

CHAPTER 236**FOOD****THE FOOD (SEAFOOD PROCESSING AND INSPECTION) REGULATIONS**S.I. 87/2002
S.I. 33/2004

(SECTION 11)

*[Commencement 6th August, 2002]***PRELIMINARY**

1. These regulations may be cited as the Food (Seafood Processing and Inspection) Regulations. Citation.
2. In these regulations — Interpretation.
- “Act” means the Food Act; Ch. 236.
- “authorized officer” means every officer of the Department of Agriculture and Fisheries or the Department of Environmental Health appointed for the purpose of these regulations by the Minister by instrument in writing;
- “Certificate of Inspection” means a document issued by the Director of Fisheries indicating that a lot of seafood meets the requirements and standards of these regulations;
- “Certificate of Sanitation” means a document issued in accordance with rule 102 of the Health Services Rules; Sub. Leg., Vol. III, Ch 231.
- “commercial fishing vessel” means a vessel which has been granted a permit under section 11(1) of the Fisheries Resources (Jurisdiction and Conservation) Act; S.I. 33/2004. Ch. 244.
- “corrective action” means procedures to be followed when a deviation, or failure to meet a critical limit occurs;
- “critical control point” means a point, step or procedure in the processing of seafood at which control can be applied, and a food-safety hazard can be prevented, eliminated, or reduced to an acceptable level;

“critical limit” means the maximum or minimum value to which a physical, biological or chemical parameter must be controlled at a critical control point to prevent, eliminate or reduce to an acceptable level, the occurrence of the identified seafood safety hazard;

“factory vessel” means a vessel on which seafood products undergo one or more of the following operations followed by packaging; filleting, slicing, mincing, freezing or processing;

“food-safety hazard” means any biological, chemical or physical property that may cause a seafood to be unsafe for human consumption;

“hazard analysis” means a review of the processing of a seafood to determine whether there is the potential for significant hazards to occur and includes a description of the preventive measures;

“hazard analysis critical control point (HACCP) certified person” means an individual who has successfully completed training in the application of HACCP principles on seafood, or who is otherwise qualified through job experience and has been certified by the Minister responsible for food to perform these functions;

“Health Certificate” means a certificate issued in accordance with the Health Services Act;

“holding station” means a plant used in connection with the buying or storage of seafood;

“lot” means the seafood produced during a period of time indicated by a specific code;

“monitoring procedures” means a planned sequence of observations or measurements to assess whether a process or a critical control point is under control and to produce an accurate record for future use in verification;

“plant” means the building or facility or parts thereof, used for or in connection with the buying, storage, processing, packaging, or labelling of seafood;

Ch. 231.

“potable water” means fresh water fit for human consumption, meeting the prevailing World Health Organization’s Microbiological Guidelines for Drinking Water Quality;

“preventive measures” means actions and activities that can be used to prevent or eliminate a food-safety hazard or reduce it to an acceptable level;

“processing” means any step in the preparation of seafood for human consumption;

“sanitation standard operating procedure” (SSOP) means a planned procedure resulting from the process where a processor systematically considers his plant’s production process and physical facility, and establishes the steps required to ensure a safe and sanitary product;

“seafood” means fresh or saltwater finfish, crustaceans, molluscs or other forms of aquatic animal or plant life, other than birds or mammals, where such animal or plant life is intended for human consumption, and food products in which such animal or plant life is a characterizing ingredient; and

“standard operating procedure” (SOP) means a planned procedure resulting from the process where the processor systematically considers his handling and production processes and establishes the steps required to ensure that seafood is received, handled, packaged, stored and disposed of in a manner which ensures its safety.

PART 1 GENERAL PROVISIONS

3 (1) Subject to paragraph (2), these regulations apply to —

Application.

S.I. 33/2004.

- (a) seafood intended for export and domestic wholesale trade;
- (b) seafood holding stations;
- (c) seafood processing plants;
- (d) seafood export plants;
- (e) commercial fishing vessels; and
- (f) factory vessels.

(2) These Regulations do not apply to quantities of one hundred pounds (45.4 kilograms) or less of seafood that is imported for personal consumption or use.

Inspection.

4. (1) Subject to paragraph (2) of regulation 3, all seafood is subject to inspection and an authorized officer may appropriate a reasonable portion of seafood to use as a sample and for inspection or testing.

Schedule 12.
Schedule 13.

(2) The inspection and testing shall include appropriate sensory or scientific analysis or both and will conform to the microbiological guidelines indicated in Schedule 12 and the chemical guidelines indicated in Schedule 13.

Availability of
seafood for
testing.

5. The owner of seafood or a person acting on his behalf shall make readily accessible to an authorized officer any seafood for which an inspection is required under these regulations.

Power to detain
seafood.

6. An authorized officer may detain any seafood that he reasonably suspects does not meet the requirements of these regulations.

Prohibition on
unwholesome
seafood.

7. No person shall import, export, process or attempt to import, export or process, any seafood that is tainted, decomposed, unwholesome, contains foreign matter or otherwise fails to meet the requirements of these regulations.

Import
requirements.

8. (1) No person to whom paragraph (1) of regulation 3 applies shall import into The Bahamas or attempt to import into The Bahamas any seafood unless —

- (a) that person is the holder of an import licence;
- (b) each container in which the seafood is imported has a label on which the name of the country of origin is clearly identified;
- (c) the identity of the plant, including the country in which it is located, if different from the country of origin in which the seafood was processed and packed, is legibly marked on the carton or case in which the containers of seafood are shipped;
- (d) the day, month and year of packing is legibly marked on the carton or case in which the containers of seafood are shipped;
- (e) in the case of seafood products specified by the Minister to present to the consumer a high potential risk of a safety hazard, the number of

containers for each production code in the import lot is provided to an authorized officer; and

- (f) written notification of each shipment of seafood to be imported or that is imported is provided to an authorized officer either prior to the importation or within forty-eight hours following the importation.

(2) The written notification referred to in paragraph (1)(f) shall set out, in respect of each shipment of seafood imported or to be imported into The Bahamas —

- (a) the name of the importer or agent;
- (b) the common and scientific names of each type of seafood contained in the shipment;
- (c) the quantity of each type of seafood contained in the shipment;
- (d) the producer;
- (e) the country of origin; and
- (f) the location where the product is to be stored.

(3) No person shall import into The Bahamas or attempt to import into The Bahamas canned seafood unless the cans are embossed or otherwise permanently marked in a code that identifies the name of the plant in which the seafood was processed, and the day, month and year of processing.

(4) An application for an import licence must be made to the Minister in Form 1 of Schedule 15 accompanied by the respective fee stipulated in Schedule 14.

Form 1 of
Schedule 15.
Schedule 14.

(5) An import licence expires on the 31st day of December of the year in which it is issued.

(6) An import licence is not transferable.

9. Any person who imports, exports, or processes any seafood in contravention of regulations 5, 7 or 8, or of any term or condition attached to a licence granted under these regulations, commits an offence and is liable upon summary conviction, to a fine of ten thousand dollars or to imprisonment for a term of six months or to both such fine and term of imprisonment.

Penalties.

10. (1) For preserving the identity of any seafood detained, an authorized officer shall attach to the seafood

Detention of
seafood.

or its container, or to a representative container, a numbered tag upon which shall be clearly written —

- (a) the word “held”;
- (b) an identification number;
- (c) a brief description of the lot detained including where applicable, the size of the container, the size of the lot, its weight, number of packages and type of packaging;
- (d) the date of detention; and
- (e) the signature and stamp of the authorized officer.

(2) Where seafood is detained pursuant to regulation 6 and in accordance with paragraph (1), the authorized officer shall deliver or post to the owner or his agent a completed Notice of Detention and a copy to the person, if different from the owner or agent, on whose premises the seafood was found.

(3) No person shall alter, deface, or remove a tag attached to any seafood or seafood container pursuant to paragraph (1), or move, sell, or dispose of any such seafood or seafood containers unless he has obtained a Notice of Release from an authorized officer.

(4) A person who alters, defaces, or removes a tag attached to any seafood or seafood container pursuant to paragraph (1), or moves, sells, or disposes of any such seafood or seafood container for which he has not obtained a Notice of Release from an authorized officer in contravention of paragraph (3) commits an offence and is liable upon summary conviction to a fine of five thousand dollars or to imprisonment for a term of three months or to both such fine and term of imprisonment.

(5) Notwithstanding paragraph (3), where it is necessary for detained seafood to be transferred from one warehouse to another, or the owner of the seafood has made a reasonable request for the seafood to be transferred under detention, the Minister may permit by written approval, such seafood to be transferred.

(6) Where an authorized officer is satisfied that any seafood detained meets the requirements of these regulations, he shall prepare a Notice of Release, and deliver or post one copy thereof to the owner of the seafood or his agent and a copy to the person, if different

from the owner or agent, on whose premises the seafood was found.

11. Where an authorized officer is satisfied that seafood inspected by him meets the requirements of these regulations, he shall, on request, issue a Certificate of Inspection for such seafood in a form satisfactory to the Minister.

Issue of
Certificate of
Inspection.

12. (1) Where an authorized officer detains seafood under regulation 6, the owner or his agent may, by notice in writing, appeal the decision of that authorized officer to the Minister who shall, subject to regulation 13, order a re-inspection.

Appeal.

(2) Where a re-inspection is made pursuant to paragraph (1) and the Minister makes a decision as a result thereof, that decision shall be final.

13. The Minister shall not order a re-inspection pursuant to regulation 12 where —

Limit on powers
to order re-
inspection.

- (a) the identity of the seafood or containers of seafood in dispute has not been preserved pursuant to regulation 10;
- (b) the request for re-inspection was not made within thirty days after the disputed inspection;
- (c) the seafood or containers of seafood have in or upon them any poisonous or harmful substances.

14. Where an authorized officer has reasonable grounds to believe that seafood has deteriorated after the date on which it was inspected or that it otherwise fails to meet the requirements of these regulations, he may again inspect such seafood.

Second
inspection.

15. No person shall —

- (a) process any seafood on board a commercial fishing vessel unless that vessel has been issued a licence under regulation 17(a);
- (b) operate an holding station unless that station has been issued a licence in accordance with regulation 17(b);
- (c) process any seafood for commercial wholesale purposes unless all processing of that seafood is conducted in a plant having a seafood processing licence issued in accordance with regulation 17(c);

Requirement for
licence.

- (d) export any seafood unless he is the holder of a seafood export licence specific to that seafood product, issued pursuant to regulation 17(d).

Penalty for failure to operate without licence.

16. Any person who contravenes regulation 15, or any term or condition attached to a licence granted under these regulations, commits an offence and is liable upon summary conviction, to a fine of ten thousand dollars or to imprisonment for a term of six months or to both such fine and term of imprisonment.

Conditions for issue of licences.

17. The Minister may issue licences with respect to factory vessels, seafood holding stations, seafood processing plants and seafood exports plants where the applicant has paid the fees in accordance with Schedule 14 and —

Schedule 14.

- (a) where in the case of a factory vessel licence, the applicant —

Form 3 of Schedule 15.

- (i) submits a completed application in Form 3, in Schedule 15;

Schedule 1.

- (ii) meets the requirements of Schedule 1 with reference to conditions applicable to factory vessels;

Schedule 2.
Schedule 5.

- (iii) meets the seafood handling requirements of Schedule 2 and Schedule 5;

Schedule 6.

- (iv) meets the plant cleaning and sanitation requirements of Schedule 6;

Schedule 7.

- (v) meets the personnel health practices requirements of Schedule 7;

Schedule 8.

- (vi) meets the pest control requirements of Schedule 8;

Schedule 9.

- (vii) meets the standard operating procedures requirements of Schedule 9;

Schedule 10.

- (viii) meets the sanitation standard operating procedures requirements of Schedule 10;

- (ix) provides a plan of the vessel on a scale of not less than one eighth of an inch to the foot, showing the intended use of each part, room or division;

- (b) where in the case of a seafood holding station licence, the applicant —

Form 3 of Schedule 15.

- (i) submits an application in Form 3 of Schedule 15;

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- (ii) meets the plant premises and construction requirements for seafood holding stations of Schedule 3; Schedule 3.
 - (iii) meets the seafood handling requirements of Schedule 2 and of Schedule 5; Schedule 2.
Schedule 5.
 - (iv) meets the personnel health practices requirements of Schedule 7; Schedule 7.
 - (v) meets the pest control requirements of Schedule 8; Schedule 8.
 - (vi) meets the standard operating procedures requirements of Schedule 9; Schedule 9.
 - (vii) provides a plan of the facility on a scale of not less than one eighth of an inch to the foot, showing the intended use of each part, room or division;
 - (viii) acquires a Certificate of Sanitation for the premises;
- (c) where in the case of a seafood processing plant licence, the applicant —
- (i) submits an application in Form 3 of Schedule 15; Form 3 of
Schedule 15.
 - (ii) meets the plant premises and construction requirements of Schedule 4; Schedule 4.
 - (iii) meets the seafood handling requirements of Schedule 5; Schedule 5.
 - (iv) meets the plant cleaning and sanitation requirements of Schedule 6; Schedule 6.
 - (v) meets the personnel health practices requirements of Schedule 7; Schedule 7.
 - (vi) meets the pest control requirements of Schedule 8; Schedule 8.
 - (vii) meets the standard operating procedures requirements of Schedule 9; Schedule 9.
 - (viii) meets the sanitation standard operating procedures requirements of Schedule 10; Schedule 10.
 - (ix) provides a plan of the processing plant on a scale of not less than one eighth of an inch to the foot, showing the intended use of each part, room or division;
 - (x) acquires a Certificate of Sanitation for the premises;

- (d) where in the case of a seafood export licence, in addition to the requirements for a seafood processing plant licence, or a factory vessel licence, the applicant must —
- (i) conduct a hazard analysis and where food safety hazards are identified, a hazard analysis critical control point (HACCP) plan must be developed in accordance with Schedule 11;
 - (ii) identify two HACCP certified persons employed within the seafood processing plant;
 - (iii) conduct, at the least, an annual reassessment of the HACCP plan to verify that it meets the requirements of these regulations. The reassessment shall be performed by one or both of the HACCP certified persons.

Schedule 11.

Requirements for commercial fishing vessels.

S.I. 33/2004.

Schedule 2.
Schedule 5.

Circumstances for suspending, revoking or refusing a licence.

Licences not transferable.

Records for seafood export licence holder.

17A. In the case of a commercial fishing vessel, the following conditions apply —

- (a) the commercial fishing vessels must meet the requirements of Schedule 1A;
- (b) the seafood handling requirements of Schedule 2 and Schedule 5 must be met.

18. The Minister may suspend, revoke or refuse to issue a licence where —

- (a) the holder of, or an applicant for, the licence has provided false information for the purpose of obtaining a licence;
- (b) the applicant fails to meet the requirements as set out in these regulations;
- (c) the applicant has outstanding fees owing; and
- (d) the applicant has failed to maintain records in accordance with these regulations, or has falsified information contained in the records.

19. Licences issued under regulation 17 are not transferable and expire on the date indicated on the licence.

20. The holder of a seafood export licence must maintain records for a minimum period of two years relating to —

- (a) the name and address of the person responsible for the HACCP program of the plant;

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- (b) each critical control point specified in the hazard analysis critical control point plan;
 - (c) a description of the critical limits and monitoring procedures that are used;
 - (d) the frequency of the monitoring procedures;
 - (e) samples of the forms that are used during monitoring procedures and of the forms that are used to record actions taken to correct the deficiencies;
 - (f) the description of any corrective action plans developed for correcting deviations and maintaining compliance with the regulations;
 - (g) results of all activities conducted in accordance with monitoring procedures, corrective actions and verification procedures taken; and
 - (h) training information of all personnel involved in performing or supervising food safety processes.

21. The holders of seafood processing and seafood export licences must have a documented recall procedure in place which provides a description of the system used to trace seafood to the first destination and in respect of each shipment of seafood shipped, the name and address of the person to whom each shipment of seafood processed was shipped.

Recall system.

22. (1) No person shall harvest, unload, handle, hold or transport seafood intended for processing unless the harvesting, unloading, handling, holding or transporting meets the requirements of Schedule 1A, Schedule 2 and Schedule 5.

Requirements for loading and unloading fresh seafood.
Schedules 1A, 2 and 5.
S.I. 33/2004.

(2) Any person who contravenes paragraph (1) commits an offence and is liable upon summary conviction, to a fine of five thousand dollars or to imprisonment for a term of three months or to both such fine and term of imprisonment.

PART 2 LABELLING AND CODE MARKINGS

23. Every container of seafood shall be correctly and legibly labelled in English, in addition to any other language, to indicate —

Labelling of seafood containers.

- (a) the common name and the scientific name of the seafood contained therein;

- (b) the net weight of the seafood unless the container or label states that the contents are to be weighed at the time of retail sale;
- (c) the name and address of the processor;
- (d) the product description;
- (e) the country of origin;
- (f) the grade where applicable;
- (g) the date of packing;
- (h) the identification of the plant by its official approval number or code;
- (i) the lot identification code;
- (j) the identity of any additives or preservatives used; and
- (k) the list of ingredients in descending order of their proportion in the container.

Exemption.

24. Inner packaging may be exempted from the requirements of regulation 23, where such product is not intended for retail sale and the outer packaging is so marked.

Misleading labelling.

25. No person shall package any seafood or mark or label any container of seafood in a manner that is false, misleading or deceptive or is likely to create an erroneous impression regarding its purity, quality, composition or quantity.

Prohibition on quality designation.

26. No person shall mark or label a container of seafood with a quality designation or sell a container of seafood that is so marked or labelled unless —

- (a) a standard for that quality has been specified in these regulations; and
- (b) the seafood in that container meets that standard.

Penalty for misleading labelling etc.

27. Any person who contravenes regulations 23, 25, and 26 commits an offence and is liable upon summary conviction, to a fine of five thousand dollars or to imprisonment for a term of three months or to both such fine and term of imprisonment.

PART 3
SCHEDULE 1
FACTORY VESSELS REQUIREMENTS

1. The minimum requirements for factory vessels are as follows —

(1) A reception area set aside for taking seafood products on board the vessel, designed and arranged into sections that are large enough to allow each successive catch to be separated. The reception area and its movable parts must be —

- (a) easy to clean; and
- (b) designed in such a way as to protect the seafood product from the sun and other elements and from any source of dirt or contamination.

(2) A contaminant-free system for conveying seafood from the reception area to the work area.

(3) Work areas that are large enough for the preparation and processing of seafood under proper conditions of sanitation. Such areas must be designed and arranged in such a way as to prevent any contamination of the products.

(4) Storage containers or storage areas that are —

- (a) separated from the production, preparation and processing areas;
- (b) separate for —
 - (i) non-food items which may be produced;
 - (ii) finished products;
 - (iii) packaging materials;
 - (iv) waste intended for final disposal;
 - (v) cleaning products, disinfectants, insecticides and all potentially toxic substances which must be stored in locked premises or cupboards so that their use present no risk of contamination of seafood;
- (c) free of objects or products such as fuel or bilge water or other forms of contamination; and
- (d) so designed as to allow them to be easily cleaned and to ensure that melt water cannot remain with the seafood product.

(5) Holds, tanks or containers for the storage of refrigerated or frozen seafood which are —

- (a) separated from the machinery space and the quarters reserved for the crew;
- (b) constructed so that the inner surfaces are waterproof and easy to sanitize and made of smooth material not capable of contaminating the seafood product;
- (c) designed to ensure that melt water cannot remain in contact with the seafood product.

(6) Equipment for pumping seafood waste that is unfit for human consumption either directly into the sea or, where circumstances so require, into a watertight tank reserved for that purpose.

(7) Equipment providing a supply of potable water or pressurized uncontaminated seawater. The seawater intake equipment must be situated in a position where it is not possible for the incoming seawater to be contaminated by waste or engine coolant or other forms of contamination.

(8) Where applicable, equipment for removing the internal organs, head and fins of seafood must be made of or coated with a material which is waterproof, resistant to decay, smooth and easy to clean and disinfect.

(9) A suitable number of changing rooms, washbasins and toilets which shall meet the requirements specified in Schedule 4;

Schedule 4.

(10) Areas used for the preparation, processing or freezing of seafood products that have —

- (a) a non-slip floor that is easy to clean and sanitize and equipped for easy drainage of water. Structures and fixtures must allow water to drain freely;
- (b) walls and ceilings that are easy to clean, particularly where there are pipes, chains or electrical conduits;
- (c) equipment and tools such as cutting benches, containers, conveyors, gutting or filleting machines that are resistant to seawater corrosion, easy to clean and sanitize and practical for maintenance;
- (d) adequate ventilation and, where necessary, proper vapour extraction;

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- (e) lighting adequate for the process being conducted;
 - (f) facilities for cleaning and sanitizing tools, equipment and fittings; and
 - (g) appliances for cleaning and sanitizing the hands with taps that are not hand-operable and with single use towels, where towels are used.
- (11) The hydraulic circuit must be arranged or protected in such a way as to ensure that it is not possible for any leakage of oil to contaminate seafood products.
- (12) Refrigerated chill rooms which —
- (a) are large enough and so constructed that a full day's production, with ice, if necessary, can be conveniently stored. The room should be kept at a temperature not exceeding 45°F (7°C);
 - (b) are equipped with an accurate indicating thermometer or a temperature measuring device, *S.I. 33/2004.* and a temperature recording device so installed as to accurately show the temperature within the compartment and should be fitted with an automatic control to regulate temperature or with an automatic alarm system to indicate a significant temperature change in a manual operation. Charts must be available for inspection by an authorized officer at least during the period when the room is in use.
2. Factory vessels which freeze seafood must have —
- (a) refrigeration plant sufficiently powerful to —
 - (i) lower the temperature rapidly so as to achieve a core temperature of at least 0°F (-18°C) in an appropriate period of time;
 - (ii) keep seafood products in the storage holds at a temperature of at least 0°F (-18°C);
 - (b) storage holds equipped with a temperature recording system placed so that it can easily be read.
3. The minimum conditions relating to on-board handling and storage of seafood products are —
- (a) a qualified person on board the factory vessel who will be responsible for —
 - (i) applying good manufacturing practices;

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- (ii) ensuring that these regulations are applied and made available to authorized officers on request;
 - (iii) a register containing that person's comments and the temperature recording that may be required;
 - (iv) ensuring that all measures necessary to prevent persons liable to contaminate seafood products from handling them; and
 - (v) ensuring that effective measures are taken to exclude pests and animals from the vessel and to protect against contamination of food on the vessel by pests; and
- (b) a standard operating procedure which ensures that —
- (i) as soon as seafood is taken on board the vessel, that seafood is protected from contamination and from the effects of the sun or any other source of heat;
 - (ii) the seafood shall be handled and stored in such a way as to prevent bruising;
 - (iii) seafood other than those kept alive must undergo cold treatment as soon as possible after harvesting. However, in the case of fishing vessels where cooling is not possible, the seafood product must not be kept on board for more than six hours;
 - (iv) ice used for the chilling of products is made from potable water or uncontaminated seawater. Before use, it must be stored under conditions that prevent its contamination;
 - (v) the working decks, the equipment and the holds, tanks and containers and any other section of the vessels that are directly in contact with the seafood are cleaned each time they are used and sanitized at the end of the work period. Potable water or uncontaminated seawater shall be used for this purpose;
 - (vi) where the head or gut of fish is removed, such operations are carried out hygienically and the products are washed

immediately and thoroughly with potable water or uncontaminated seawater. The viscera and parts that may pose a threat to public health must be removed and set apart from the products intended for human consumption.

4. The general conditions for handling of seafood shall be as required at Schedule 5. Schedule 5.

5. The general conditions of sanitation applicable to areas and equipment shall be as required at Schedule 6. Schedule 6.

6. The general conditions of sanitation applicable to staff shall be as required at Schedule 7. Schedule 7.

7. The general conditions relating to packaging are —

(1) Packaging must be carried out under satisfactory conditions of sanitation to prevent the possibility of contamination of the seafood products.

(2) Packaging materials and products that are likely to come into contact with seafood products must not contribute to the contamination of the seafood and in particular —

(a) must not negatively affect the organoleptic characteristics of the seafood or contribute to the seafood, any material that is injurious to human health, and;

(b) must afford adequate protection to the seafood product.

(3) All packaging material must be used only once unless it is made of smooth corrosion resistant material capable of being easily cleaned and sanitized. Reused materials should be cleaned and sanitized between each use.

(4) Packaging materials used to hold fresh seafood under ice must allow adequate drainage of the melt water.

(5) Packaging materials must be stored in an area away from the production area and protected from dust and other forms of contamination.

SCHEDULE 1A*S.I. 33/2004.***COMMERCIAL FISHING VESSEL REQUIREMENTS**

1. The general hygiene conditions applicable to seafood products on board commercial fishing vessels are as follows —

(1) The sections of vessels or the containers reserved for the storage of seafood products must not contain objects or products liable to transmit harmful properties or abnormal characteristics to the foodstuffs. These sections or containers must be so designed as to allow them to be cleaned easily and to ensure that melted water cannot remain in contact with the seafood products.

(2) When used, the sections of vessels or the containers reserved for the storage of seafood products must be completely clean and, in particular must not be capable of being contaminated by the fuel used for the propulsion of the vessel or by bilge water.

(3) As soon as the seafood is taken on board, the seafood must be protected from contamination and from the effects of the sun or any other source of heat. When the seafood is washed the water used must be either fresh potable water, or clean seawater, so as not to impair the quality of the seafood.

(4) The seafood must be handled and stored in such a way as to prevent bruising. The use of spiked instruments shall be tolerated for the moving of large fish or fish which might injure the handler, provided the flesh of the fish is not damaged.

(5) Seafood other than those kept alive must undergo cold treatment as soon as possible after loading. However, in the case of fishing vessels where cooling is not possible, the fish must not be kept on board for more than eight hours.

(6) Ice used for the chilling of the seafood product must be made from potable water or clean seawater. Before use, it must be stored under conditions that prevent its contamination.

(7) After the seafood has been unloaded, the container, equipment and sections of vessels which are directly in contact with the seafood products must be cleaned with potable water or clean seawater.

(8) Where fish is headed and/or gutted on board, such operations must be carried out hygienically and the products must be washed immediately and thoroughly with fresh potable water or clean seawater. The viscera and parts which may pose a threat to public health must be removed and set apart from

products intended for human consumption. Livers and roes intended for human consumption must be refrigerated or frozen.

(9) Equipment used for gutting, heading and the removal of fins, and containers and equipment in contact with the fishery products, must be made of or coated with a material which is water-proof, resistant to decay, smooth and easy to clean and disinfect. This equipment, when used must be completely clean.

(10) Staff assigned to the handling of fishery products shall be required to maintain a high standard of cleanliness.

2. Additional hygiene conditions applicable to commercial fishing vessels are —

(1) Fishing vessels which refrigerate or freeze seafood products must be quipped with holds, tanks or containers for the storage of refrigerated or frozen seafood products at the appropriate temperature. These holds shall be separated from the machinery space and the quarters reserved for the crew by partitions that are sufficiently impervious to prevent any contamination of the stored seafood products.

(2) The inside surface of the holds, tanks or containers shall be water-proof and easy to wash and disinfect. It shall consist of a smooth material or, failing that, smooth paint maintained in good condition, not being capable of transmitting to the seafood products, substances harmful to human health.

(3) The holds shall be designed to ensure that melted water cannot remain in contact with the seafood products.

(4) Containers used for storage of seafood products must ensure their preservation under satisfactory conditions of hygiene and, in particular, allow drainage of melted water. These containers, when used must be completely clean.

(5) The working decks, the equipment and the holds, tanks and containers shall be cleaned after each use. Potable water or clean seawater shall be used for this purpose. Disinfection, the removal of insects or rat extermination shall be carried out whenever necessary.

(6) Cleaning products, disinfectants, insecticides and all potentially toxic substances shall be stored in locked premises or cupboards. Their use must not present any risk of contamination of the seafood product.

(7) If seafood products are frozen on board, the vessel must meet the requirements of section 2 of Schedule 1. When freezing in brine is used, the brine shall not be a source of contamination for the seafood product.

(8) Vessels equipped for chilling of fishery products in cooled seawater, either chilled by ice or refrigerated by mechanical means, shall comply with the following requirements:

- (i) tanks must be equipped with adequate seawater filling and drainage installations and must incorporate devices for achieving uniform temperature throughout the tanks;
- (ii) tanks must have a means for recording temperature connected to a temperature sensor positioned in the section of the tank where temperatures are highest;
- (iii) the operation of the tank or container system must secure a chilling rate which ensures the mix of fish and seawater reaches 3°C in a maximum of six hours after loading and 0°C in a maximum of sixteen hours after loading;
- (iv) after each unloading, the tanks, circulation systems and containers must be completely emptied and thoroughly cleaned using potable water or clean seawater. They should only be filled with clean seawater;
- (v) the date and the number of the tank must be clearly indicated on the temperature recordings which must be kept available for review by authorized officers.

(9) The Minister or an authorized officer shall keep up to date for control purposes a list of the vessels equipped in accordance with points 7 or 8, with the exception however of vessels equipped with removable containers and which are not engaged regularly in preserving fish in chilled seawater.

(10) Vessel owners or their representatives shall take all the measures necessary to prevent persons liable to contaminate fishery products from handling them, until there is evidence that such persons can do so without risk.

SCHEDULE 2

HANDLING SEAFOOD DURING AND AFTER LANDING

1. Unloading and landing equipment must be constructed of material that is easy to clean and sanitize and must be kept in a good state of repair and cleanliness.

2. During unloading and landing, contamination of seafood must be avoided. It must in particular be ensured that —

- (a) unloading and landing operations proceed rapidly;
- (b) seafood is placed without unnecessary delay in a protected environment at the temperature required on the basis of the nature of the product and, where necessary, on ice during transport and storage; and
- (c) equipment and handling practices do not cause unnecessary damage to the edible parts of the seafood product.

SCHEDULE 3

PLANT PREMISES AND CONSTRUCTION REQUIREMENTS

(SEAFOOD HOLDING STATION)

1. Location

(1) The holding station shall be located away from sources of odours, dust and air contamination such as dumps, machine shops, etc.

(2) The holding station shall be located where it will be accessible to a supply of potable water and to a sewage system.

(3) The holding station shall be located in a well-drained area, where it will not be subject to flooding, and where it will not contribute contamination to food by seepage, or by providing a breeding place for pests.

(4) The parts of the processing plant handling food and non-food items shall be physically separated from each other.

(5) The surroundings must be kept free of excessive vegetation capable of harbouring insects or vermin.

(6) Roads, premises and parking areas shall be maintained so that they do not constitute a source of contamination in areas where food is exposed.

(7) Open waste containers, debris and seafood boxes must not be piled in open areas outside the station.

(8) If the station grounds are bordered by grounds not under the operator's control, care shall be exercised in

the station by inspection, extermination, or other means to exclude pests, dirt, and filth that may be a source of food contamination.

2. Physical Plant

(1) The building must be large enough to accommodate the storage of seafood in a sanitary manner. In the area where seafood is received or stored, non-absorbent building materials designed to facilitate maintenance and sanitary operations shall be used. These shall be easily cleaned and resistant to wear and corrosion.

(2) All exterior openings such as doors, windows and vents shall be kept in good repair at all times. These shall be equipped with screens or other devices such as air curtains to prevent the entrance of insects, rodents and other animals.

(3) The receiving area shall not open directly into garages, rest rooms, living quarters, or areas where eating, drinking or smoking is allowed.

(4) Fixtures, ducts and pipes, shall not allow drip or condensate to contaminate food, food contact surfaces, or packaging materials and should not provide a source of contamination.

(5) The surface of the floor in areas where seafood is received or held must be sloped to drain with a uniform grade of $\frac{1}{4}$ inch per foot. The floor must be constructed of material that is impervious to water, durable and non-slip, and that can be maintained in a clean sanitary manner. This surfacing must be kept in good repair at all times.

(6) Drainage outlets must be placed every four hundred square feet of floor space. Drain lines must have an inside diameter of at least four inches with screened vents to prevent the entrance of vermin. There shall be no cross connections between drainage lines from toilets to other drainage lines. All drainage lines must discharge directly into a sewerage system.

(7) Walls and ceilings shall be constructed of non-absorbent materials, which are easy to clean and sanitize, and do not provide a source of contamination.

(8) Shields to prevent glass from falling into the food products if a light bulb should break shall adequately cover lights within the station.

(9) Sufficient natural and mechanical ventilation shall prevent condensation on walls and ceilings.

(10) Plumbing shall provide an adequate supply of water throughout the station to carry sewerage and liquid waste from the station. Sewerage shall be discharged directly into a private septic tank or a municipal sewerage system.

(11) Adequate and readily accessible toilet facilities equipped with washbasins and hand washing supplies shall be provided. There should be no direct access from the rest room to seafood receiving or handling areas.

(12) Toilet rooms must be kept clean, sanitary and in good repair. Hand washing units shall be provided with hot water and sanitary towel service or suitable drying devices. A sign directing employees to wash hands after each use of the toilet shall be prominently displayed.

(13) Refuse receptacles shall be constructed and maintained in a manner that protects against harbourage of vermin and or contamination of food.

3. Equipment and Instruments

(1) All equipment and utensils shall be constructed of material that allows for proper cleaning and sanitation. Stainless steel must be used as far as possible in all metal equipment that will come into contact with the seafood. Otherwise, food contact surfaces shall be non-toxic and non-corrosive. All equipment shall be in good repair and kept in a sanitary manner.

(2) Instruments used for measuring, regulating or recording physical parameters such as temperature and weight shall be accurate and adequately maintained, and adequate in number for their designated uses.

(3) Freezer rooms and freezers shall be operated such that frozen products achieve a core temperature of at least 0°F (-18°C) in an appropriate period of time, where the freezing time is determined by the type, size, shape, and packing of the product together with the temperature and air speed in the freezer.

(4) Cold storage rooms shall be operated such that frozen products are maintained at a core temperature of at least 0°F (-18°C).

(5) All refrigerated rooms must be equipped with an accurate indicating thermometer or a temperature *S.I. 33/2004.*

measuring device, and a temperature recording device so installed as to accurately show the temperature within the compartment and should be fitted with an automatic control to regulate temperature or with an automatic alarm system to indicate a significant temperature change in a manual operation. Charts must be available for inspection by an authorized officer at least during the period when the room is in use.

4. Water and Ice

(1) Only potable water shall be used with seafood or on food contact surfaces.

(2) If water is obtained from rainwater tanks or private wells it must be filtered, and treated to minimize contamination. Tests must be conducted at frequent intervals to ensure that the water meets and maintains World Health Organization guidelines for drinking-water quality.

(3) Potable water shall be used in the production of ice. If ice is not produced at the station then it must be obtained from a source that produces, handles and delivers it in a sanitary manner.

(4) Ice shall be stored, transported and handled in a sanitary manner.

(5) Adulterated ice shall not come into contact with seafood or food contact surfaces.

SCHEDULE 4

PLANT PREMISES AND CONSTRUCTION REQUIREMENTS

(SEAFOOD PROCESSING PLANT)

1. Location

(1) The plant must be located away from sources of odours, dust and air contaminants such as refineries, chemical plants and dumps.

(2) The plant shall be located where it will be accessible to a supply of potable water and to a sewage system.

(3) The plant must be located in a well-drained area, where it will not be subject to flooding, and where it will not contribute contamination to food by seepage, or by providing a breeding place for pests.

(4) The parts of the plant handling food and non-food items shall be physically separated from each other.

(5) The surroundings must be kept free of excessive vegetation capable of harbouring insects or vermin.

(6) Roads, premises and parking areas shall be maintained so that they do not constitute a source of contamination in areas where seafood is exposed.

(7) Open waste containers and seafood boxes must not be piled in open areas outside the plant.

(8) If the plant grounds are bordered by grounds not under the operator's control and not maintained as described in subparagraphs (5), (6) and (7), care shall be exercised by the plant operator by inspection, extermination, or other means to exclude pests, dirt, and filth that may be a source of seafood contamination.

2. Physical Plant

(1) The building must be large enough to accommodate the production of safe seafood without hampering sanitary cleanup. In the area where seafood is processed or stored, waterproof building materials, designed to facilitate maintenance and sanitary operations for seafood processing purposes, shall be used. These shall be easily cleaned and resistant to wear and corrosion.

(2) Aisles and working spaces between walls and equipment shall be adequate and unobstructed, and permit employees to perform their duties and to protect against contaminating food or food contact surfaces with clothing or personal contact.

(3) Where contamination is likely to occur, there shall be separation of operations by means of location, partition, airflow, enclosure, or other effective means.

(4) All exterior openings such as doors, windows and vents shall be kept in good repair at all times. These shall be equipped with screens or other devices such as air curtains to prevent the entrance of insects, rodents and other animals.

(5) The processing area shall not open directly into garages, restrooms or dining areas.

(6) Fixtures, ducts and pipes, shall not allow drip or condensate to contaminate food, food contact surfaces, or

packaging materials and must not provide a source of contamination.

(7) The surface of the floor in areas where seafood is held or processed must be sloped for drainage purposes without flat, dead spots, which would allow water to settle. A slope of $\frac{1}{4}$ inch per foot (2.1 cm per meter) is considered suitable.

(8) The floors shall be constructed of such material to ensure that they are waterproof and non-absorbent and can be adequately cleaned and kept in good repair. The surface must help prevent workers from slipping.

(9) In areas where water is used, there must be at least one drainage outlet for each 400 square feet of floor space.

(10) Drainage lines must have an inside diameter of at least 4 inches.

(11) Drainage vents must be screened to prevent rodents and other small animals from entering the plant through the drains.

(12) There shall be no cross connections between drainage lines from toilets to other drainage lines. All drainage lines should discharge directly into a sewerage system.

(13) Walls and ceilings shall be constructed of waterproof, non-absorbent materials that are easy to clean and sanitize and do not provide a source of contamination.

(14) Metal walls and ceilings (stainless steel, aluminum, galvanized iron or steel) are satisfactory if seams, nail holes and junctions of floors, walls and ceilings are watertight.

(15) Ceilings must be ten feet high or higher in processing and work areas.

(16) Where natural lighting is insufficient, well distributed artificial lighting of good quality shall be provided in hand washing areas, dressing and locker rooms and all areas where food is examined, processed or stored.

(17) At least 50 feet candles of light shall be required in areas where detailed inspections are carried out. At least 20 feet candles of light shall be required in all working, storage and processing areas and a minimum of 10 feet candles of light in all other areas.

(18) Lights over processing areas shall be covered by shields to prevent glass from falling into the food products if a light bulb should break.

(19) Sufficient natural or mechanical ventilation shall be provided to control moulds, vapours, including steam and noxious fumes, objectionable odours or excessive condensate. The flow of air shall be such that it will minimize the possibility of air-borne contamination of food, food contact surfaces or packaging materials.

(20) The ventilation systems shall be installed so that air does not move from raw material or preparation rooms into processing or packaging rooms.

(21) Plumbing shall be of adequate size and design and adequately maintained to carry sufficient quantities of water throughout the plant to carry sewage and liquid waste from the plant.

(22) There shall be no cross-connections between a potable water supply and water from any other source.

(23) There shall be no fixtures or connections through which the approved potable water supply might be contaminated by back siphonage.

(24) Fixtures, ducts and pipes must not be suspended over working areas where drip or condensate may contaminate foods, raw materials or food-contact surfaces.

3. Water and Ice

(1) Both hot and cold water under adequate pressure shall be provided throughout the plant and in quantities sufficient for all operating needs.

(2) All equipment shall be installed with back flow devices so that liquids will not be back siphoned into lines carrying potable water.

(3) Only potable water shall be used for cleaning seafood in any form or in the cleaning of any food contact surfaces or other areas that might contribute to the contamination of any food product.

(4) If water from a private well is used, the source shall be free of contamination. Tests must be conducted regularly to ensure that the water meets and maintains World Health Organization (WHO) guidelines for drinking-water quality.

(5) If non-potable water is used in the plant for purposes such as fire protection, steam lines and the like, it shall be supplied in separate lines with no cross connections with potable water lines.

(6) Non-potable water lines and outlets shall be clearly marked.

(7) Plants keeping live animals such as crustaceans or molluscs shall use water of a quality such that there is no contamination of any kind transferred to the animals.

(8) Potable water shall be used in making ice used for holding fresh seafood or other food products.

(9) Ice shall be stored, transported and handled in a sanitary manner.

(10) Neither ice nor its melt water shall be reused after it has been in contact with seafood, or with contaminated work surfaces or holding areas. Adulterated ice shall not be used.

(11) Ice must preferably be manufactured in the plant, otherwise it shall be obtained from a source that produces, handles and delivers it in a sanitary manner.

4. Waste Disposal

(1) The system used for waste treatment and disposal must be operated in an adequate manner so that it does not constitute a source of contamination where seafood is exposed.

(2) Sewer lines shall be connected to a municipal sewerage system or to a private septic system designed and maintained such that there is no leakage or production of objectionable odours.

(3) Processing waste that cannot be carried by a sewerage disposal system shall be stored in insect and rodent proof containers.

(4) These containers must be washed and sanitized between uses.

(5) Refuse receptacles shall be constructed and maintained in a manner that protects against contamination of food.

(6) Rubbish and any offal shall be conveyed, stored, and disposed of so as to minimize the development of odour, minimize the potential for the waste becoming a

breeding place for pests, and protect against contamination of food, food-contact surfaces and water supplies.

5. Equipment and Utensils.

(1) Freezer rooms shall be operated so that finished frozen products achieve a core temperature of at least 0°F (-18°C), in an appropriate period of time.

(2) Cold storage rooms shall be operated so that finished frozen products are maintained at a core temperature of at least 0°F (-18°C).

(3) The refrigerated chill room must be large enough and so constructed that a full day's production, with ice, if necessary, can be conveniently stored. The room must be kept at a temperature not exceeding 45°F (7°C).

(4) All refrigerated rooms must be equipped with an accurate indicating thermometer or a temperature measuring device, and a temperature recording device so installed as to accurately show the temperature within the compartment and should be fitted with an automatic control to regulate temperature or with an automatic alarm system to indicate a significant temperature change in a manual operation. Charts must be available for inspection by an authorized officer at least during the period when the room is in use. *S.I. 33/2004.*

(5) All equipment and utensils must be of such materials and construction that they are smooth, easily cleaned and maintained.

(6) Any food contact surfaces of the equipment shall be free from pits and cracks, and seams shall be smoothly bonded and maintained to minimize growth opportunities for micro-organisms.

(7) Equipment and utensils must be designed and constructed to prevent adulteration of seafood with fuel, lubricants, metal and other extraneous materials.

(8) All equipment must be installed in a manner that will facilitate the cleaning of the equipment itself and all surrounding areas. Instruments used for measuring, regulating, or recording physical parameters such as temperatures, that control or prevent the growth of undesirable micro-organisms in food shall be accurate and adequately maintained, and adequate in number for their designated uses.

(9) Stainless steel must be used as far as possible in all metal equipment that will come in contact with the seafood. Otherwise food-contact surfaces shall be corrosion resistant.

(10) Where seafood is handled, the cutting boards or table tops shall be made of hard, non-porous, moisture-resistant synthetic material.

(11) Only non-toxic surfaces shall be used. Copper, cadmium or lead paints, enamelware or porcelain should not be used for food contact surfaces.

(12) All parts of stationary, or not readily movable equipment, must be installed so as to provide easy access for cleaning.

(13) Equipment must be mounted above the floor so that there is adequate access to allow cleaning under the equipment.

(14) Water drainage lines from equipment shall be installed in such a way that waste water is delivered through an uninterrupted connection into the drainage system without flowing over the floor.

6. Employee Facilities

(1) Employees must be provided with dressing rooms that are separate from the toilet and work areas. Dressing rooms must be constructed so that the walls and floors are easily cleaned. Dressing rooms must not open into food handling areas.

(2) Adequate and readily accessible toilet facilities equipped with washbasins and hand-washing supplies shall be provided. Access from the toilet areas to food-processing areas must be through a ventilated vestibule, with two sets of self-closing doors.

(3) Toilet rooms must be ventilated by a direct opening to the outside air or by an adequate mechanical ventilating system.

(4) The toilet rooms shall be kept clean, sanitary and in good repair.

(5) Adequate hand-washing facilities shall be provided and located in convenient places and be furnished with running water at a suitable temperature. Compliance with this requirement may be accomplished by providing —

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- (a) hand-washing and, where appropriate, hand-sanitizing facilities at each location in the plant where good sanitary practices require employees to wash and, where appropriate, sanitize their hands. Such facilities shall not be hand operable;
 - (b) effective hand-cleaning and sanitizing preparations;
 - (c) sanitary towel service or suitable drying devices;
 - (d) devices or fixtures, such as water control valves, so designed and constructed to protect against recontamination of clean, sanitized hands; and
 - (e) readily understandable signs directing employees handling unprotected food, unprotected food-packaging materials, or food-contact surfaces to wash and, where appropriate, sanitize their hands before they start work, after each absence from post or duty, and when their hands may have become soiled or contaminated. These signs may be posted in the processing room(s) and in all other areas where employees may handle such food, materials, or surfaces.
- (6) The hand-washing units shall be provided with hot water and a sign directing employees to wash their hands after each use of the toilet should be prominently displayed.
- (7) A footbath shall be placed at each entrance to the processing area and maintained with an adequate supply of an appropriate sanitizing solution.
- (8) Employees must eat only in designated areas. Employees shall not eat in the processing area. Eating areas must be cleared after each use and cleaned after regularly scheduled work breaks and lunch periods to prevent food particles from attracting vermin and insects.

SCHEDULE 5

SEAFOOD HANDLING

1 Seafood shall be inspected and sorted as necessary to ensure that it is clean and suitable for use as food, is not contaminated and shall be stored under conditions that will protect against contamination and minimize deterioration.

2. Seafood shall be washed or cleaned as necessary to remove soil or other contaminants. Only potable water

shall be used for washing, rinsing, and conveying seafood. Wash solutions should be prepared according to manufacturers' directions.

3. Vehicles used in the transportation of seafood shall be properly cleaned and sanitized between uses. Containers and carriers of seafood must be inspected on receipt to ensure that their condition has not contributed to the contamination or deterioration of the seafood.

4. Containers, boxes and trucks used to transport fresh seafood to or from the plant shall be washed and sanitized if these are to be used again.

5. Reusable containers must be rinsed again with chlorinated water just before use.

6. The seafood product must be kept cool, as near 32°F (0°C) as possible for fresh seafood and below 0°F (-18°C), preferably -10°F (-23°C) for frozen seafood.

7. The seafood must be kept at a temperature of 45°F (7°C) or lower during processing, and must be placed in a clean container immediately thereafter. If necessary, clean ice must be added to the seafood to maintain this temperature.

8. Cutting boards must be scrubbed and sanitized at least twice a day to avoid bacterial build-up, and there must be a final wash step at the end of the handling process. If processed seafood are to be iced they must be packed immediately after washing, iced well and placed in a chill room at 30°F to 35°F (-1°C to -2°C).

9. If processed seafood is to be frozen, that seafood must be placed in a freezer within thirty minutes of being packaged so as to reduce the potential for the growth of pathogenic and non-pathogenic bacteria.

10. When frozen seafood is to be thawed before being processed that frozen seafood must be placed in water at a temperature of 45°F (7°C) or lower. Seafood must be thawed in a manner which prevents contamination.

11. The seafood product must be removed from the water as soon as thawed. The water used for thawing the seafood must be changed and the thawing tanks cleaned and sanitized before each use.

SCHEDULE 6**PLANT CLEANING AND SANITATION****1. General maintenance.**

(1) Buildings, fixtures, and other physical facilities of the plant shall be maintained in a sanitary condition and shall be kept in repair sufficient to prevent food from becoming contaminated. Cleaning and sanitizing of utensils and equipment shall be conducted in a manner that protects against contamination of food, food-contact surfaces or food-packaging materials.

(2) Cleaning compounds and sanitizing agents used in cleaning and sanitizing procedures shall be free from undesirable micro-organisms and shall be safe and adequate under the condition of use. Compliance with this requirement may be verified by an effective means, including purchase of these substances under supplier's guarantee or certification, or examination of these substances for contamination.

2. Toxic materials

(1) Only the following toxic materials may be used or stored in a plant where seafood is processed or exposed —

- (a) those required to maintain clean and sanitary conditions;
- (b) those necessary for use in laboratory testing procedures;
- (c) those necessary for plant and equipment maintenance and operation; and
- (d) those necessary for use in the plant's operations.

(2) Toxic cleaning compounds, sanitizing agents, and pesticide chemicals shall be identified, labelled, held, and stored in a manner that protects against contamination of food, food-contact surfaces, and food-packaging materials, and when not in use, toxic cleaning compounds, sanitizing agents and pesticide chemicals shall be stored in cabinets which are properly labelled and used for no other purpose.

3. Cleaning and storage

(1) All food contact surfaces must be cleaned and sanitized before use and after any interruption during which food contact surfaces may have been contaminated.

(2) Continuously used equipment must be thoroughly cleaned at the end of each working shift, or more often if conditions indicate the need.

(3) Surfaces of equipment used in the operation of food plants which do not come into contact with food must be cleaned as frequently as necessary to protect against contamination of food.

(4) Single-service articles (such as utensils intended for one-time use, paper cups, and paper towels) must be stored in appropriate containers and must be handled, and disposed in a manner that protects against contamination of food or food-contact surfaces.

(5) Sanitizing agents shall be adequate and safe and shall be used as prescribed.

(6) All portable equipment and utensils must be cleaned and sanitized after each use.

(7) Manufacturers' directions must be followed for the specific cleanser being used, however the following is a suggested procedure for cleaning in processing plants —

- (a) remove loose dirt;
- (b) rinse with water;
- (c) wash with an acceptable detergent;
- (d) rinse thoroughly with hot water at a temperature of at least 170°F (77°C);
- (e) sanitize with an acceptable compound; and
- (f) rinse thoroughly with hot water at a temperature of at least 170°F (77°C) to remove traces of the sanitizing compound.

(8) Chemical, microbial, or extraneous material testing procedures shall be used where necessary to identify sanitation failures or possible food contamination. All food that becomes contaminated to the extent that it is adulterated shall be rejected, or if permissible, treated or processed to eliminate the contamination.

(9) All cleaned and sanitized portable equipment and utensils must be stored above the floor in a clean, dry location, in a manner that protects food contact surfaces from contamination until required for further use.

SCHEDULE 7**PERSONNEL HEALTH PRACTICES****1. Medical Exam**

(1) All food-handling employees must be in possession of a valid public health certificate.

(2) A person who, by medical examination or supervisory observation, is shown to have, or appears to have, an illness, open lesion, including boils, sores, or infected wounds, or any other abnormal source of microbial contamination by which there is a reasonable possibility of food, food-contact surfaces, or food packaging materials becoming contaminated, shall be excluded from any operations which may be expected to result in such contamination until the condition is corrected. Personnel shall be instructed to report such health conditions to their supervisors.

(3) Employees must take a medical examination before returning to work after any contagious illness.

2. Cleanliness.

(1) All persons working in direct contact with food, food-contact surfaces, and food-packaging materials shall conform to hygienic practices while on duty to the extent necessary to protect against contamination of food. The methods for maintaining cleanliness apply to all visitors to the processing areas and include, but are not limited to —

- (a) wearing outer garments suitable to the operation in a manner that protects against the contamination of food, food-contact surfaces, or food packaging materials;
- (b) maintaining adequate personal cleanliness;
- (c) washing hands before starting work, after each absence from the workstation, and at any other time when the hands may have become soiled or contaminated;
- (d) sanitizing hands before entering the food processing area;
- (e) removing all unsecured jewellery and other objects that might fall into food, equipment, or containers, and removing hand jewellery that cannot be adequately sanitized during periods in which food is manipulated by hand. If hand jewellery cannot be removed, it may be covered

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- by material which can be maintained in an intact, clean, and sanitary condition and which effectively protects against the contamination by these objects of the food, food-contact surfaces or food-packaging materials;
- (f) maintaining gloves, if they are used in food handling, in an intact, clean, and sanitary condition. The gloves must be of an impermeable material;
 - (g) wearing, where appropriate, in an effective manner, hairnets, headbands, caps, beard covers, or other effective hair restraints;
 - (h) storing clothing or other personal belongings in areas other than where food is exposed or where equipment or utensils are washed;
 - (i) confining the eating of food, spitting, chewing of gum, drinking and use of tobacco to areas other than where food may be exposed or where equipment or utensils are washed; and
 - (j) taking any other necessary precautions to protect against contamination of seafood, food-contact surfaces, or seafood packaging materials with micro-organisms or foreign substances including, but not limited to, perspiration, hair, cosmetics, tobacco, chemicals and medicines applied to the skin.

SCHEDULE 8

PEST CONTROL

- 1.** No pests or animals shall be allowed in any area of the seafood plant.
- 2.** Guard or guide dogs may be allowed in some areas of a plant if the presence of the dogs is unlikely to result in contamination of seafood, food-contact surfaces, or food-packaging materials.
- 3.** Effective measures shall be taken to exclude pests and animals from the processing areas and to protect against the contamination of seafood on the premises by pests.
- 4.** The use of insecticides or rodenticides is permitted only under precautions and restrictions that will protect against the contamination of seafood, food-contact surfaces, and food-packaging materials.

SCHEDULE 9**STANDARD OPERATING PROCEDURES (SOP)**

1. A written document, prepared in a format prescribed by the Department of Fisheries for seafood holding storage facilities and processors must include —
 - (a) a list or flow diagram of the activities and processes of the facility;
 - (b) a narrative of the receiving, handling, packaging, storage and disposal of the seafood products and its components i.e. packaging materials, ice, etc;
 - (c) the differences in product form or processes which must be clearly stated and documented;
 - (d) a narrative of any assessment of product condition or quality including sensory assessment and core temperatures; and
 - (e) samples of forms to be used in record keeping.
2. All records generated by the application of the SOP are to be kept available for a period of two years.

SCHEDULE 10**SANITARY STANDARD OPERATING PROCEDURES (SSOP)**

1. In the preparation of the SSOP, the processor considers his production process and the physical facility where it is carried out, and determines necessary steps to be taken regularly and routinely to ensure the microbiological safety of the seafood it produces and to remain in compliance with Schedule 4.

Schedule 4.

2. A written document of sanitary standard operating procedures, prepared in a format prescribed by the Department of Fisheries for seafood processing plants must take the following into consideration —

- (a) the quality of the water that comes into contact with food or food contact surfaces, or is used in the manufacture of ice. The document will include a diagram indicating the flow of potable and non-potable water, with outlets consecutively numbered for easy identification in the plant;

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- (b) the condition and cleanliness of food process areas (floor, walls, ceilings, overhead fixtures, windows, doors and other openings), food-contact surfaces and equipment, including utensils and items of clothing (eg. gloves and outer garments);
 - (c) the prevention of cross contamination from unsanitary objects to food, packaging material, and other food contact surfaces, including utensils, gloves and outer garments and from raw product to cooked product;
 - (d) the maintenance of hand washing, hand sanitizing and toilet facilities;
 - (e) the protection of food, food packaging material and food contact surfaces from adulteration with lubricants, fuel, pesticides, cleaning compounds, sanitizing agents, and other chemical, physical and biological contaminants;
 - (f) the proper labelling, storage and use of toxic compounds;
 - (g) the control of employee health conditions that could result in the microbiological contamination of food, food packaging materials and food contact surfaces;
 - (h) exclusion of pests from the food plant. The document will include a diagram indicating the position of traps and bait stations;
 - (i) the disposal procedures for waste materials and debris;
 - (j) the responsibility of outside contractors;
 - (k) the condition and cleanliness of vehicles used to transport product; and
 - (l) the condition and cleanliness of raw material (packaging) storage areas.

3. Each of the areas listed in paragraph 1 of this Schedule must be considered, at a minimum in the following ways —

- (a) a stated goal which will indicate what the procedure is expected to achieve;
- (b) the method by which the goal is to be achieved;
- (c) the person whose responsibility it will be to carry out the stated tasks;

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- (d) the frequency with which the task will be performed;
 - (e) the monitoring of the task, indicating who will confirm that the task has and is being performed as prescribed. It will also state how and when checks will be carried out;
 - (f) the verification of the task indicating how, by whom and how often the processor will verify that the stated goal is being achieved;
 - (g) the corrective actions that will be taken when monitoring or verification procedures demonstrate that the stated goal is not being achieved; and
 - (h) the recording of the results of the tasks performed, including as appropriate a checklist or other record of the time, initial of operator, and other information relative to the task. A sample of any forms to be used should be annexed, although these may need to be changed as the need arises.
4. All records generated by the application of the SSOP are to be kept available for a period of two years.

SCHEDULE 11

HAZARD ANALYSIS CRITICAL CONTROL POINT (HACCP) PLAN

1. (1) Every exporter shall conduct or have conducted a hazard analysis to determine whether there are food-safety hazards that are reasonably likely to occur for each kind of seafood processed at each plant and to identify the preventive measures that the processor can apply to control those hazards. Such food-safety hazards can be introduced within and outside the processing plant environment, including food-safety hazards that can occur before, during and after harvest.

(2) A food-safety hazard that is reasonably likely to occur is one for which a prudent processor would establish controls because experience, illness data, scientific reports or other information provides a basis to conclude that there is a reasonable possibility that it will occur in the particular

type of seafood being processed in the absence of those controls.

2. (1) Every exporter shall have and implement a written HACCP plan whenever a hazard analysis reveals one or more food-safety hazards that are reasonably likely to occur as described in paragraph (1) of this section.

- (2) A HACCP plan shall be specific to —
- (a) each location where seafood is processed; and
 - (b) each kind of seafood product processed. The plan may group kinds of seafood together or group kinds of production methods together if the food-safety hazards, critical control points, critical limits and procedures required to be identified and performed in paragraph (3) of this section are identical for all seafood so grouped or for all production methods so grouped.

3. The HACCP plan shall, at a minimum —

- (a) list the food-safety hazards that are reasonably likely to occur as identified in accordance with paragraph (1) of this Schedule, and that must be controlled for each seafood. Consideration should be given to whether any food-safety hazards are reasonably likely to occur as a result of the following —
 - (i) natural toxins;
 - (ii) microbiological contamination;
 - (iii) chemical contamination;
 - (iv) pesticides;
 - (v) drug residues;
 - (vi) decomposition in scombroid toxin-forming species or in any other species where a food-safety hazard has been associated with decomposition;
 - (vii) parasites, where the processor has knowledge or has reason to know that the parasite-containing seafood will be consumed without a process sufficient to kill the parasites, or where the processor represents, labels, or intends for the product to be so consumed;
 - (viii) unapproved use of direct or indirect food or colour additives;

-
- (ix) physical hazards; and
 - (x) clostridium botulinum toxin formation, in the case of smoked or smoke flavoured seafood, for a period of at least the expected shelf life of the product, under normal conditions and conditions of moderate abuse;
- (b) list the critical control points for each of the identified food-safety hazards, including as appropriate —
 - (i) critical control points designed to control food-safety hazards that could be introduced in the processing plant environment; and
 - (ii) critical control points designed to control food-safety hazards introduced outside the processing plant environment, including food-safety hazards that occur before, during and after harvest;
 - (c) list the critical limits that must be met at each of the critical control points;
 - (d) list the procedures, and frequency thereof, that will be used to monitor each of the critical control points to ensure compliance with the critical limits;
 - (e) include any corrective action plans that have been developed and are to be followed in response to deviations from critical limits at critical control points. Corrective actions must ensure that the cause of the deviation is corrected and all products are considered safe and are not adulterated as a result of the deviation;
 - (f) list the verification procedures and frequency thereof that the processor will use and those verification procedures must —
 - (i) be used to verify that the HACCP plan is adequate to control food safety hazards that are reasonably likely to occur and that the plan is being effectively implemented;
 - (ii) include a review of consumer complaints, calibration of process monitoring equipment and periodic product testing as specified in the HACCP plan;

-
- (g) provide for a record keeping system that —
- (i) documents the monitoring of critical control points, the taking of corrective actions, the calibration of any process control instruments used at critical control points, and the performing of any product testing, including procedures and frequency;
 - (ii) documents verification and sanitation monitoring actions undertaken;
 - (iii) shall contain the actual values and observations that were obtained during monitoring;
 - (iv) in relation to subparagraphs (i) and (ii) contain the name and location of the processor, the date and time of the activity that the record reflects, the signature or initials of the person performing the operation and where appropriate, the identity of the product and production code;
 - (v) ensures that processing and other information is entered on records at the time of observation; and
 - (vi) ensures that records resulting from corrective actions are reviewed at a specified frequency according to the processor's HACCP plan.

4. In the absence of a corrective action plan as required by paragraph 3(e) —

- (a) all products affected must be held, segregated and reviewed by an HACCP certified individual and only products deemed acceptable after review will be offered for sale;
- (b) the processor must take corrective action to correct the cause of the deviation;
- (c) corrective actions must be fully documented in accordance with this Schedule;
- (d) corrective actions must be subject to verification. Such verification will ensure that the appropriate action was taken and that the cause of the deviation was corrected;
- (e) the processor shall immediately follow the corrective action requirements of this Schedule

whenever any verification procedure reveals the need to take corrective action.

5. (1) The processor shall retain records relating to the HACCP plan for the time periods specified —

- (a) at least one year for records related to refrigerated products;
- (b) at least two years for records related to frozen, preserved, or shelf-stable products;
- (c) at least two years for records related to the general performance of equipment.

(2) The records produced as a result of the requirements of this Schedule shall at all reasonable times, be made available to an authorized officer upon request for review.

(3) Records submitted by the processor under paragraph (2) for official review are considered confidential and not available to the public.

6. The HACCP plan shall be signed and dated, by one of the two HACCP certified persons as required in regulation 17 of these regulations. This signature shall signify that the HACCP plan has been accepted for implementation by the firm. The HACCP plan should be dated and signed —

- (a) upon initial acceptance;
- (b) upon any modification; and
- (c) upon reassessment of the plan as required at paragraph 6 of this Schedule.

7. The processor shall reassess the adequacy of the hazard analysis whenever any changes occur or at least annually. An individual who is HACCP certified shall perform the reassessment.

SCHEDULE 12

MICROBIOLOGICAL LIMITS FOR SEAFOOD

In this Schedule the following codes apply —

- “*n*” – Number of representative sample units.
- “*c*” – Maximum allowable number of sample units which exceed microbial level *m*.

- “*m*” – Maximum recommended bacterial level for *c* samples out of *n*.
- “*M*” – Maximum recommended bacterial level for remaining (*n* – *c*) samples.

Plate counts below “*m*” are considered good quality. Plate counts between “*m*” and “*M*” are considered marginally acceptable quality, but can be accepted if the number of samples does not exceed “*c*”. Plate counts at or above “*M*” are considered unacceptable quality.

1. MICROBIOLOGICAL LIMITS FOR SEAFOOD

Product	Bacteria per gram or cm ²			
	<i>n</i>	<i>c</i>	<i>m</i>	<i>M</i>
Fresh and frozen fish and cold-smoked fish	5	3	5 x 10 ⁵	10 ⁷
Precooked breaded fish	5	3	5 x 10 ⁵	10 ⁷
Fresh and frozen raw crustaceans	5	3	10 ⁶	10 ⁷
Frozen cooked crustaceans	5	3	5 x 10 ⁵	10 ⁷
Cooked, chilled, and frozen crabmeat	5	3	10 ⁵	10 ⁶
Fresh and frozen bivalve molluscs	5	3	5 x 10 ⁵	–

2. MICROBIOLOGICAL LIMITS FOR E. COLI IN SEAFOOD

Product	Bacteria per gram or cm ²			
	<i>n</i>	<i>c</i>	<i>m</i>	<i>M</i>
Fresh and frozen fish and cold-smoked fish	5	3	11	500
Precooked breaded fish and fishery product	5	2	11	500
Fresh and frozen raw crustaceans	5	1	11	500
Frozen cooked crustaceans	5	2	11	500
Cooked, chilled, and frozen crabmeat	5	1	11	500
Fresh and frozen bivalve mollusks	5	2	16	–

3. MAXIMUM TOLERANCE LEVELS FOR FECAL COLIFORMS IN SEAFOOD PRODUCTS

Product	Guideline
Seafood, Fresh, Frozen	1 or more of 5 subs exceeding MPN of 330/100g or 2 or more exceeding 230/100g

4. MICROBIOLOGICAL LIMITS FOR SALMONELLA IN SEAFOOD

Product	Bacteria per gram or cm²			
	<i>n</i>	<i>c</i>	<i>m</i>	<i>M</i>
Fresh and frozen fish and cold-smoked fish	5	0	0	–
Fresh and frozen raw crustaceans	5	0	0	–
Frozen cooked crustaceans	10	0	0	–
Fresh and frozen bivalve molluscs	5	0	0	–

5. MICROBIOLOGICAL LIMITS FOR S. AUREUS IN SEAFOOD

Products	Bacteria per gram or cm²			
	<i>n</i>	<i>c</i>	<i>m</i>	<i>M</i>
Fresh and frozen fish and cold-smoked fish	5	2	10 ³	10 ⁴
Precooked breaded fish	5	1	10 ³	10 ⁴
Fresh and frozen raw crustaceans	5	2	10 ³	10 ⁴
Frozen cooked crustaceans	5	0	10 ³	–
Cooked, chilled, and frozen crabmeat	5	0	10 ³	–

6. MICROBIOLOGICAL LIMITS FOR V. PARAHAEMOLYTICUS IN FISH

Products	Bacteria per gram or cm²			
	<i>n</i>	<i>c</i>	<i>m</i>	<i>M</i>
Fresh and frozen fish and cold-smoked fish	5	2	10 ²	10 ³
Fresh and frozen raw crustaceans	5	1	10 ²	10 ³
Frozen cooked crustaceans	5	1	10 ²	10 ³
Cooked, chilled, and frozen crabmeat	10	1	10 ²	10 ³
Fresh and frozen bivalve molluscs	10	1	10 ²	10 ³

7. MICROBIOLOGICAL LIMIT FOR L. MONOCYTOGENES IN FISH

Product	Bacteria per gram or cm²
Seafood, Fresh, Frozen	0

SCHEDULE 13
**CHEMICAL LIMITS FOR
SEAFOOD**

Sulphur dioxide (sulphites)	150 mg/kg
Polyphosphate	5 mg/kg
EDTA	75 mg/kg
TVB-N	25 mg/N/100g flesh

**MAXIMUM TOLERANCE LEVELS FOR TOXIC ELEMENTS IN
SEAFOOD PRODUCTS**

S.I. 33/2004

Product	Lead (Pb)	Cadmium (Cd)	Mercury
1. Fish	0.2	0.05	
2. Crustaceans	0.5	0.5	
3. Bivalve Molluscs	1.0	1.0	
4. Fishery Products, except those listed at (5) below			0.5
5. Anglerfish (lophus spp.), Atlantic catfish (Anarhichas lupus), bass (Dicentrarchus labrax), blue ling (Molva dipterygia), bonito (Sarda spp.), eel (Anguilla spp.), halibut (Hippoglossus hippoglossus), little tuna (Euthynnus spp.), Marlin (Makaira spp.), pike (Esox lucius), plain bonito (Orcynopsis unicolor), Portuguese dogfish (Centroscymnes coelolepis), rays (Raja sp.), redfish (Sebastes marinus, S. mentella, S. viviparous), sail fish (Istiophorus platypterus), scabbard fish (Lepidopus caudatus, Aphanopus carbo), shark (all species), snake mackerel (Lepidocybium flavobrunneum), Ruvettus pretiosus, Gempylus serpens), sturgeon (Acipenser spp.), swordfish (Xiphias gladius, tuna Thunnus spp.)			1.0

**SCHEDULE 14
FEES FOR LICENCES**

	\$
1. License to import seafood	\$500.00
2. Factory Vessel License	\$300.00
3. License to operate a seafood buying / holding station	\$100.00
4. License to process seafood	\$300.00
5. License to export seafood	\$500.00
6. Product Inspection Fee	\$ 50.00
7. Certificate of Inspection	\$ 50.00

SCHEDULE 15

**FORM 1
THE FOOD ACT
(CH. 236)**

THE FOOD (SEAFOOD PROCESSING AND INSPECTION) REGULATIONS

APPLICATION FOR LICENCE TO IMPORT OR EXPORT SEAFOOD

1. **Name of Applicant**.....
 Name of
 Company.....
 Postal Address..... Island.....
 Street Address / Settlement Fax.....
 Telephone..... E-mail.....
2. **Type of licence(s) requested (tick appropriate box)**
 Export Import (proceed to # 7)
3. **Processing Plant or Factory Vessel Approval #**.....
4. **Product Brand Name (if applicable)**.....
5. **Product(s) to be exported**
 Crawfish Conch Stone crabs Scalefish
 Others
 (specify)
6. **Product forms to be exported (tick appropriate box)**
 Whole Raw Iced
 Guttled Cooked Frozen

- Fillet Smoked Canned

Others
(specify)

7. List products and product types to be imported

.....

8. Destination Country / Countries

.....

9. List products and product forms to be imported

.....
.....

10. Country / Countries of Origin

.....

11. Description of Product Storage Facilities

Total Dry Storage Capacity

Number and Total Capacity of Refrigerated Rooms

Number and Total Capacity of Frozen Storage Rooms

12. List additional documentation accompanying application

.....

Signature of Applicant Date.....

FORM 2

**THE FOOD ACT
(Ch. 236)**

**THE FOOD (SEAFOOD PROCESSING AND INSPECTION)
REGULATIONS**

LICENCE TO IMPORT OR EXPORT SEAFOOD

No.....

This Licence is granted to of

.....

and authorizes the export or import of the seafood specified below —

1. 2.

3. 4.

This Licence:

- (a) shall not be transferred or assigned;
- (b) authorizes only the export/import of the seafood specified above;
- (c) authorizes only the export/import of seafood from/to
..... (Port of Entry).

The Licensee must submit at the end of each month a statement showing the quantities of seafood purchased, produced, sold, imported or exported as the case may be, during that month.

This Licence expires on the day of

Dated this day of

MINISTER RESPONSIBLE FOR THE MANUFACTURE,
PROCESSING AND PRESERVING OF FOOD

FORM 3

THE FOOD ACT

(Ch. 236)

THE FOOD (SEAFOOD PROCESSING AND INSPECTION) REGULATIONS

**APPLICATION FOR A LICENCE TO OPERATE A
FACTORY VESSEL, HOLDING STATION OR PROCESSING PLANT**

(To be completed in duplicate)

- 1. Name of Applicant**
- Name of Company
- Postal Address..... Island
- Street Address / Settlement Fax
- Telephone..... E-mail

- 2. Type of licence(s) requested (tick appropriate box)**
- Factory Vessel Buying / Holding Station Processing Plant

3. Description	Factory Vessel	Buying / Holding Station	Processing Plant
Facility Size .....	.....ft	.....sq ft	.....sq ft
Number of Refrigerated Storage Rooms .....	.....	.....	.....
Total Refrigerated Storage Capacity .....	.....lbs	.....lbs	.....lbs
Number of Frozen Storage Rooms .....	.....	.....	.....
Total Frozen Storage Capacity .....	.....lbs	.....lbs	.....lbs
Number of Freezers .....	.....	.....	.....
Type of Freezers .....	.....	.....	.....
Production Capacity .....	.....lbs/day	.....lbs/day	.....lbs/day
Ice Making Capacity .....	.....lbs/hr	.....lbs/hr	.....lbs/hr
Other Major Equipment .....	.....	.....	.....

4. **Source of Potable Water**

5. **List additional documentation accompanying application**

- | | |
|-----------------------------------------------------------|-------------------------------------------------------------------|
| <input type="checkbox"/> Valid Business Licence | <input type="checkbox"/> Flow Chart (specify products) |
| <input type="checkbox"/> Certificate of Incorporation | <input type="checkbox"/> Standard Operating Procedures |
| <input type="checkbox"/> Annual Return for Preceding Year | <input type="checkbox"/> Sanitation Standard Operating Procedures |
| <input type="checkbox"/> Certificate of Sanitation | <input type="checkbox"/> Hazard Analysis (specify products) |
| <input type="checkbox"/> Water Distribution Map | <input type="checkbox"/> HACCP Plan (specify products) |
| <input type="checkbox"/> Pest Control Map | <input type="checkbox"/> Scaled Drawing of Facility Layout |

Signature of Applicant Date.....

FORM 4

**THE FOOD ACT
(Ch. 236)**

**THE FOOD (SEAFOOD PROCESSING AND INSPECTION)
REGULATIONS**

LICENCE TO OPERATE A FACTORY VESSEL

No.....

This Licence is granted to
of to operate the factory
vessel described below:

Name Length.....

Registration No..... Home Port.....

This Licence expires on the 31st day of December,

Dated this day of

MINISTER RESPONSIBLE FOR THE MANUFACTURE,
PROCESSING AND PRESERVING OF FOOD

FORM 5

**THE FOOD ACT
(Ch. 236)**

**THE FOOD (SEAFOOD PROCESSING AND
INSPECTION) REGULATIONS**

LICENCE TO OPERATE A HOLDING STATION

No.....

This Licence is granted to of
..... to operate a Seafood Holding
Station at

This Licence expires on the 31st day of December,

Dated this day of,

MINISTER RESPONSIBLE FOR THE MANUFACTURE,
PROCESSING AND PRESERVING OF FOOD

FORM 6

**THE FOOD ACT
(Ch. 236)**

**THE FOOD (SEAFOOD PROCESSING AND
INSPECTION) REGULATIONS**

LICENCE TO OPERATE A PROCESSING PLANT

No.....

This Licence is granted to
of to operate a Processing
Plant at.....

This Licence expires on the 31st day of December,

Dated this day of,.....

MINISTER RESPONSIBLE FOR THE MANUFACTURE,
PROCESSING AND PRESERVING OF FOOD