

Government of the Union of Myanmar
Ministry of Livestock and Fisheries
DEPARTMENT OF FISHERIES

DIRECTIVE No. (8/96)

November 6, 1996

In exercise of the powers conferred by section 23 of the Myanmar Marine Fisheries Law 1990, the Director General of the Department of Fisheries issues the following Directive for Operational Requirements For Fisheries Products Establishments.

**OPERATIONAL REQUIREMENTS FOR FISHERIES PRODUCT
ESTABLISHMENTS**

Division I - Hygienic requirements for premises

Maintenance

- 1.1 The buildings, equipment utensils and all other physical facilities of the establishment, including drains, must be maintained in good repair and in a clean and orderly condition and operated in accordance with these Directives.

Cleaning and Disinfection

- 2.1 Either immediately after cessation of work for the day or at such other times as may be appropriate to maintain hygienic conditions, floors, including drains, auxiliary structures and walls of food handling areas must be thoroughly cleaned.
- 2.2 To prevent contamination of processed fisheries product, all equipment, utensils and surfaces which contact the food must be;
 - (a) cleaned as frequently as necessary; and
 - (b) disinfected when there is a risk of contamination, but not less than daily.
- 2.3 Surfaces which contact processed fisheries product must be adequately rinsed after the use of any detergents, prior to any handling of the food.

- 2.4 Adequate precautions must be taken to prevent processed fisheries product from being contaminated during cleaning or disinfection of rooms, equipment or utensils.
- 2.5 Detergents and disinfectants must be suitable for use in food handling areas and must not impart any flavours, or leaves any toxic residues.
- 2.6 Staff changing facilities, toilets and lunch rooms must be kept clean at all times.
- 2.7 Roadways, yards and other areas in the immediate vicinity of and serving the premises must be kept clean.

Hygiene Control Program

- 3.1 A cleaning program must be in place for each establishment.
- 3.2 All cleaning personnel must be suitably trained in cleaning techniques.

Inedible by-products

- 4.1 Inedible by-products and other inedible material must:
 - (a) be stored in such a manner as to avoid potential contamination of processed fisheries product; and
 - (b) be removed from the food preparation areas as often as necessary to avoid potential contamination, and at least daily.

Storage and disposal of waste

- 5.1 Facilities must be provided for the storage of waste and inedible material prior to removal from the establishment.
- 5.2 The facilities must be:
 - (a) away from processing areas; and
 - (b) designed to:
 - (i) prevent access to waste by pests; and
 - (ii) avoid contamination of food, potable water, equipment, buildings or roadways on the premises.
- 5.3 Waste must be removed from food handling areas and other working areas as often as necessary to avoid potential contamination and at least daily.

- 5.4 Immediately after disposal of the waste, receptacles used for storage and any equipment which has come into contact with the waste must be cleaned and disinfected.
- 5.5 The waste storage area must be kept clean.
- 5.6 All waste disposal bins must be fitted with close-fitting lids which are kept closed.

Exclusion of domestic animals

- 6.1 Domestic animals, except guard dogs in perimeter areas, are not permitted on a registered establishment used for preparing processed fisheries product.

Pest control

- 7.1 There must be an effective and continuous programme for the detection, control and eradication of pests in the establishment and surrounding areas.
- 7.2 Any pest control measures must not constitute a risk to human health.
- 7.3 Accurate and legible records of the:
 - (a) location; and
 - (b) frequency of servicing;of bait stations at registered establishment must be kept.

Storage of hazardous substances

- 8.1 Pesticides, cleaning agents or other substances which could represent a hazard to health must be suitably labelled with a warning about their toxicity and used and extreme care must be taken to avoid their contamination processed fisheries product.
- 8.2 Hazardous substances must be stored in rooms or cabinets used only for that purpose and handled only by authorised and properly trained persons or by persons under strict supervision of trained personnel.
- 8.3 Except when necessary for hygienic or preparation purposes, no substance which could contaminate processed fisheries product may be used or stored in food handling areas.

Division II - Personal hygiene and health requirements.

Penal Provision

Personal effects and clothing

- 9.1 Personal effects and clothing must not be stored in food handling areas.

Hygiene training

- 10.1 The occupier of an establishment must arrange for adequate and continuing training of all food handlers in hygienic of processed fisheries product and in personal hygiene so that they understand the precautions necessary to prevent contamination of the food.

Communicable diseases

- 11.1 The occupier of an establishment must ensure that no person, while known or suspected to be suffering from, or to be a carrier of a disease likely to be transmitted through processed fisheries product or while afflicted with infected wounds, skin infections, sores or with diarrhoea, is permitted to work in any food handling area in any capacity in which there is any likelihood of such a person directly or indirectly contaminating the food with pathogenic micro-organisms.
- 11.2 Any person so affected must immediately report their illness to the management.

Injuries

- 12.1 Any person who has a cut or wound must not continue to handle processed fisheries product or food contact surfaces until the injury is completely protected by a water proof covering which is firmly secured, and which is conspicuous in colour.

Personal cleanliness

- 13.1 A person in a food handling area must maintain a high degree of person cleanliness.
- 13.2 A person must not wear any jewellery when engaged in preparing processed fisheries product except sleeper earrings and plain wedding rings.

- 13.3 A person must not wear fingernail varnish if handling food with bare hands.
- 13.4 A person must not engage in any behaviour which could result in contamination of processed fisheries product, such as eating, smoking chewing anything such as gum, sticks, tobacco or betel nuts, or any other unhygienic behaviour in food handling areas.
- 13.5 A person who will be engaged in handling food must wash his or her hands:
- (a) on entering the food handling area; and
 - (b) immediately after using the toilet; and
 - (c) after touching the nose or mouth; and
 - (d) after handling contaminated material; and
 - (e) whenever necessary to avoid contaminating the food in the area.
- 13.6 A person who will be engaged in handling food must wash and disinfect his or her hands immediately after handling any material which might be capable of transmitting disease.
- 13.7 The wearing of gloves does not exempt the operator from having thoroughly washed hands.

Protective clothing

- 14.1 A person in a food handling area must at all time:
- (a) wear suitable protective clothing and footwear; and
 - (b) wear a head-covering that encloses the hair; and
 - (c) if medium risk or high risk food is prepared in the area and the person has a beard or moustache, or both-wear a head covering that encloses the scalp hair and the beard or moustache, or both and
 - (d) if the person is wearing gloves-ensure that the gloves are in a sound, clean and sanitary condition.
- 14.2 If a person wears disposable gloves or other disposable protective clothing in a food handling area, the gloves or other clothing must be discarded after use and must not be reused.
- 14.3 Protective clothing worn by a person in a food handling area must not have an outer breast pocket and must be:

- (a) light coloured; and
- (b) either washable or disposable.

- 14.4 A person in a food handling area must keep protective clothing so as not to present a risk of contamination to the processed fisheries product.
- 14.5 Protective outer clothing (including footwear, overalls, aprons, headwear and gloves) used in the food handling area must not be worn outside the establishment.

No smoking signs

- 15.1 The occupier must display signs advising that smoking in food handling areas is prohibited.

Visitors

- 16.1 A visitor to a food handling area must comply with all the relevant personal cleanliness requirements of these Directives, including the requirements related to wearing protective clothing.

Operators in pathogen testing laboratories

- 17.1 Operators in pathogen testing laboratories must change their uniform prior to entering food handling areas.

Supervision

- 18.1 The occupier of the establishment must allocate responsibility for ensuring personnel comply with all requirements in these Directives to competent supervisory personnel.

Division III - Hygienic requirements in production / harvesting areas

Unsuitable growing or harvesting areas

- 19.1 Processed fisheries product for export must not be grown in or harvested from areas where the presence of potentially harmful substances such as pesticides, fungicides or heavy metals, would lead to an unacceptable level of such substances in the food.
- 19.2 Shellfish for export without depuration must not be harvested from areas

where faecal material, pathogenic micro-organisms, marine biotoxins or radionuclides are present in concentrations that are harmful to human health as determined by a sanitary survey carried out in accordance with the requirements of the Sanitation Control Program which may be instituted by Department of Fisheries.

- 19.3 Oysters intended for depuration must not be harvested from water where.
- (a) the total coliform median MPN exceeds 700 per 100 mL or more than 10 percent of samples of the water exceed and MPN of 2,300 per 100mL for a 5 tube decimal dilution test; or
 - (b) the faecal coliform median MPN exceeds 88 per 100 mL or more than 10 percent of the samples of the water exceed an MPN of 260 per 100mL for a 5 tube decimal dilution test.
- 19.4 Shellfish must not be harvested from an area if -
- (a) the concentration of paralytic shellfish poison equals or exceeds 80 micrograms per 100 grams of edible portion of raw shellfish; or
 - (b) when monitored in accordance with the Sanitation Control Program which may be instituted by Department of Fisheries., neurotoxic shellfish poison is found in detectable levels in the shellfish.
- 19.5 Fish of the following species: Spanish mackerel, barracuda, coral trout, coral cod, surgeonfish, grouper, red snapper, red bass, red emperor, amberjack, paddletail, chinamanfish, or moray eel; must not be harvested from coral reef areas at times when those areas are known to be affected by blooms of dinoflagellates (especially *Gambierdiscus toxicus*) producing ciguatoxins.

Protection of raw materials

- 20.1 Raw materials must be protected during production, storage and transport from:
- (a) contamination by:
 - (i) pests; and
 - (ii) physical and chemical agents; and
 - (iii) microbiological contaminants; and
 - (iv) other objectionable to substances; and
 - (b) deleterious changes due to temperature or other physical parameters;
- and conveyances and equipment must be adequate for this purpose.

Division IV - Hygiene requirements for processing

Raw material requirements

- 21.1 Raw materials, ingredients and packaging stored in an establishment must be:
- (a) maintained under conditions that will prevent spoilage; and
 - (b) protected against contamination; and
 - (c) protected against damage.
- 21.2 Stocks of raw materials and ingredients must be used so as to ensure that oldest stock is used first.

Prevention of cross-contamination

- 22.1 Effective measures must be taken to prevent cross-contamination of processed fisheries product.

Processing

- 23.1 All steps in the production process, including packaging, must be performed without unnecessary delay and under conditions which will minimise the possibility of contamination, deterioration, or the development of pathogenic and spoilage micro-organisms and contamination by foreign matter.

Division V - other requirements

Processing and production records

- 24.1 The occupier of an establishment must keep records for each lot of food processed in the establishment.
- 24.2 The records must show processing details, including records of quantities, processing temperatures and times, details of sampling and any other records that are relevant to showing that the food is processed in accordance with these Directives.

Storage

- 25.1 Processed fisheries product must be stored under conditions, including

temperature and humidity, that will:

- (a) minimise the contamination with, and proliferation of micro-organisms; and
- (b) protect the food against deterioration.

Calibration of equipment

- 26.1 All measuring instruments, gauges and devices used in connection with the preparation of processed fisheries product must be graduated in a manner which enables them to be read accurately and must be calibrated accurately.
- 26.2 A calibration system may be applied either in-house or by an external authority unless otherwise specified in these Directives.

Division VI - Refrigeration procedures for processed fisheries product

Chilling

- 27.1 Chilling of processed fisheries product must be performed with sufficient rapidity to prevent any undesirable physical, biochemical or microbiological deterioration of the food.

Chilled processed fisheries product

- 28.1 Processed fisheries product that is required to be chilled, must be chilled to the temperature between -1 to +4°C.

Freezing

- 29.1 Freezing of processed fisheries product must be performed with sufficient rapidity to prevent any undesirable physical, biochemical or microbiological deterioration of the food.

Frozen processed fisheries product

- 30.1 Processed fisheries product that is required to be frozen must be frozen to the temperature -18° C or colder.
- 30.2 Freezing must be carried out in a room or chamber specifically designed for the purpose.

- 30.3 The freezing process must be carried out in one room or chamber, except that processed fisheries product cooled to -10°C or colder may be transferred to a second freezer for continuation of the process, provided the transfer is carried out in such a manner as to minimise temperature rise in the product.

Storage and transport of frozen processed fisheries product

- 31.1 Cold stores must be operated so as to maintain frozen processed fisheries product in a frozen state.
- 31.2 Transport of frozen processed fisheries product to or from a registered establishment must be carried out so as to maintain the food in a frozen state.
- 31.3 Where a rise occurs in the temperature of frozen processed fisheries product during storage or transport:
- (a) if the temperature of the food is between -17°C and -15°C (inclusive), the temperature of the food must be reduced to -18°C or colder as quickly as possible; and
 - (b) if the temperature of the food is between -14°C and 12°C (inclusive), the temperature of the food must be reduced to -18°C or colder as quickly as possible and the food must be reassessed for wholesomeness, fitness for human consumption and compliance with the appropriate product standard; and
 - (c) if the temperature of the food rises above -12°C , the food must be rejected for export.

Thawing

- 32.1 If frozen processed fisheries product is thawed or tempered in a registered establishment for the purpose of use in production, it must be brought to its thawed state as quickly as possible without causing undersirable physical, biochemical and microbiological changes to the food.
- 33.1 Any licence-holder for the processing of fish and fishery products shall abide by this directive as one of the conditions of the licence.
- 33.2 On violation of the any terms or conditions of the Directive, criminal action

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may be taken under Section 45 of the *Myanma Marine Fisheries Law* and the licence-holder may be liable to suspension, revocation, termination and cancellation of the licence under Section 24 of the said Law.

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