

S.I. 85 of 2010

EXPOR

4.(1) Type 1: Fishery By-Products shall consist of parts of fishery products (which are fit for human consumption in accordance with Seychelles legislation), intended for —

- (a) human consumption;
- (b) use as an ingredient in products intended for human consumption;
- (c) use as a raw material that will undergo further processing before being used for either (a) or (b).

(2) Type 2: Fishery By-Products shall be one or more of the following, namely

- (a) whole or parts of fishery products, which are fit for human consumption in accordance with Seychelles legislation, but are not intended for human consumption for commercial reasons;
- (b) former fishery products other than catering waste, which are no longer intended for human consumption for commercial reasons or due to problems of manufacturing or packaging defects or other defects which do not present any risk to humans or animals;
- (c) fishery products that have been declared as unfit for human consumption as defined

- (e) whole fish or other sea animals, except sea mammals, caught in the open sea for the purposes of fishmeal production.

(3) Type 3: Fishery By-Products are those by-products that are not used either as ingredients or raw materials in food or feed. Examples of such products may include but are not limited to fish skins for the tannery industry.

(4) Type 4: Fishery Waste Products shall be one or more of the following namely, material derived from fishery product processing —

- (a) that has no commercial value and as such is removed from the food supply chain;
- (b) that is unsafe for human consumption due to contamination in excess of limits defined in Schedule 10 of the Export of Fisheries Products (Sanitary) Regulations 2010.;
- (c) that is suspected of being infected with diseases or parasites communicable to humans or animals;
- (d) that has been mixed with any potentially unsafe products, whether derived from products of fishery, animal origin or non animal origin;
- (e) that has been handled, processed or stored in any way that may make it unsafe for human or animal consumption.

5.(1) All raw materials shall —

- (a) originate from establishments, including vessels, registered and approved by the Competent Authority according to the Export of Fisheries Products Regulations 2010.;

Fishery By-
Product
Requirements
Type 1

- (b) meet the requirements for food safety conditions as set out in Schedule 10 of the Export of Fisheries Products Regulations 2010;
 - (c) be derived from fishery products which are fit for human consumption as defined by the appropriate organoleptic and/or chemical standards for freshness.
- (2) They shall be transported and stored with respect to conditions of hygiene as set out in Schedule 6 of the Export of Fisheries Products Regulations 2010.
- (3) All processing shall

- (b) recording devices to record continuously the results of these measurements; and
- (c) an adequate safety system to p

Plants' own-checks

(14) Hygiene control must include regular own checks of the environment and equipment. Internal inspection schedules and results must be documented and maintained for at least two years.

(15) Operators and owners of processing plants shall put in place, implement and maintain permanent procedures for the application of HACCP system and own checks.

(16) Where the results of a tests on samples taken, do not comply with the provisions of these Regulations, the operator of the processing plant must —

- (a) notify the Competent Authority immediately of the full details of the nature of the sample and the batch from which it was derived;
- (b) establish the causes of failure of compliance;
- (c) reprocess or dispose of the contaminated batch under the supervision of the Competent Authority;
- (d) ensure that no material suspected or known to be contaminated is moved from the plant before being reprocessed under the supervision of the Competent Authority and re-sampled officially in order to comply with the standards laid down in these Regulations, unless destined for disposal;
- (e) increase the frequency of sampling and testing of production;
- (f) inv

- (g) instigate appropriate decontamination and cleaning procedures within the plant;
- (h) specific products may also need to comply with additional measures as set out in the Schedules.

7.(1) Products once dispatched from the fishery facility shall not re-enter the food or feed supply chain.

(2) The controls and requirements for further processing of such products are beyond the scope of this regulation.

8.(1) The fishery waste shall be —

- (a) disposed of in accordance with the provisions of the Environment Protection Act 1994 and all regulations regarding the disposal of food or animal waste;
- (b) unless special facilities are provided for the continuous disposal of

- (b) clearly labelled as Type 4 fishery waste and the containers shall not be used for

(i) a product that will undergo further refining or processing before being incorporated in a food product;

(ii) an ingredient in feed manufacture,

but the requirements for production of all crude fish oils irrespective of its use shall remain the same;

(b) refined fish oils shall have undergone further processing and laboratory analysis to demonstrate its safety. It can be used as an ingredient or component in food products;

(c) all fishery products used for production of fish oil shall be fit for human consumption as determined by organoleptic or TVB-N determination;

(d) the processor is responsible for conducting “own checks” on raw materials, including the determination of TVB-N, and documenting such checks as part of the HACCP plan;

(e) the maximal permitted levels for TVB-N in raw materials for production of fish oil are —

(i) 25 mg of nitrogen/100 g of flesh for species *Sebastes* spp., *Helicolenus dactylopterus*, *Sebastichthys capensis*;

(ii) 30 mg of nitrogen/100 g of flesh species belonging to the *Pleuronectidae* family;

(iii) 35 mg of nitrogen/100 g of flesh for *Salmo salar*, species belonging to the *Merlucciidae* family, species belonging to the *Gadidae* family;

- (iv) 60 mg of nitrogen/100 g of flesh for whole fish of species that are caught for the sole and direct purpose of fish oil production;
- (f) all fish to be used for the production of fish oil shall, be stored, transported and handled in conditions that are the same as for any fishery product according to the Export of Fishery Products (Sanitary) Regulations 2010, except that where whole fish of species that are caught for the sole and direct purpose of fish oil production are used they may be processed without chilling provided that the

SCHEDULE 2

Specific Requirements for Fish Meal Production

Processing

1. Processing plants must have an installation to check the presence of extraneous matter, such as packaging material, metallic pieces, etc. in the animal by-products.

The fishery by-products must undergo an appropriate heat treatment process dependant on the particle size the raw materials have been reduced to. The processing parameters (flow rate time and temperature etc) of this heat treatment must be proven by laboratory analysis, to ensure the final product meets the microbial standards in part 2 of this schedule.

The critical control points must at least include —

- (a) raw material particle size;
- (b) temperature achieved in the heat treatment process;
- (c) pressure applied to the raw material, if applicable; and
- (d) duration of the heat treatment process or feed rate to a continuous system.

Minimum process standards must be specified for each applicable critical control point.

When using a continuous flow system, the progression of the product through the heat converter must be controlled by means of mechanical commands limiting its displacement in

such a way that at the end of the heat treatment operation the product has undergone a cycle which is sufficient in both time and temperature as verified by microbial analysis of final product.

Records must be maintained as end in in

c = number of samples the bacterial count of which may be between m and M, the sample still being considered acceptable if the bacterial count of the other samples is m or less.

Maximal
levels of
contaminants
in fishmeal

3. These levels are maximal levels designated beyond which the product is declared unsafe for use as feed. Analysis shall only be required for the purposes of verifying product safety where contamination is thought to have occurred.

Nitrites	60 mg/kg	(expressed as) sodium nitrite)
Aldrin	0.1 mg/kg	
Dieldrin		
Campechlor		
Dioxins	6.0 pg/g	WHO-PCDD/ F-TEQ/kg (1)
Sum of dioxins and dioxin-like PCBs	24.0 pg/g	WHO-PCDD/ F -PCB-TEQ/kg (1)

(1) WHO-TEFs for human risk assessment based on the conclusions of the World Health Organisation meeting in Stockholm, Sweden, 15-18 June 1997 (Van den Berg et al., (1998) Toxic Equivalency Factors (TEFs) for PCBs, PCDDs, and PCDFs for Humans and for Wildlife. Environmental Health Perspectives, 106(12), 775).

MADE this 15th day of November, 2010.

PETER SINON
MINISTER OF INVESTMENT,
NATURAL RESOURCES AND INDUSTRY
