—(1) The number of sample units may be drawn at random from the batch by an inspector.

(2) The sample units shall be assessed by—

(*a*) the applicable international product standard;

(*b*) the applicable, physical, chemical microbiological and biotoxins standards relevant to the water samples from production areas.

(3) Where a sample is taken from a batch for the purpose of examination and analysis for chemical residue, phytoplankton, and marine biotoxins and other contaminants, the taking of sample and the examination and analysis shall be carried out in accordance with internationally accepted standards.

PART XIV—*Sampling and Analysis, contd.*

(4) Prescribed products that have been examined and analyzed shall be separated from those products that have not been examined or analyzed or been rejected for export.

Sampling tests.

135.—(1) The competent authority shall institute sampling procedures and protocols in relation to tests for the following—

(*a*) mercury content;

(*b*) histamine; and

(*c*) crustaceans.

(2) In respect to tests for mercury content—

(*a*) the analysis shall be carried out on a finely homogenized mixture of the sample so as to obtain a mean value;

(*b*) where there is a change in the international permissible level, the competent authority shall revise the national level.

(3) In respect to tests for histamine—

(*a*) the appropriate number of samples shall be taken from each prescribed product at the time of landing of the product;

(*b*) regarding the value found in species known as Scombridae and Clupeiddae—

(i) the mean value shall not exceed 100 ppm;

(ii) the value shall be less than 200 ppm, if taken from two samples,

so, however, that no sample shall have a value exceeding 200 ppm;

(*c*) species belonging to families which have undergone enzyme ripening treatment in brine may have higher levels but such levels shall not exceed 400 ppm;

(*d*) such tests shall be carried out in accordance with reliable scientifically recognized methods such as high performance liquid chromatography.

(4) In respect to tests on crustacean, the minimum international accepted sample size shall be utilized.

(5) The batch shall be rejected for export where the permitted maximum levels are exceeded.

Samples generally.

136.—(1) The competent authority shall design sample plans and procedures in relation to the following—

(*a*) sampling of water from approved production areas for testing for chemical residue, phytoplantkton and other micro-organisms and marine biotoxins;

PART XIV—*Sampling and Analysis, contd.*

(*b*) sampling of prescribed products for testing for parasites, residues, phytoplankton, and marine biotoxins;

(*c*) sampling of potable water or ice for chemical residue or microbes;

(*d*) taking prescribed product samples from licensed processing establishments, licensed vessels, storage areas, transport facilities to determine compliance with product safety standards.

(2) Every sample procedure shall include matters relating to sample size, method of analysis and recording of results and labelling.

PART XV—*Trade Description*

Identification number.

137. The identification number of every licensed processing establishment and licensed vessel shall be affixed on the immediate container of the prescribed products preceded by one of the following where applicable—

(*a*) "Licensed Processing Establishment Number" or "Lic. Pro. Est. No."; or

(*b*) "Licensed Carrier Vessel Number" or "Lic. Car. Ves. No."; or

(*c*) "Licensed Factory Vessel Number" or "Lic. Fac. Ves. No."; or

(*d*) "Licensed Freezer Vessel Number" or "Lic. Fre. Ves. No.".

Country of origin of prescribed products.

138.—(1) The trade description applied under regulations 140 and 142 to imported prescribed products that are repacked in Jamaica, shall indicate the last country in which the prescribed products were processed before being imported into Jamaica.

(2) There shall be no indication that Jamaica is the country of origin of prescribed products which are imported from another country and repacked in Jamaica without being altered by processing before they were repacked.

(3) Subject to paragraph (4), the country of origin of prescribed products shall be taken to be Jamaica if they were harvested in Jamaican waters and processed in Jamaica.

(4) Paragraph (3) shall not apply to bivalve molluscs, marine gastropods, tunicates and echinoderms.

Identification code.

139. The immediate container of prescribed products shall be embossed or otherwise permanently marked with an identification code, which shall include—

(*a*) the production area grid number;

(b) the harvesting vessel number (if applicable);

(*c*) the carrier vessel or freezer vessel number (if applicable);

(*d*) the date of harvesting;

PART XV—*Trade Description, contd.*

(*e*) the identification number of the licensed processing establishment or licensed vessel.

Trade description to be applied.

140.—(1) A trade description shall—

(*a*) be applied to all prescribed products;

(*b*) be in the form of a label, stencil, lithograph or other device which is fixed permanently and unobscured in a conspicuous position on the immediate container;

(*c*) be in a colour that contrasts with any background colour;

(*d*) relate to their condition at the time of exports; and

(*e*) contain in prominent and legible characters—

(i) a true description of the prescribed products;

(ii) a list of all ingredients in descending order of proportion where—

(A) the products contain more than one ingredient; and

(B) they are labelled in a manner that makes them suitable for direct sale to the consumer;

(iii) the net contents;

(iv) the date of packaging or processing in clear language or in code;

(v) the country of origin as specified in paragraph (2);

(vi) the official identification number allotted to the licensed establishment or licensed factory vessel in which processing last occurred;

(vii) the name and address of the licensed processing establishment or the name and home port of the licensed factory vessel;

(viii) any other information as may be required.

(2) Subject to paragraph (3), the country of origin shall be indicated in any of the following manner—

(*a*) "PRODUCT OF JAMAICA";

(*b*) "PRODUCE OF JAMAICA";

(*c*) "JAMAICAN PRODUCT";

(*d*) "PRODUCED IN JAMAICA";

PART XV—*Trade Description, contd.*

(*e*) "MADE IN JAMAICA";

(*f*) "JAMAICAN", conjoined with the name of the prescribed products; or

(*g*) such other caption that clearly indicates Jamaica as the country of origin or the country where they last underwent preparation that changed their nature.

(3) Derivatives of the word "JAMAICA" or "JAMAICAN" shall not be used.

Application of trade description where more than one covering used.

141. Where prescribed products which are packed in an immediate covering, which is not lining material, and then packed into one or more outer coverings, the trade description shall be applied to each covering.

Interference with trade description.

142. No person shall alter or interfere with a trade description applied to prescribed products and their packaging.

Use of language other than English.

143.—(1) Where the prescribed products which are processed in Jamaica are to be inspected and the whole or a portion of a trade description applied thereto appears only, or is repeated, in a language other than the English language, the operator shall, at his expense, obtain a translation of the other language certified by—

(*a*) a commercial translation agency;

(*b*) a high commission, embassy, trade commission or consulate of the foreign country of which that language is an official language; or

(*c*) a tertiary educational institution at which the language is taught.

(2) A translation shall be made available to an inspector on request.

Marks and Seals

Sealing.

144. The competent authority may require an inspector to seal—

(*a*) a licensed processing establishment;

(*b*) a licensed vessel or any part thereof, including a chiller, freezer, retort or storage area;

(*c*) a motor vehicle or refrigerated van;

(*d*) a container system unit;

(*e*) a ship including a hold, locker, access port, cask or barrel;

(*f*) an aircraft; or

(*g*) any other thing used in connection with the harvesting, handling, processing or storage or transport of prescribed products for export.

PART XV—*Trade Description, contd.*

Seals not to be removed, altered or interfered with.

145.—(1) No person, except an inspector in pursuance of his duties under these Regulations, shall remove, break, alter or otherwise interfere in any way with an official mark or seal.

(2) Where an official health mark is removed, broken, altered or otherwise tampered with an inspector shall—

(*a*) detain the prescribed products and the container;

(*b*) notify the operator giving reasons in writing for the detention; and

(*c*) obtain all relevant details including—

(i) the registration number, make and type of motor vehicle which transported the prescribed products;

(ii) the name of the owner or operator of the vehicle;

(iii) a description of the container and serial number;

(iv) the times of dispatch and arrival;

(v) the name and address of the driver;

(vi) the name of the licensed processing establishment or licensed vessel from which the prescribed products were shipped;

(vii) the name of the person receiving the prescribed products;

(viii) a description of the prescribed products;

(ix) the numbers on the official health mark; and

(x) any statements giving reasons for the interference with the official seal;

(*d*) collect and correlate all relevant documents;

(*e*) compare the prescribed products with the descriptions given on the accompanying documents; and

(*f*) submit a report of the findings to the competent authority for investigation.

Official health mark. First Schedule. Form 8.

146.—(1) There shall be an official health mark for use by an inspector in the form set out as Form 8 in the First Schedule.

(2) The competent authority shall cause the health mark to be kept in safe custody.

(3) The official health mark shall—

(*a*) not be transferable; and

PART XV— *Trade Description, contd.*

(*b*) be durable and waterproof and the characters legible, indelible and easily decipherable.

Application of official marks.

147. An inspector shall apply the official health mark to prescribed products, or containers after he has examined—

(*a*) the prescribed products and found them fit for human consumption; and

(*b*) the containers and found them to be in a sanitary condition.

Official health mark for bivalve molluscs.

148.—(1) Notwithstanding regulation 147 the official health mark which shall be used in respect to bivalve molluscs, echinoderms, tunicates, and marine gastropod shall be printed on the wrapping material or be placed on a separate label which is affixed to the wrapping material.

(2) Self adhesive official health marks shall not be used, unless they are non-detachable.

(3) [*Deleted by L.N. 40/2006.*]

Marks, etc., to be destroyed.

149.—(1) Where an official health mark is damaged, worn or otherwise unusable the competent authority shall cause it to be destroyed.

(2) The competent authority shall keep a record of the date and manner of destruction of all health marks.

Net Contents

Metric units.

150. The net contents of prescribed products shall be declared numerically or by mass or volume in metric units or by count, so, however, that where a country to which the products are exported requires the net contents to be expressed in imperial and metric units the net contents shall so be expressed.

PART XV— *Trade Description, contd.*

Foreign country requirements.

151.—(1) An operator shall advise the competent authority in writing of the requirements of the importing country regarding the specification of net contents and the operator shall comply with the requirements.

(2) The provisions of regulation 154 and this regulation shall apply where the declared net contents is declared by counting individual units.

Determination of net contents.

152.—(1) Where the net contents of prescribed products in an immediate container is to be determined by counting the number of individual units of prescribed products in the container the individual units shall be recorded.

(2) The net contents of prescribed products in a consignment declared by mass shall be determined by using the appropriate methods and standards applicable to those prescribed products.

Declared net contents on container.

153. If a container contains a number of immediate containers that are labelled with the net contents of those immediate containers, the declared net contents on the container shall specify the number of immediate containers and their net contents.

PART XVI— *Export Procedures*

Intention to Enter Prescribed Products for Export

Application pursuant to regulation 12.

154. An application pursuant to regulation 12 to enter prescribed products for export shall be made to the competent authority at least seven days prior to the proposed date of export of the product.

Inspection and certification.

155.—(1) Where an operator has applied pursuant to regulation 12, the competent authority shall, where it deems necessary, cause an inspection of the prescribed products to be carried out.

(2) Where on inspection —

(*a*) the prescribed products are found to be fit for human consumption and for export; and

(*b*) the prescribed products meet the requirements of the importing country,

the competent authority shall, in addition to issuing an export licence, issue an export health certificate in respect to such products.

(3) No person shall alter, add to or delete information contained in—

(*a*) an application to enter prescribed products;

(*b*) an export licence; or

(*c*) an export health certificate.

Inspection of prescribed products if condition changed, etc.

156. Where an inspector has reasonable grounds to believe that after certification or the grant of an export licence or export health certificate and before the products are exported that—

(*a*) there is non-compliance with any regulation relating to prescribed products; or

(*b*) the condition of the prescribed products has deteriorated,

he shall inspect the prescribed products and detain the products if the condition has deteriorated, and so inform the competent authority which shall immediately notify the operator in writing stating that certification and the export licence and export health certificate are withdrawn and the reasons therefor and the operator shall forthwith return the notice of intention and the export licence and export health certificate and shall not export the prescribed products.

Withdrawal of export licence and health certificate

156A.—(1) Paragraph (2) shall apply in any case where, after export, the competent authority becomes aware that—

(*a*) an application for an export licence or an export health certificate contains or is based on false or misleading representation or on information which is false in a material particular;

(*b*) an administrative error has occurred in relation to an export licence or an export health certificate and it is necessary to correct that error; and

(*c*) an operator has failed to comply with the provisions of these Regulations.

(2) The competent authority—

(*a*) may, as it thinks necessary, suspend for such period as it thinks fit, or withdraw, the export licence or export health certificate;

(*b*) on the suspension or withdrawal of the export licence or export health certificate, shall immediately notify the operator in writing that certification and the export licence and export health certificate are withdrawn or suspended and the reasons therefor; and

(*c*) may take such steps as it deems necessary to prevent the acceptance of any prescribed products by the importing country.

Prescribed Products Not Fit for Export but Fit for Human Consumption

Prescribed products not fit for export

157. Where an inspector has inspected prescribed products, and he has reasonable grounds to believe that the prescribed products are not fit for export but fit for human consumption he shall—

(*a*) cause the prescribed product to be handled, treated, stored or marked so to prevent deterioration; and

(*b*) cancel, remove and deface any official export health marks that may have been applied thereto or the container or carton.

Prescribed products prohibited for export resubmitted for inspection.

158.—(1) An operator may resubmit prescribed products that have been rejected for export for re-inspection.

(2) The operator shall before resubmitting the prescribed products—

(*a*) notify the competent authority in writing that the prescribed products are being resubmitted for inspection; and

(*b*) indicate the nature of any further preparation or processing operations that have been undertaken in relation to the prescribed products to render them fit for export; and

(*c*) provide evidence that the further preparation or processing has resulted in the prescribed products being suitable for export.

Handling of prescribed products not fit for human consumption.

159. Where, upon re-inspection under regulation 158, an inspector is satisfied that prescribed products are not fit for human consumption he shall—

(*a*) cause those products to be separated from other prescribed products to prevent contamination;

(*b*) cause those products to be labelled clearly as unfit for human consumption;

(*c*) cause those products to be removed as quickly as possible from the licensed processing establishment or licensed vessel; and

(*d*) cause the prescribed products that are suitable for use as animal feed, or pharmaceutical purposes to be so marked, handled, treated and stored and condemn, mark and destroy those that cannot so be used.

Cost of disposal of unfit prescribed products

159A. An operator shall be responsible for all costs associated with the proper handling, treatment, storage and disposal of all prescribed products which are not fit for human consumption.

PART XVII—*Records*

Records

160.—(1) An operator shall keep records in respect to the operations of his licensed processing establishment or licensed vessel, as the case may be.

PART XVII—*Records, contd.*

(2) Records required to be kept under paragraph (1) shall be retained—

(*a*) in the case of records relating to the harvesting, handling, processing or movement into or out of prescribed products, for the shelf life of the products, or for a period of three years, whichever is the longer;

(*b*) in any other case, for a period of five years,

and be made available for inspection on request.

(3) All records kept by an operator shall be accurate, legible and dated.

(4) An operator shall keep accurate records of repair and maintenance of—

(*a*) equipment used for harvesting, handling or processing of prescribed products;

(*b*) the water supply, retorts and refrigeration plant.

(5) An operator shall, upon request from the competent authority or an inspector, make available any report from a repairman, tradesman, engineer, consultant or expert, relating to any matter specified in paragraph (3).

Recording measuring devices.

161. No person shall alter or tamper with any recording or measuring device required by these Regulations in order to obtain a false or misleading reading.

PART XVIII— *Appeals*

Appeals.

First Schedule Form 9.

162. The notice of appeal shall be in the form specified as Form 9 in the First Schedule.

FIRST SCHEDULE (Regulations 4, 8(1), 12(1), (2) and (3), 13(2) and (3), 146(1) and 162)

FORM 1

Stamp of Competent Authority

STAMP OF THE COMPETENT AUTHORITY UNDER THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

FORM 2

Inspector's Identification Card

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

Inspector's Identification Card

Photograph of Inspector

Name of Inspector _____

Identification No. _____

Date of Issue _____

Authorized Signature _____

FIRST SCHEDULE, *contd.*
FORM 3

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Application for a Licence to Enter Prescribed Products for Export

Application No. _____

Date of Application _____

I/We....., hereby apply for a licence to enter for export the consignment of prescribed products specified below—

PART I— *Particulars of Applicant*

Full name of applicant _____

Address of applicant _____

_____

Position of applicant (where applicable) _____

Telephone No. _____ Fax No. _____

Email _____ Telex No. _____

PART II— *Particulars of Prescribed Products*

Species (insert scientific names then common names)

_____

_____

Presentation of products and type of treatment (e.g. live, refrigerated, frozen, salted, preserved, pickled, chopped, whole, gutted, headless) _____

Code/Batch number _____

Type of packaging _____

Number of packages _____

Net Weight _____

Requisite storage and transport temperature _____

FIRST SCHEDULE, *contd.*
FORM 3, *contd.*

PART III— *Origin of Products and by-Products*

Name and official identification number of vessel(s) where product harvested and handled

_____

_____

_____

Dates(s) of harvest _____

_____

Approved production areas from which product was harvested

_____

_____

Name, address and identification number of establishment that processed product

_____

_____

_____

Date of processing and cold storage _____

_____

Temperature required during transportation _____

Container _____ Refrigerated truck _____

PART IV— *Destination of Products and By-Products*

The aquaculture inland and marine products and by-products are dispatched from

_____
(*place of dispatch*)

to _____
(*country and place of destination*)

by the following means of transportation or a combination of them (specify means of transport; if air, specify name of airline and flight number; if land, specify route, if sea, specify name of vessel and sports and whether goods will be offloaded or remain in transit)

_____

_____

_____

_____

FIRST SCHEDULE, *contd.*

FORM 3, *contd.*

Name of Consignor _____

Name of Consignee and address at place of destination _____

_____

_____

_____

MISCELLANEOUS

Your application is to be accompanied by the prescribed application fee.

DECLARATION

I/We hereby declare that the provisions of the Act and the Regulations that apply to the products referred to in this notice have been and will be complied with until the products are exported, and that all due care will be exercised to ensure that the prescribed products mentioned above arrive at their destination in compliance with the provisions of the Act and Regulations.

I/We understand that any failure to comply with the Act and Regulations may result in the suspension or cancellation of my/our export licence or export health certificate.

Dated this day of , 200

Signature of Applicant.

FIRST SCHEDULE, *contd.*
FORM 3A

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Application for a Licence to Enter Prescribed Products

Application No. _____

Date of Application _____

I/We ....., hereby apply for a licence to enter for export the consignment of prescribed products specified below—

PART I— *Particulars of Applicant*

Full name of applicant _____

Address of applicant _____

_____

Position of applicant (where applicable) _____

Telephone No. _____ Fax No. _____

Email _____ Telex No. _____

Full name of licensed processing establishment or vessel

_____

PART II

Species (insert scientific names then common names)

_____

_____

_____

_____

FIRST SCHEDULE, *contd.*

FORM 3A, *contd.*

MISCELLANEOUS

Your application is to be accompanied by the prescribed application fee.

DECLARATION

I/We hereby declare that the provisions of the Act and the Regulations that apply to the products referred to in this notice have been and will be complied with until the products are exported, and that all due care will be exercised to ensure that the prescribed products mentioned above arrive at their destination in compliance with the provisions of the Act and Regulations.

I/We hereby understand that any failure to comply with the Act and Regulations may result in the suspension or cancellation of my/our export licence or export health certificate.

Dated this day of , 200

Signature of Applicant.

FIRST SCHEDULE, *contd.*

FORM 4

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Application for a Licence to Operate a Processing Establishment

Application No. _____

Date of Application _____

Name of owner/operator of establishment _____

Business address of owner/operator _____

Name of operator of establishment _____

Business address of operator if different from address of establishment _____

Particulars of export operations _____

_____

_____

Other operations at the processing establishment, if any, likely to affect the export operations carried on at the establishment _____

_____

_____

MISCELLANEOUS

Your application shall be accompanied by the following—

1. The documents required by the Guidelines to Veterinary Inspection and Monitoring of Fish Processing Establishment Operations set by the Veterinary Services Division of the Ministry responsible for agriculture.
2. The Public Health Certificate pursuant to regulation 13 (4) (*a*).
3. The prescribed application and inspection fees.

Signature of Applicant _____

FIRST SCHEDULE, *contd.*

FORM 4, *contd.*

FOR OFFICIAL USE

Date Inspected _____

Result of Inspection _____

Document Received _____ Application Granted/Refused

Fee Received _____ If Granted: Licence No. _____

Operating Certificate No. _____

Dated Application Received _____ If refused reasons therefor _____

FORM 5

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Application for a Licence to Operate a Factory Vessel/ Freezer Vessel/carrier Vessel

Application No. _____

Date of Application _____

Name Vessel _____

Home Port of Vessel _____

Name and Address of Operator of Vessel _____

Type of vessel carrier _____ freezer _____ factory _____

Will persons sleep on vessel _____ No of persons _____

Describe facilities _____

FIRST SCHEDULE, *contd.*
FORM 5, *contd.*

Port of loading and off-loading of prescribed products _____

_____

_____

Port where prescribed products are to be inspected _____

_____

Particulars of harvesting, handling or processing of prescribed products _____

_____

Particulars of other operations likely to affect the harvesting, handling or processing of prescribed products on board _____

_____

_____

MISCELLANEOUS

Your application shall be accompanied by the following documents—

1. Proof of ownership or base of vessel.
2. The Public Health Certification of crew members.
3. HACCP Plan and relevant specifications of the vessel and equipment to be used thereon.
4. Proof of registration under the Fishing Industry Act.
5. The prescribed fees.

Signature of Application _____

FOR OFFICIAL USE

_____

Date Inspected _____

Result of Inspection _____

Document Received _____ Application Granted/Refused

Fee Received _____ If Granted: License No. _____

Operating Certificate No. _____

Dated Application Received _____ If refused reasons therefor _____

_____

FIRST SCHEDULE, *contd.*

FORM 6

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Licence to Enter Prescribed Products for Export

Licence No. _____

_____
(*Name of Exporter*)

of _____
(*Business Address of Exporter*)

is hereby licensed to enter prescribed goods for export.

This licence is valid for a period of _____ days, unless earlier suspended or revoked, and is not transferable.

The prescribed goods which may be exported pursuant to this licence are—

This licence is granted under the following condition—

Breach of the Act or Regulations shall result in suspension or revocation.

Dated the day of , 20

(*Affix Stamp of Competent Authority*)

Signed:

Director, Veterinary Services Division
Ministry of Agriculture

FIRST SCHEDULE, *contd.*

FORM 6A

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Licence to Export

Licence No. _____

_____
(*Name of Exporter*)

of _____
(*Business Address of Exporter*)

is hereby licensed to export prescribed goods.

This licence is valid for a period of _____ months, unless earlier suspended or revoked, and is not transferable.

The prescribed goods which may be exported pursuant to this licence are—

This licence is granted under the following condition—

Breach of the Act or Regulations shall result in suspension or revocation of the licence.

Dated the day of , 20 .

(*Affix Stamp of Competent Authority*)

Signed:

Director, Veterinary Services Division
Ministry of Agriculture.

FIRST SCHEDULE, *contd.*

FORM 6B

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Licence to Operate a Processing Establishment

Licence No. _____

_____

(*Name of Operator*)

of _____

(*Business Address of Operator*)

is hereby licensed to operate a processing establishment at _____

_____

(*Address of Processing Establishment*)

This licence is valid for a period of _____ months, unless earlier suspended or revoked, and is not transferable.

The prescribed goods which may be exported pursuant to this licence are—

This licence is granted under the following condition—

Breach of the Act or Regulations shall result in suspension or revocation.

Dated the day of , 20 .

(Affix Stamp of Competent Authority)

Signed:_____

Director, Veterinary Services Division
Ministry of Agriculture

FIRST SCHEDULE, *contd.*

FORM 6C

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Licence to Operate Carrier Vessel/Factory Vessel/Freezer Vessel

Licence No. _____

_____

(*Name of Operator*)

of _____

(*Business Address of Operator*)

is hereby licensed to operate a *carrier vessel/factory vessel/freezer vessel the home port of which is: _____

_____

(*Name of Home Port*)

This licence is valid for a period of _____ months, unless earlier suspended or revoked, and is not transferable.

The prescribed goods which may harvested and found on the *carrier vessel/factory vessel/freezer vessel pursuant to this licence are—

This licence is granted under the following condition—

Breach of the Act or Regulations shall result in suspension or revocation.

Dated the day of , 20 .

(Affix Stamp of Competent Authority)

Signed:_____

Director, Veterinary Services Division
Ministry of Agriculture.

Delete which is inapplicable

FIRST SCHEDULE, *contd.*

FORM 7

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Operating Certificate Pursuant to Licence Granted Under Regulation 12(2) and (3)

No. _____

This is to certify that _____
(*Name of Operator*)

of _____
(*Business Address of Operator*)

has been granted, on the day of , 200 , a licence

No. _____ to operate a * processing establishment/carrier vessel/factory vessel/ freezer vessel for a period of _____ months, unless the licence is previously suspended or revoked.

Dated the day of , 20 .

(***Affix Stamp of Competent Authority***)

_____
Director, Veterinary Services Division
Ministry of Agriculture.

****Delete whichever is inapplicable***

FORM 8 [*Deleted by L.N. 40/2006.*]

FIRST SCHEDULE, *contd.*

FORM 9

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) ACT

THE AQUACULTURE, INLAND AND MARINE PRODUCTS AND BY-PRODUCTS (INSPECTION, LICENSING AND EXPORT) REGULATIONS, 2000

Notice of Appeal

Appeal No. _____

To: The Minister responsible for Agriculture

Take notice that I, _____

of _____
(*Business Address*)

being a consignor or operator of a processing establishment/carrier vessel/ factory vessel/ freezer vessel, hereby appeal against the decision of the competent authority, in the matter of _____

_____

This decision was notified to me on the _____ day of _____200

The grounds of appeal are—

I attach herewith copies of correspondence, documents or statements relevant to the appeal and receipt evidencing payment of the prescribed fee.

Dated the _____ day of _____200

_____
Signature of Appellant

SECOND SCHEDULE (Regulation 5)

Contents of Official Register

1. Date of lodgment of application.
2. Name of applicant.
3. Business address of applicant.
4. Name of operator, if different from applicant.
5. Business address of operator, if different from applicant.
6. Category of licence for which application made.
7. Address of processing establishment or home port of carrier vessel, factory vessel or freezer vessel.
8. Nature of export operation.
9. Description of equipment, facilities and services in processing establishment or on board carrier vessel, factory vessel or freezer vessel.
10. Type, description and identification number of carrier vessel, factory vessel or freezer vessel.
11. Number and expiry date of Public Health Certificate of processing establishment.
12. Date of inspection of processing establishment, carrier vessel, factory vessel or freezer vessel.
13. Name and identification number of inspector carrying out inspection.
14. Date of submission of report of inspection.
15. Date of grant of licence.
16. Date of refusal of application.
17. Reasons for refusal.
18. Date of notification or refusal of application.
19. Date of renewal of licence.
20. Date of notification of suspension of licence.
21. Reasons for suspension of licence.
22. Date of withdrawal of suspension of licence.
23. Date of notification of revocation of licence.
24. Date of notice of appeal.
25. Grounds of appeal.
26. Decision of appeal.
27. Date of notification of decision of appeal.
28. Date of revocation of licence.

THIRD SCHEDULE (Regulations 12(4), 14, 104(2) and 127(4))

Fees

Application fee—			
to export or enter for export prescribed products	...	...	$10,000.00
for licensing of processing establishment	...	...	$3,000.00
for licensing of vessels	...	...	$4,000.00
Fee for approval of chemical compound	...	...	$3,000.00
Inspection fee—			
Official Register	...	...	$500.00
processing establishment			
1st inspection	...	...	$35,000.00
2nd inspection	...	...	$20,000.00
3rd inspection	...	...	$15,000.00
vessel			
1st inspection	...	...	$25,000.00
2nd inspection	...	...	$15,000.00
3rd inspection	...	...	$10,000.00
Issue of licence—			
to export prescribed products	...	...	$20,000.00
to enter for export prescribed products	...	...	$5,000.00
to operate processing establishment	...	...	$50,000.00
to operate vessel	...	...	$40,000.00
Renewal of licence—			
to export prescribed products	...	...	$20,000.00
to enter for export prescribed products	...	...	$5,000.00
to operate processing establishment	...	...	$50,000.00
to operate vessel	...	...	$40,000.00
On issue of export health certificate in respect of each consignment	...	...	$1,000.00
Lodgment of appeal to Minister	...	...	$2,000.00
Fee for certification of a HACCP plan for processing establishment or vessels	...	...	$5,000.00

FOURTH SCHEDULE (Regulation 94(3))

Requirements Concerning Live Bivalve Molluscs Intended for Immediate Human Consumption

1. The possession of visual characteristic associated with freshness and viability, including shells free of dirt, an adequate response to percussion, and normal amounts of intravalvular liquid.

2. They must contain less than 300 faecal coliforms or less than 230 E. Coli per 100g of mollusc flesh and intravalvular liquid based on a five-tube, three-dilution MPN-test or any other bacteriological procedure shown to be of equivalent accuracy.

3. They must not contain samonella in 25g of mollusc flesh.

4.—(1) They must not contain toxic or objectionable compounds occurring naturally or added to the environment.

(2) In accordance with the procedure laid down in internationally accepted reference standards the competent authority shall determine the testing methods for checking the chemical criteria and the limit values applicable.

5. The upper limits as regards the radionuclide contents must not exceed the limits for foodstuffs as laid down by internationally accepted reference standards.

6.—(1) The total Paralytic Shellfish Poison (PSP) content in the edible parts of molluscs (the whole body or any part edible separately) must not exceed 80 microgrammes per 100g of mollusc flesh in accordance with the biological testing method—in association if necessary with a chemical method for detection of Saxitoxin—or any other method recognized in accordance with the procedure laid down in internationally accepted reference standards.

(2) If the results are challenged, the reference method shall be the biological method.

7.—(1) The customary biological testing methods must not give a positive result to the presence of Diarrhetic Shellfish Poison (DSP) in the edible parts of molluscs (the whole body or any part edible separately).

(2) The total Amnestic Shellfish Poison (ASP) content in the edible parts of molluscs (the entire body or any part edible separately) must not exceed 20 micrograms of domoic acid per gram using the HPLC method.

8.—(1) In the absence of routine virus testing procedures and the establishment of virological standards, health checks must be based on faecal bacteria counts.

(2) Examinations for checking compliance with these requirements must be carried out in accordance with proven methods which are scientifically recognized.

(3) For the uniform application of these provision sampling plans as well as the methods and analytical tolerances to be applied in order to check compliance with these requirements must be established in accordance with the procedure laid down in internationally accepted reference standards.

(4) The effectiveness of the faecal indicator bacteria and their numerical limits as well as the other parameters specified herein shall be kept under constant review and, where scientific evidence proves the need to do so, be revised following the procedure specified in internationally accepted reference standards.

(5) When there is scientific evidence indicating the need to introduce other health checks or to amend the parameters specified in these provisions for the purpose of protecting public health, such measures must be adopted in accordance with the procedure referred to in internationally accepted reference standards.

SEVENTH SCHEDULE, *contd.*

PART D

Sulphur dioxide and sulphides listed in Part C are conditionally permitted in the type of prescribed products listed in column 1 at the maximum quantities or levels as indicated in the second column:

Type of Prescribed Products	Maximum Levels (expressed as SO 2)
Dried Salted Fish of the Gadigane Species	200 inedible parts
Fresh Frozen or Quick Frozen Crustacean and Cephalopods	150 inedible parts
Fresh Crustacean—up to 80 units	150 inedible parts
between 80–120 units	200 inedible parts
over 120 units	300 inedible parts
Cooked Crustacean	50 inedible parts

PART E

Save in respect of the additives, preservatives, oxidants, dioxides, Sorbates or benzoate listed in Parts A and B the other preservatives specified below are permitted in maximum quantities or levels in the type of prescribed product specified.

Type of Prescribed Products	Preservatives and Oxidants	Maximum Levels
Process and semi-process Fish Products	Erythorbic Acid and Sodium Erythorbate	1500 express
Frozen or Quick Frozen Fish with Red Skin	Erythorbic Acid	
Surimi	Polyphosphate	1gm/kg
Fish and Crustacean Paste	Polyphosphate	5gm/kg
Fillet of Frozen or Quick Frozen Unprocessed Fish	Polyphosphate	5gm/kg
Frozen or Quick Frozen Crustacean Products	Polyphosphate	5gm/kg
Canned Tuna	Polyphosphate	5gm/kg
Canned and Bottled Crustacean and Molluscs	Calcium Disodium (edta)	75mg/kg
Canned and Bottled Fish	Calcium Disodium (edta)	75mg/kg
Minorin	Calcium Disodium (edta)	100mg/kg
Frozen and Quick Frozen Crustacean	Calcium Disodium (edta)	75mg/kg

The only ingredients to be used with canned Abalone are—

Ascorbic acid

Salt

Sodium Meta Bisulphite

EIGHTH SCHEDULE (Regulation 103)

Chemical Compounds for which Approval is not required

The following chemical compounds, or uses of chemical compounds, need not be approved provided that compound or use does not cause contamination of prescribed products or in any way create a hazard to the preparation of prescribed products.

1. Chemical compounds used solely as ingredients, additives, preservatives, and oxidants in prescribed products as provided for in the Ninth Schedule.
2. Chemical compounds for use solely as denaturants.
3. Chemical compounds for use solely in laboratories for analytical and similar use.
4. Chemical compounds for use solely in offices or areas in a registered establishment where prescribed goods are not prepared.
5. Chemical compounds for use solely in space heating systems or cooling towers.
6. Chemical compounds for use solely in sewage or waste water systems outside buildings.
7. Chemical compounds for use solely in secondary cooling loops.
8. Chemical compounds (except insecticides) for use solely on the exterior of buildings or areas immediately adjacent to the exterior of buildings.
9. Chemical compounds for use solely for cleaning or maintenance of vehicle exteriors.
10. Chemical compounds for use solely in workshops for—
    (*a*) cleaning machinery;
    (*b*) removing grease and oil; or
    (*c*) lubricating equipment for use in inedible product areas.
11. Marking inks used for the application of information to packaging materials used as coverings of prescribed products.
12. Soda ash or similar chemical compounds.
13. Solvents used to remove substances resistant to the solvent action of acidic or alkaline cleaning agents.
14. Acetic Acid.
15. Calcium carbonate.
16. Calcium hydroxide.
17. Calcium hypochlorite.
18. Citric acid.
19. Hydrochloric acid.
20. Hydrogen peroxide.
21. Lactic acid.
22. Phosphoric acid.
23. Potassium hypochlorite.
24. Sodium bicarbonate.

EIGHTH SCHEDULE, *contd.*

25. Sodium carbonate (soda ash).
26. Sodium hydroxide (caustic soda).
27. Sodium hypochlorite.
28. Sodium metasilicate.
29. Sodium tripolyphosphate.
30. Sulphuric acid.
31. Tetrasodium pyrophosphate.
32. Trisodium phosphate.
33. The following edible oils that are used solely for lubrication purposes—
    (*a*) arachis oil;
    (*b*) cottonseed oil;
    (*c*) maize or corn oil;
    (*d*) olive oil;
    (*e*) rapeseed oil;
    (*f*) safflower oil;
    (*g*) soyabean oil;
    (*h*) sunflower oil.

NINTH SCHEDULE

(Regulation 104(4))

Categories of Use and Restrictions on Use of Chemical Compounds

Item	Category of Use	Description and Restrictions on Use
1.	General Cleaner Type A	General cleaning compound for use in all areas.
2.	General Cleaner Type B	Cleaning compound which, may only be used in soak tanks and applied by mechanical cleaning devices.
3.	General Cleaner Type C	General cleaning compound for use in areas of establishments in which there are no prescribed products.
4.	Acid Cleaner	Acid cleaning compound for periodic use in all areas.
5.	General Scouring Cleaning	A scouring compound suitable for use in all areas.
6.	Sanitizer	General sanitizing compound without detergent properties for use in all areas.

NINTH SCHEDULE, *contd.*

Item	Category of Use	Description and Restrictions on Use
7.	Sanitizer/Detergent	General sanitizing compound with detergent properties for use in all areas.
8.	Liquid Hand Soap Type A	Liquid soap for hand washing to be used from fixed dispensers sufficiently remote from prescribed product so as not to create a hazard.
9.	Liquid Hand Soap Type B	Liquid soap or cream for hand washing or hand sanitizing to be used only from fixed dispensers in amenities, suspect pens or areas not containing edible prescribed products.
10.	Lubricant Type A	A lubricant involving incidental contact with prescribed products to be used with the minimum application necessary to accomplish the desired technical effect.
11.	Lubricant Type B	A compound for use as an application to meat hooks and equipment to clean them and to prevent rust so, however, that those portions of the hooks and equipment that contact edible prescribed products are clean and free of the compound before the hooks or equipment is used again.
12.	Lubricant Type C	A lubricant involving no contact with prescribed products to be used with the minimum application necessary to accomplish the desired technical effect.
13.	Pesticide Type A	A non-residual insecticide for use in areas that may contain prescribed products, provided any exposed prescribed products are removed or covered before spraying is begun and the area is cleaned by thorough washing after spraying is completed.
14.	Pesticides Type B	A residual insecticide for use only in areas that do not contain prescribed products.
15.	Pesticide Type C	A rodenticide for use strictly in accordance with labelled directions.
16.	Pesticide Type D	A miscellaneous pesticide for use strictly in accordance with labelled directions.

[The inclusion of this page is authorized by L.N. 78/2002]

NINTH SCHEDULE, *contd.*

Item	Category of Use	Description and Restrictions on Use
17.	Tripe Treatment Compound	A tripe treatment agent for use in accordance with labelled directions.
18.	Prescribed Products Treatment Agent	A compound for treating water to be thoroughly rinsed from prescribed products before evisceration.
19.	Boiler Treatment Compound	A compound for minimizing scale build up in systems delivering potable water, where direct or indirect contact with prescribed products may be involved, to be used in accordance with labelled directions.
20.	Retort Water Treatment Agent	A compound for cooling and retort water treatment, to be used in accordance with labelled directions.
21.	Marking Ink	Ink for making or labelling.
22.	Odour Neutralizing Agent	A compound for use in areas containing inedible prescribed products, non-processing areas of exterior areas for use in odour control, provided it is not used to mask odours resulting from insanitary conditions and any characteristic odour does not penetrate into areas containing edible prescribed products.
23.	Water Treatment Compound	A compound for treatment of water to be used in accordance with labelled directions.
24.	Metal Cleaner and Polish	A metal cleaner for use on non-food contact surfaces.
25.	Drain Cleaner	A compound for chemical treatment of blocked drains.
26.	Miscellaneous Compound	A compound to be used in accordance with the manufacturer's directions.

TENTH SCHEDULE (Regulations 50A and 75)

Parameters and Parametric Values

PART A

Microbiological parameters

Parameter	Parametric value (number/100ml)
Escherichia coli (*E. coli*)	0
Enterococci	0

PART B

Chemical parameters

Parameter	Parametric value	Unit	Notes
Acrylamide	0.10	ug/l	Note 1
Antimony	5.0	ug/l	
Arsenic	10	ug/l	
Benzene	1.0	ug/l	
Benzo (a) pyrene	0.010	ug/l	
Boron	1.0	mg/l	
Bromate	10	ug/l	Note 2
Cadmium	5.0	ug/l	
Chromium	50	ug/l	
Copper	2.0	mg/l	Note 3
Cyanide	50	ug/l	
1, 2-dichloroethane	3.0	ug/l	
Epichlorohydrin	0.10	ug/l	Note 1

TENTH SCHEDULE, *contd.*

PART B, *contd.*

Chemical parameters

Parameter	Parametric value	Unit	Notes
Fluoride	1.5	mg/l	
Lead	10	ug/l	Note 3
Mercury	1.0	ug/l	
Nickel	20	ug/l	Note 3
Nitrate	50	mg/l	
Nitrite	0.50	mg/l	
Pesticides	0.10	ug/l	Notes 4 and 5
Pesticides—Total	0.50	ug/l	Notes 4 and 6
Polycyclic aromatic hydrocarbons	0.10	ug/l	Sum of concentrations of specified compounds; Note 7
Selenium	10	ug/l	
Tetrachloroethene and Trichloroethene	10	ug/l	Sum of concentrations of specified perimeters
Trihalomethanes—Total	100	ug/l	Sum of concentrations of specified compounds; Note 8
Vinyl chloride	0.50	ug/l	Note 1

Note 1: The parametric value refers to the residual monomer concentration in the water as calculated according to specifications of the maximum release from the corresponding polymer in contact with the water.

Note 2: Where possible, without compromising disinfection, operators should strive for a lower value.

Note 3: The value applies to a sample of water intended for use in the processing of prescribed products obtained by an adequate sampling method (1) at the tap and taken so as to be representative of a weekly average value ingested by consumers.

TENTH SCHEDULE, *contd.*

PART B, *contd.*

Chemical parameters

Where appropriate the sampling and monitoring methods must be applied in a harmonized fashion to be drawn up in accordance with these Regulations.

Operators shall take account of the occurrence of peak levels that may cause adverse effects on the wholesomeness of product.

Note 4: 'Pesticides' means:

(*a*) organic insecticides;

(*b*) organic herbicides;

(*c*) organic fungicides;

(*d*) organic nematocides;

(*e*) organic acaricides;

(*f*) organic algicides;

(*g*) organic rodenticides;

(*h*) organic slimicides;

(*i*) related products (*inter alia,* growth regulators) and their relevant metabolites, degradation and reaction products.

Only those pesticides which are likely to be present in a given supply need be monitored.

Note 5: Parametric value applies to each individual pesticide. In the case of aldrin, dieldrin, heptachlor and heptachlor epoxide the parametric value is 0.030 µg/l.

Note 6: 'Pesticides—Total' means the sum of all individual pesticides detected and quantified in the monitoring procedure.

Note 7: The specified compounds are:

(*a*) benzo (b) fluoranthene;

(*b*) benzo (k) fluoranthene;

(*c*) benzo (ghi) perylene; and

(*d*) indeno (1, 2, 3-cd) pyrene.

Note 8: Where possible, without compromising disinfection, operators shall strive for a lower value.

The specified compounds are: chloroform, bromoform, dibromochloromethane, bromodichloromethane.

TENTH SCHEDULE, *contd.*

PART C

Indicator parameters

Parameter	Parametric value	Unit	Notes
Aluminium	200	ug/l	
Ammonium	0.050	mg/l	
Chloride	250	mg/l	Note 1
Clostridium perfringens (including spores)	0	number/100ml	Note 2
Colour	Acceptable to consumers and no abnormal change		
Conductivity	2500	uS cm^{-1} at 20°C	Note 1
Hydrogen ion concentration	≥ 6.5 and ≤ 9.5	pH units	Note 1
Iron	200	ug/l	
Manganese	50	ug/l	
Odour	Acceptable to consumers and no abnormal change		
Oxidisability	5.0	mg/l O_2	Note 3
Sulphate	250	mg/l	Note 1
Sodium	200	mg/l	
Taste	Acceptable to consumers and no abnormal change		
Colony count 22°C	No abnormal change		
Coliform bacteria	0	number/100ml	
Total organic carbon (TOC)	No abnormal change		Note 4
Turbidity	Acceptable to consumers and no abnormal change		Note 5

TENTH SCHEDULE, *contd.*

PART C, *contd.*

Note 1: The water shall not be aggressive.

Note 2: This parameter need not be measured unless the water originates from or is influenced by surface water. In the event of non-compliance with the parametric value, the competent authority concerned shall investigate the supply to ensure that there is no potential risk to wholesomeness of product arising from the presence of pathogenic microorganisms, for example Cryptosporidium.

The competent authority shall include the results of all such investigations in the reports they submit under regulations 50A and 76.

Note 3: This parameter need not be measured if the parameter is analyzed.

Note 4: This parameter need not be measured for supplies of less than 10 000 m^3 a day

Note 5: In the case of surface water treatment, the competent authority should strive for a parametric value not exceeding 1.0 NTU (nephelometric turbidity units) in the water *ex treatment* works.

ELEVENTH SCHEDULE (Regulations 50E and 77B)

MONITORING

TABLE A

Parameters to be analyzed

1. *Check monitoring*

(1) The purpose of check monitoring is regularly to provide information on the organoleptic and microbiological quality of the water supplied for use in the processing of prescribed products as well as information on the effectiveness of treatment of water used or intended for use in the processing of prescribed products (particularly of disinfection) where it is used, in order to determine whether or not water intended for use in the processing of prescribed products complies with the relevant parametric values laid down in these Regulations.

(2) The following parameters shall be subject to check monitoring—

Aluminium (Note 1)

Ammonium

Colour

Conductivity

Clostridium perfringens (including spores) (Note 2)

Escherichia coli (E. coli)

Hydrogen ion concentration

Iron (Note 1)

Nitrite (Note 3)

Odour

Pseudomonas aeruginosa

Taste

Colony count 22° C and 37° C

Coliform bacteria

Turbidity

Note 1: Necessary only when used as flocculant (*).

Note 2: Necessary only if the water originates from or is influenced by surface water (*).

Note 3: Necessary only when chloramination is used as a disinfectant (*).

(*) In all other cases, the parameters are in the list for audit monitoring.

2. *Audit monitoring*

The purpose of audit monitoring is to provide the information necessary to determine whether or not all of the parametric values are being complied with.

ELEVENTH SCHEDULE, *contd* (Regulations 50E and 77B)

TABLE B

Minimum frequency of sampling and analyses for water intended for use in the processing prescribed products supplied from a distribution network or from a tanker

Operators shall take samples at the points of compliance as defined in regulation 5 (1) to ensure that water intended for use in the processing of prescribed products meets the requirements of these Regulations.

Volume of water distributed or produced each day within a supply zone (Notes 1 and 2) m^3	Check monitoring number of samples per year (Notes 3, 4 and 5)	Audit monitoring number of samples per year (Notes 3 and 5)
≤ 100	(Note 6)	(Note 6)
> 100 ≤ 1000	4	1
> 1000 ≤ 10000	4 +3 for each 1000 m^3/d and part thereof of the total volume	1 +1 for each 3300 m^3/d and part thereof of the total volume
> 10000 ≤ 100000		3 +1 for each 10000 m^3/d and part thereof of the total volume
> 100000		10 +1 for each 25000 m^3/d and part thereof of the total volume

Note 1: A supply zone is a geographically defined area within which water intended for use in the processing of prescribed products comes from one or more sources and within which water quality may be considered as being approximately uniform.

Note 2: The volumes are calculated as averages taken over a calendar year.

Note 3: In the event of intermittent short term supply the monitoring frequency of water distributed by tankers is to be decided by the competent authority.

Note 4: For the different parameters in the Tenth Schedule, the competent authority may reduce the number of samples specified in the table if:

ELEVENTH SCHEDULE, *contd.*

PART B, *contd.*

(a) the values of the results obtained from samples taken during a period of at least two successive years are constant and significantly better than the minimum requirements laid down in the Tenth Schedule; and

(b) no factor is likely to cause a deterioration of the quality of the water.

The lowest frequency applied shall not be less than 50% of the number of samples specified in the table, except in the particular case of note 6.

Note 5: As far as possible, the number of samples shall be distributed equally in time and location.

Note 6: The frequency shall be decided by the competent authority.

SECTION 1

Specifications for the Analysis of Parameters

Every laboratory at which samples are analyzed shall have a system of analytical quality control that is subject from time to time to checking by a person who is not under the control of the laboratory and who is approved by the competent authority for that purpose.

Parameters for Which Methods of Analysis are Specified

The following methods for microbiological parameters shall be guided by CEN/ISO international methods as laid down from time to time.

Coliform bacteria and Escherichia coli (E. coli) (ISO 9308-1)

Enterococci (ISO 7899-2)

Pseudomonas aeruginosa (prEN ISO 12780)

Enumeration of culturable micro-organisms—Colony count 22° C (prEN ISO 6222)

Enumeration of culturable micro-organisms—Colony count 37° C (prEN ISO 6222)

Clostridium perfringens (including spores)

Membrane filtration followed by anaerobic incubation of the membrane on m-CP agar (Note 1) at 44 ± 1° C for 21 ±3 hours. Count opaque yellow colonies that turn pink or red after exposure to ammonium hydroxide vapours for 20 to 30 seconds.

Note 1: The composition of m-CP agar is—

Basal medium	
Tryptose	30g
Yeast extract	20g
Sucrose	5g
L-cysteine hydrochloride	1g

ELEVENTH SCHEDULE, *contd.*

PART B, *contd.*

$MgS0_4$. $7H_2O$ 0.	1 g
Bromocresol purple	40 mg
Agar	15 g
Water	1,000 mg

Dissolve the ingredients of the basal medium, adjust Ph to 7, 6 and autoclave at 121° C for 15 minutes. Allow the medium to cool and add:

D-cycloserine	400 mg
Polymyxine- sulphate	25 mg
Indoxyl-â-D-glucoside	60 mg

to be dissolved in 8 ml sterile water before addition

Filter—sterilized 0, 5% phenolphthalein diphosphate solution	20 ml
Filter—sterilized 45% $FeCl_3$. $6H_20$	2 ml

SECTION 2

Parameters for Which Performance Characteristics are Specified

(1) For the following parameters, the specified performance characteristics are that the method of analysis used must, as a minimum, be capable of measuring concentrations equal to the parametric value with a trueness, precision and limit of detection specified. Whatever the sensitivity of the method of analysis used, the result must be expressed using at least the same number of decimals as for the parametric value considered in Parts B and C of the Tenth Schedule.

ELEVENTH SCHEDULE, *contd.*

SECTION 2, *contd.*

Parameters for Which Performance Characteristics are Specified

Parameters	Trueness % of Para-metric value (Note 1)	Precison % of Para-metric value (Note 2)	Limit of detection % of Para-metric value (Note 3)	Conditions	Notes
Acrylamide	0, 10	µg/l	Note 1	To be controlled by product specification	
Aluminium	10	10	10		
Ammonium	10	10	10		
Antimony	25	25	25		
Arsenic	10	10	10		
Benzo (a)	25	25	25		
pyrene Benzene	25	25	25		
Boron	10	10	10		
Bromate	25	25	25		
Cadmium	10	10	10		
Chloride	10	10	10		
Chlorine	0.5	0.5	0.5		
Chromium	10	10	10		
Conductivity	10	10	10		
Copper	10	10	10		
Cyanide	10	10	10		Note 4
1, 2-dichloroethane	25	25	25		
Epichloro-hydrin				To be controlled by product specification	
Fluoride	10	10	10		
Iron	10	10	10		
Lead	10	10	10		

ELEVENTH SCHEDULE, *contd.*

SECTION 2, *contd.*

Parameters for Which Performance Characteristics are Specified

Parameters	Trueness % of parametric value (Note 1)	Precision % of parametric value (Note 2)	Limit of detection % of parametric value (Note 3)	Condition	Notes
Manganese	10	10	10		
Mercury	20	10	20		
Nickel	10	10	10		
Nitrate	10	10	10		
Nitrite	10	10	10		
Oxidisability	25	25	10		Note 5
Pesticides	25	25	25		Note 6
Polycyclic aromatic hydrocarbons	25	25	25		Note 7
Selenium	10	10	10		
Sodium	10	10	10		
Sulphate	10	10	10		
Tetrachoroethene	25	25	10		Note 8
Trichloroethene	25	25	10		Note 8
Trihalomethanes—Total	25	25	10		Note 7
Vinyl chloride				To be controlled by product specification	

(2) For hydrogen ion concentration the specified performance characteristics are that the method of analysis used must be capable of measuring concentrations equal to the parametric value with a trueness of 0.2 pH unit and a precision of 0.2 pH unit.

Note 1 (1*): Trueness is the systematic error and is the difference between the mean value of the large number of repeated measurements and the true value.

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ELEVENTH SCHEDULE, *contd.*

SECTION 2, *contd.*

Note 2 (2*): Precision is the random error and is usually expressed as the standard deviation (within and between batch) of the spread of results about the mean. Acceptable precision is twice the relative standard deviation.

Note 3: Limit of detection is either:

(a) three times the relative within batch standard deviation of a natural sample containing a low concentration of the parameter; or

(b) five times the relative within batch standard deviation of a blank sample.

Note 4: The method shall determine total cyanide in all forms.

Note 5: Oxidation shall be carried out for 10 minutes at 100° C under acid conditions using permanganate.

Note 6: The performance characteristics apply to each individual pesticide and shall depend on the pesticide concerned. The limit of detection may not be achievable for all pesticides at present, but the competent authority shall strive to achieve this standard.

Note 7: The performance characteristics apply to the individual substances specified at 25% of the parametric value in the First Schedule.

Note 8: The performance characteristics apply to the individual substances specified at 50% of the parametric value in the Tenth Schedule.

Parameters for Which No Method of Analysis is Specified.

Colour

Odour

Taste

Total organic carbon

Turbidity (Note 1)

Note 1: For turbidity monitoring in treated surface water the specified performance characteristics are that the method of analysis used shall, as a minimum, be capable of measuring concentrations equal to the parametric value with a trueness of 25%, precision of 25% and a 25% limit of detection.