

GOVERNMENT OF THE PEOPLE'S REPUBLIC OF BANGLADESH
MINISTRY OF FISHERIES AND LIVESTOCK

NOTIFICATION

S.R.O. No. 276 Law/97

Dated: the 4th December 1997

In exercise of the powers conferred on the Government under section 3 read with section 15 of the Fish and Fish Products (Inspection and Quality Control) Ordinance, 1983 (Ord. XX of 1983) and in suppression of the Fish and Fish Products (Inspection and Quality Control) Rules, 1989 and other provisions made there under the Government is pleased to make the following rules namely.

1. **Short title.** - These rules may be called the Fish and Fish Products (Inspection and Quality Control) Rules, 1997.
2. **Definitions .-** In these rules, unless there is anything repugnant to the subject or context.-
 - a) "Canned fish" means any fish that is packed in a hermetically sealed glass or metal container and has been sterilized or treated with heat sufficient to prevent growth of micro-organism;
 - b) "Cured fish" means any fish that has been either dried, salted dried, salted, pickled, smoked, marinated or fermented or has been processed by any combination of these procedures;
 - c) "Decomposed fish" means any fish that has offensive or objectionable color, odour, taste or textural defects and not of the nature expected to the fresh fish product and it includes tainted fish;
 - d) "Director General" means the Director General of the Department of Fisheries.
 - e) "Drained weight" means the weight of fish after the liquid has been drained out through a device by using a method as approved by the Food and Agriculture organization of United Nations;
 - f) "Fees" means any fee prescribed in rule 18;
 - g) "Form" means any form attached to these rules;
 - h) "Inspector" means an officer appointed as an Inspector under sub-section (1) of section 4 of the Ordinance;
 - i) "Iced or chilled fish" means any fish kept at a temperature in between 0^oc to 5^oc;
 - j) "Landing centre" means a designated place or a hygienic centre established by the Government or otherwise, for the purpose of landing fish, primarily or for an ad interim period, for sending to the processing plant or for marketing;
 - k) "License" means any license issued under rule 14;

- l) “Lot” means any quantity of fish being exported under a single invoice;
- m) “Ordinance” means the Fish and fish Products (Inspection and Quality Control) Ordinance. 1983 (Ord. XX or 1983).
- n) “Person” means any company, firm, wholesale merchant, supplier, vendor or any person dealing with fish and it includes the owner of an ice plant;
- o) “Potable water” means any water with the quality referred to in Schedule 10;
- p) “Processing plant” means any place or vessel where fish is-
 - (i) processed wholly or partially or
 - (ii) de headed, peeled or filleted or gutting or iced or packed for the purpose of export; or
 - (iii) freezed, canned, cured, packed or stored for internal marketing or for export.
- q) “Salubrity certificate” means a certificate issued under rule 11;
- r) “Schedule’ means any schedule annexed to these rules;
- s) “Service centre” means a designated place or hygienic centre established by the Government or otherwise primarily or for an ad interim period where fishes are landed fresh, cleaned, sorted, graded with head and iced stored or packed fresh, cleaned, sorted, graded with head and iced stored or package before processing or sending them to processing plant;
- t) “Tainted fish” means any fish that is unsuitable for human consumption;
- u) “Unhygienic fish” means any fish that is micro-organism of public health significance or substances toxic or aesthetically offensive to human being or any fish with hanging meat which is not meant for export but which encourages quick bacterial growth and deterioration of the quality of the fish.

3. Authorised Officer: All officers, not below the rank of the Deputy Director of the section of Fish Inspection and Quality control of the Department of Fisheries, shall be deemed to be authorized officer for the purposes of these rules; provided that a Deputy Director may, for a period not exceeding three months, temporarily empower in writing any of his subordinate officer, not below the rank of Inspector, to exercise any of the powers of, or discharge the functions of an authorized officer.

4. Fish processing and export.

(1) No person shall, without license, process or export fish or for the purpose of export, supply, stock or market any fish.

(2) If a person contravenes sub-rule (1) the Authorised Officer or an Inspector may, on the spot seize the fish referred to in that sub-rule and impose fine on that person for an amount not exceeding ten thousand taka and on realization of the amount of the fine, the

seized fish may be returned to that person.

(3) No person shall process or export any unhygienic, tainted or decomposed fish or send such fish to another or receive from other for processing or export; provided that this rule shall not apply for receiving any exported fish returned to Bangladesh from overseas.

(4) If a person contravenes sub-rule (3), the Authorised Officer or an Inspector may, on the spot seize the fish referred to in that sub-rule and impose fine on that person for an amount, not exceeding taka twenty thousand.

5. Provisions to be followed in fish processing.-

(1) No license shall be issued to a person for internal marketing or sale or for processing fish to export in the international market, unless that person has a processing plant managed in terms of the Quality assurance programme (QAP) based on the HACCP as referred to in Schedule-9:

provided that the Government may, if necessary, for the purpose of issuing licence for export of fish in the international market, add any condition to Schedule-9 or relax any condition thereof.

(2) These rules and the provisions of the Schedules shall be followed in the case of processing of fish.

(3) No such materials, chemicals or container shall be used in fish processing which may, by coming into contact with the fish contaminate decompose or cause to be unhygienic that fish.

(4) If a person contravenes sub-rule (3) any license for processing plant of that person may be cancelled.

(5) For carrying out the purpose of sub-rule (3), the Government may, by notification in the official Gazette, prescribe any materials chemicals or containers to be used for processing of different types of fishes or fish products.

(6) Every person engaged in fish processing in the processing plant shall obtain a permission in writing from the Authorised Officer regarding materials, chemicals and containers to be used in such processing until any notification is issued under sub-rule (5).

(7) No person shall use dichloro, diphenyl trichloro-ethane (DDT) or any other harmful insecticides in fish drying or in any cured fish processed by other methods, Provided that for the purpose of protecting any dried or cured fish from worm and insects, such degree of auto-degradable insecticides may be used as the Authorized Officer shall approve and determine.

(8) If any person contravenes sub-rule(7), the Authorised Officer or an Inspector may impose fine on that person for an amount not exceeding taka ten thousand and seize the

fish products referred to in that sub-rule for the purpose of destruction.

(9) No person shall use any materials, chemicals, utensils in processing, carrying, selling, stocking or marketing of fish which are not of food grade quality.

(10) If any person contravenes sub-rule, (9), the Authorised Officer or an Inspector may impose fine on that person for an amount not exceeding ten thousand taka or cancel the license of his processing plant.

6. Special provision relating to fish carrier, landing centre, service centre, vending centre and ice plant.-

The provisions of schedule 5 shall be followed in respect of the carrier of fish, Schedule 6 and 7 shall be followed in respect of landing centre, service centre and vending centre of fish and Schedule 8 shall be followed in respect of ice plant.

7. Measures to be taken after the return of fish which has been exported.-

(1) Where any fish is returned to Bangladesh after it has been exported for international market, that fish shall not be re-exported or supplied, stocked or processed for internal marketing unless it has been tested in any laboratory approved by the Department of Fisheries.

(2) If after the test referred to in sub-rule (1), the fish is certified by the Authorised Officer to the effect that it is unhygienic, decomposed or tainted, the measures prescribed in sub-rule (3) shall be adopted in respect of that fish, under the supervision of the Authorised Officer.

(3) The unhygienic, decomposed or tainted fish referred to in sub-rule (2) shall, forthwith be destroyed by digging ground or otherwise or processed for making food of fish or animal.

8. Marking cartons, containers, etc.-

(1) Any container or carton in which the processed fish is kept, that container or carton shall be labeled in English or in the language of the customer, as the case may be, where the following particulars shall be printed clearly:-

(a) the customary and the scientific name of fish;

(b) name and address of the processing plant;

(c) actual or drained weight of fish;

(d) date of processing;

(e) date of best before;

(f) name and ratio of materials if used more than one in processing; and

(g) shift code, batch number and lot number.

(2) The carton shall be marked and sealed for export as per requirement of the importing country.

9. Inspection:

(1) Any Inspector, at any reasonable time, may for the purpose of ensuring the compliance of the provisions of these rules, inspect any processing plant and its surroundings, the fish brought to that plant for processing or any stored fish for processing or export, any ship or vehicle used for carrying fish, landing centre, service centre, vending centre, fish culture ground and the method of processing fish in the plant, cartons and containers for processed fish and documents relating to HACCP.

(2) The inspector may, at the time of inspection for the purpose of ensuring the compliance of these rules, give direction to the person concerned to destroy or not to process any particular fish or to do any other necessary work and that person shall be bound to carry out those directions.

(3) If a person refuses to comply with any direction given under sub-rule (2), a fine may be imposed on that person for an amount not exceeding taka ten thousand or the license of the plant of that person may be cancelled.

(4) The inspector shall, during any inspection under this rule, carry the identity card issued by the concerned Authorised Officer.

10. Sample collection and test, etc -

(1) The Inspector may during inspection under rule 9 draw by random sampling any reasonable number of samples of fish for any kind of test which has or has not been processed or in the processing plant or is being exported from such stock lot or fish landing centre or service centre, fishing vessel or fish culture ground. .

(2) The Inspector shall put a tag on the sample with his signature and date on identification number and a brief description of the samples after verifying the quality of standard of fish, issuance of salubrity certificate and verification of the effectiveness of the HACCP plan and its operation and the total result of the samples drawn under sub-rule (1) after counter signature by the managing authority of the particulars of fish or particulars of fish of his own processing plant.

(3) The Inspector shall collect such fees as prescribed under rule 18, for test of samples drawn under sub-rule (1), from the owner of fish or his representative and by recording the particulars of such samples, shall give a receipt with his signature from a receipt book prepared to this end, to the owner of fish or his representative and shall send such samples for test to any Government laboratory approved by the Authorised Officer.

(4) The officer in-charge of the laboratory shall, within a period not exceeding ten days, send three copies of the report of the test to the Inspector concerned and the Inspector shall, as early as possible, send a copy of the report shall be sent immediately to the Authorised Officer with his necessary recommendation.

(5) The Authorised Officer shall, immediately after receiving the report of test under sub-rule (4), on the basis of that report, sign all documents relating HACCP along with issuing celebrity certificate for the owner of fish or his representative or shall inform him in writing any other decision if any.

(6) No sample can be drawn once again, if the standard of the samples drawn under sub-rule (1) is not acceptable; but where it appears to him after examination of the documents relating to HACCP that the fish of any particular day or shift from a declared lot, is substandard or unacceptable, that fish shall be segregated and destroyed or marketed in the internal market or processed in any way and the record of it shall be maintained properly by the authority of the plant.

11. Salubrity Certificate.-

(1) No person shall export any fish or fish products unless that person obtains salubrity certificate regarding every lot of fish or fish products from the Authorized Officer.

(2) An application for salubrity certificate shall be submitted in Form-A to the Authorised Officer with fees prescribed in rule 18.

(3) If after receiving the application referred to in sub-rule (2), if appears on examination to the Authorised Officer that the particulars stated in that application and all documents submitted are correct, the Authority Officer shall subject to the payment of fees under rule 18, Inspection under rule 9 and collection of samples and test under rule 10, issue salubrity certificate in Form-B within a period not exceeding fifteen days and shall sign the statements submitted therewith by writing “examined and found to be correct” and if these are found not to be correct, he shall not issue any salubrity certificate:

Provided that the Authorised Officer may issue salubrity certificate for alive, iced fish or trade sample not exceeding ten kilograms without sample collection and test referred to in rule 10.

(4) If a customer of another country where any fish is to be exported, desires to have any additional salubrity certificate or any change or alteration in such certificate issued under this rule, such additional certificate or change or amendment may be issued or made, as the case may be, subject to the payment of fee by exporter under rule 18.

12. Re-examination of fish.-

Where it appears to the Authorised Officer that the fish or fish products for which a salubrity certificate is issued under rule 11, has been decomposed or tainted or its quality has been degraded or it has been adulterated and that fish requires to be re-examined, the Authorised Officer may, after inspection under rule 9, pass an order for taking appropriate measures.

13. Destruction of fish, etc.

(1) Where it appears to an Inspector or Authorised Officer during inspection or test, that any fish is not suitable for processing or it is unhygienic, decomposed or tainted and for that reason, it is not possible to export or, it has become unfit for human consumption due to adulteration, the Inspector or the Authorised Officer may order it to be segregated from the suitable for processing or the export of such fish, which has been unfit for human consumption. be stopped and destroyed.

(2) Any fish seized under rule 4 which is unhygienic, decomposed or tainted or any fish seized under sub-rule (4) of that rule shall be destroyed under this rule.

(3) Any fish referred to in sub-rule (1) shall be destroyed in the presence of the Authorised Officer or his representative in such hygienic manner so that it does not create any hazards to the public health or create any adverse effect to the environment and the record of such destruction shall be maintained properly by the authority of the plant.

14. Application for license, etc,-

(1) Any person desiring to have a license for fish processing plant on land or vessel, cured fish plant, or any exporter who has no processing plant or for fish landing centre, service centre, vending centre ice plant or fish supplier, shall apply in Form-C, to the Authorised Officer subjects to payment of application fee under rule 18.

(2) The Authorised Officer or any other officer nominated by him may, for the purpose of an application for license under sub-rule (1), inspect the concerned plant, carrier, establishment or place or may call for any information relating to it.

(3) The Authorised Officer shall, subject to payment of fee prescribed in rule 18, issue a license in Form-D within a period not exceeding thirty days from the application if he is satisfied on the application made under sub-rule (1), particulars relating to plant, carrier, existing facilities of the establishment or place and the conditions mentioned in rule 15 or if he is not so satisfied shall rejection, application:

provided that in the case of rejection of the application. the decision shall be communicated to the applicant in writing by recording the grounds of rejection, within a period of seven days from such decision.

(4) A license may be issued at any time in the year and such license may be renewed within 31st January of each year subject to the payment of fees prescribed in rule 18.

15. Conditions for licenses.-

(1) The following conditions are to be fulfilled for getting any licence referred to in rule 14. namely:-

(a) existence of facilities mentioned in Schedules 1, 2 and 10 for a land-based fish processing plant and facilities mentioned in Schedules 3 and 10 for a processing

plant in vessel;

- (b) existence of facilities mentioned in Schedule 4 for the cured fish processing plant;
- (c) existence of facilities mentioned in Schedule 5 for the fish carrier & fish supplier;
- (d) existence of facilities mentioned in Schedule 6 and 7 for landing centre, service centre and vending centre of fish;
- (e) existence of facilities mentioned in Schedule 8 and 10 for ice plant and
- (f) existence of permanent address, registered office and a permission in writing from a person who has license for processing plant for the purpose of using his registered brand.

16. Cancellation of license, etc.-

(1) The Authorised Officer may, by recording the reasons, cancel the license of a person if that person contravenes any provision of the Ordinance or these rules or any condition on the license.

(2) The Authorised Officer shall, before canceling a license under sub-rule (1), issue a notice to the licensee stating the grounds for cancellation and to submit, within seven days from receipt of the notice, statements in writing, if any.

(3) The Authorised Officer shall either cancel the license or pass any other order or decision after considering the written statements submitted to him on receiving notice under sub-rule (2), within the period of ten days of the receipt of such statements or, if no such statements are submitted, within fifteen days from the expiry of the period mentioned in the notice and the overall situation and such order or decision shall be communicated to the licensee.

(4) Where the Authorised Officer is, either on the basis of any report of inspection or otherwise, is of the opinion that there has been such serious infection in any fish or fish products stored in a processing plant or in a lot or the fish or fish products declared in the lot has been adulterated or practiced falsehood or submitted some untrue documents or suppressed any information such serious situation has been created for contravention of the Ordinance or the provisions of these rules, that it is necessary to present all or any special operation of that plant, the Authorised Officer may, notwithstanding the provisions of sub-rule (2), without issuing any notice for show cause, pass an order by canceling temporarily the license of that plant.

17. Appeal.-

(1) If a person is aggrieved by any order passed under these rules, that person may prefer an appeal to the Director General within fifteen days from that order;

(2) An appellant shall, along with on appeal under sub-rule (1), submit fees prescribed in rule 18, attested copy of the concerned order, a brief statements of the appellant regarding that order and other necessary particulars and documents.

(3) The Director General himself or any officer nominated by him not below the rank of a Director shall, within thirty days of the appeal, give decision on that appeal and that decision shall be final.

18. Prescribed fees.-

(1) The prescribed fees under these rules shall be as follows:-

<u>Description</u>	<u>Amount</u>
(a) Application for any license	Taka 300/-
(b) License for processing plant on land or vessel	Taka 5000/-
(c) License for any exporter who has no processing plant	Taka 3000/-
(d) License for cured fish plant	Taka 1000/-
(e) License for ice plant	Taka 1000/-
(f) License for vending centre and supplier of fish to be exported	Taka 1000/
(g) License for fish landing centre or service centre	Taka 2000/
(h) Appeal	Taka 1000/
(i) Application for salubrity certificate	Taka 200/
(j) Salubrity certificate	Taka 1000/
(k) Additional certificate, change or amendment of certificate	Taka 500/
(l) Test of each sample	Taka 1000/

(2) All fees other than the fees for test of samples referred to in sub-rule (1), shall be deposited to the head "46-Fisheries and other receipt" by treasury challan and a copy of such challan shall be submitted along with the concerned application.

(3) The fees for test of samples along with fees referred to in sub-rule (1), shall be paid to the concerned Authorized Officer through bank draft or pay order and for that amount, the concerned Inspector shall give a receipt with his own signature from a receipt book to be prepared for that purpose.

(4) The Authorized Officer may, from the amount received as fee under sub-rule (3), spend for the development of the quality control laboratory, research on quality control, training and for buying chemicals, glass wares, utensils, equipment and other related articles for the purpose of effective operation of test in the laboratory and for regular inspection and supervision of the processing plants:

Provided that the accounts of such fees shall be maintained properly and an accurate statement of expenditure of the amount received in that head in each year, shall be submitted to the Director General.

19. Implementation of Quality Assurance Programme (QAP) based on HACCP.-

(1) Every person shall implement, from the place of origin of the fish production to all stages of processing, the Quality Assurance Programme (QAP) in the processing plant

for receiving, landing, carrying, stocking and processing or for marketing in accordance with the provisions mentioned in Schedule-9, for the purpose of export, and for carrying out the proper execution of that work and the owner of each plant shall appoint one person to be incharge.

(2) The owner of each plant shall send the name of the person incharge for implementing Quality Assurance Programme (QAP) based on HACCP in each licensed processing plant to the Authorised Officer and both the owner and the person incharge shall be severally and jointly responsible for implementing Quality Assurance Programme (QAP) in each plant.

(3) The Authorized Officer shall approve the Quality Assurance programme (QAP) presented by the owner of fish processing plant if that is found to be consistent with the HACCP and he is satisfied on examination of other particulars.

(4) If there appears to be any risk of health hazards in implementing Quality Assurance Programmes (QAP) by the own checking method maintained in Schedule-9 or from any information received by the person incharge, the owner or the person incharge shall take measures for removing such risk under the supervision of the Authorized Officer and maintain all records properly.

20. Method of realising fine.

(1) Any fine imposed under these rules shall be realised, subject to the provision of rule 17, by the Inspector or the Authorized Officer in cash on a receipt issued by him with signature from a receipt book prepared for that purpose and the amount of such fine shall be deposited to the Government Treasury by challan in the head “46-fisheries other receipt”.

(2) Where the person to whom a fine is imposed, pays that fine before preferring an appeal under rule 17, that person shall lose his right of appeal and the amount of fine paid as such, shall be deposited to the Treasury as referred to in sub-rule (1).

(3) Where the person files an application stating that he shall prefer an appeal under rule 17 after the fine is imposed on him, the realization of that fine shall be postponed pending the decision of that appeal.

(4) The person shall pay the amount of fine within a period not exceeding fifteen days from the day of the order, if the order of fine is upheld in appeal under rule 17.

(5) Where the concerned person does not pay the amount of fine within the period referred to in sub-rule (4), the concerned Authorized Officer may cancel the license of that person.

21. Use of chemicals in fish culture ground, etc.-

(1) In production of fish, no such antibiotic, pesticide, hormone or other chemicals shall be used, the residual affect of which makes the food grade quality of it unacceptable.

(2) Where it becomes necessary to use any chemicals referred to in sub-rule (1) in any fish culture ground, the person involved in fish culture shall inform the Authorized Officer in writing about the types and quantity of chemicals to be used and with approval of that officer, such chemicals may be used.

(3) The owner of the processing plant in which any fish to be processed or a person in charge shall arrange the water and fish of the fish culture ground to be tested twice in a year to ensure whether the presence of the residual affect of antibiotic, pesticide, hormone or other chemicals are outside the acceptable quantity.

(4) The residual affect of chemicals referred to in sub-rule (3) in the water or fish of a fish culture ground or in processed fish shall be within the acceptable quantity and where the presence of the residual affect in processed fish exceeds the acceptable quantity, that fish shall be destroyed in accordance with rule 13 in the presence of the Authorized Officer or his nominated representative and the culture of fish in field shall be stopped.

Explanation.- In this rule, acceptable food quantity means the presence of antibiotic, pesticide, hormone, or other chemicals in any fish in such ratio as is approved by the food and Agricultural Organization of the United Nations and the World Health Organization.

SCHEDULE-1

{See Rule 5(2), 15(1)}

CONDITIONS AS TO NECESSARY FACILITIES FOR FISH PROCESSING PLANT.

1. Floor of the processing plant shall be smooth, water-proof and the same be so slopping for easy drainage of liquid substances in the drain.
2. In order to drainage the waste of liquid substances of the plant, there shall be hygienic drainage system and the outlet of drain shall be made such a way so that insect or other animal could not enter into the drain.
3. Interior walls shall be smooth., water-proof, light colored and it would be at least 1.8 meters height from floor of the interior walls and it shall be made such a way for easy washing.
4. The height of roof shall be such a high so that under the roof easy movement can be possible and junction points of the floor to wall, wall to wall and wall to roof shall be parabolic.
5. Windows and other openings shall be constructed in such a way so that dirt and particles could not enter into the plant and those be covered with insect proof net.
6. Doors shall be smooth, non-absorbent, self-closing and be covered with insect proof net.
7. All entrances to the processing area shall have foot-operated taps with basin for washing hands and appropriate cleaning and disinfectant materials there to.
8. There shall be an arrangement of liquid disinfectant substance in the way of entrances to processing area so that the bottom of the shoes of the persons who enter, could get wet.
9. There shall be adequate number of hygienic rest-room for the use of the workers nearby the processing plant or under the same roof of the processing plant.
10. All entrances to the rest-room shall have foot-operated taps with basin for washing hands and appropriate cleaning and disinfectant materials thereto.
11. There shall be sufficient area and facilities to the entrances of the processing plant or nearby it so as to the workers could change their dress and the said area shall be separated from the processing area.
12. For the purpose of using in the processing plant:-
 - (a) there shall be an arrangement for supplying potable water;
 - (b) there shall be covered, hygienic and cleaned sufficient water storage tanks; and
 - (c) there shall be supply of adequate hot water in appropriate place.
13. In processing plant:-
 - (a) there shall be sufficient lighting in the working areas for easy identification of fish &

other materials; and

(b) the electric fitting shall be water-proof and bulbs be fitted with covers.

14. Plant building and other places thereto shall be designed and constructed in such a way as to minimize any chance of cross-contamination of fish and the activities apprehended to contaminate fish, the place of said activities shall be separated by partition or other means.
15. Crabs, tortoise and turtles shall be processed in an area completely separated by partition or other means.
16. Fish or fish products which would not be used as human food or the processing area of other goods shall be kept completely separated from fish processing area of other goods shall be kept completely separated from fish processing area.
17. Machinery and other tools used for the purpose of processing shall be kept clean and free from contamination.
18. **In processing plant-**
 - (a) equipments, fixtures and furniture for the purpose of fish processing shall be made by stainless steel or non-corrodible materials;
 - (b) no wooden furniture and fixtures can be used in places where it can come into touch of fish; and
 - (c) the furniture and fixtures which are likely come into touch of fish shall be non-absorbent.
19. In order to remove waste materials from processing plant there shall be hygienic foot-operated, covered utensils and arrangement for destroying the waste materials in hygienic condition.
20. So that the waste-materials of processing plant cannot pollute its surroundings, there shall be sufficient facilities to ensure the same.
21. Conveyor-belts which are likely come close contact of fish be made so that they can be easily cleaned and disinfected.
22. There shall be arrangement for non-corrodible equipments for separating fish meat and they shall be easily cleanable and disinfectant able.
23. Equipments for cutting grinders and other processing equipments shall be standard quality.
24. The boxes, trolleys and other containers used for storage of fish (save and except lively fish) shall be made so that water can be easily drained away.
25. No utensil made by wire-net can be used for processing other fish and except shall fish and crustacean.
26. Enameled or galvanized utensils shall not be used in fish processing
27. In processing plant-

- (a) each frozen storage shall be fitted with an auto temperature recording thermometer and the said thermometer be located in conspicuous part of the store for easy visibility.
 - (b) frozen storage shall maintain a constant temperature of -18°C to -25°C or below;
 - (c) cold storage (chill-room) shall have the facilities maintaining temperature of 0°C to 5°C , and
 - (d) the temperature of ice-storage shall be below the range of 0°C
- 28.** For using adequate pressure and heat in processing canned fish, there shall be arrangement for adequate steam or vapour or other means.
- 29.** In canning plant-
- (a) there shall be adequate sealing machines; and
 - (b) there shall be retort with thermometer, pressure gauge steam spreader and venting valve.
- 30.** In processing plant there shall be an arrangement for producing value added product as per international requirement.

SCHEDULE-2

{See Rule 5(2), 15(1)}

CONDITIONS FOR MANAGING FISH PROCESSING PLANT.

1. In processing plant-

(a) No persons shall be appointed or entered in a processing plant who has been suffering from skin disease, diarrhea or other contagious disease as determined by the Government of whose infected wound may communicate disease in fish

(b) no employee with an open cut wound shall be allowed to work unless it is covered with a close fitting water-proof dress or a bright and contrast color.

2. Before appointment, every person shall be medically examined by a registered doctor to ensure that he is free from contagious disease and proof record is to be maintained and every employed person shall be examined every year accordingly, and it is also to be maintained.

3. The following things are to be observed in processing plant and these shall be written and hung and displayed in a conspicuous place as a notice board namely:-

(a) every person employed in processing plant shall maintain a high degree of personal cleanliness;

(b) at the time of handling fish, water-proof and cleaned glove shall be put on and no ornament shall wear in hand.

(c) eating, drinking, spitting, smoking or such other act which may contaminate fish shall be prohibited; and

(d) no person shall be allowed to enter in the plant unless he has cleaned his hands in running water with cleaning and disinfectant materials and after using the toilets, hands shall be similarly cleaned.

4. Every person employed in fish processing shall use suitable dress, head-gear, nose-mask and shoes which can be easily cleaned.

5. Apron or other dress materials or shoes shall not be washed in the floor.

6. Gloves shall be kept neat & clean and hygienic condition.

7. In processing plant-

(a) out yard shall always be kept neat & clean; and

(b) floor, drain, wall, roof and other places of the plant shall be cleaned and disinfected by washing brightly after every shift or if necessary in any other time and the disinfected work would be done in such a way that disinfection materials could not come into contact of fish.

8. In processing plant-

(a) the machinery, articles, utensils used for processing or other articles may come into contact with fish shall be cleaned and disinfected before starting work or the day and after finishing of the work and it will get dried in the air and be kept in hygienic condition.

(b) fish shall be kept chilled temperature below 5°C through out processing and before freezing;

(c) water below the range of 10°C temperature shall be used for washing fish at the time of processing.

(d) in every work potable water shall be used;

(e) ice made from potable water shall be used;

(f) ice shall be stored in storage free from contamination; and

(g) all waste materials including waste water shall removed hygienically.

9. Fish shall be freezed in -35°C to -40°C temperature in approved place and procedure as determined by authorized officer and at the time of freezing core temperature shall be at least -18°C and the record shall be maintained at least 24 months.

10. In processing plant-

(a) frozen fish shall be stored in frozen storage in a temperature of -18°C to -25°C and measure shall be taken for the protection of said fish from oxidation or dehydration;

(b) frozen storage shall maintain in a temperature of -18°C to -25°C and that shall be automatically recorded and the same shall maintain at least 24 months.

11. In case of keeping frozen fish out of frozen storage the container or box of frozen fish, shall maintain in a temperature of -18°C to $\pm 2^{\circ}\text{C}$ and for that purpose appropriate measure shall be taken.

12. Crab, tortoise & turtles and meat of other animals shall not be kept with fish in frozen storage.

13. In processing plant-

(a) disinfectant used in the food-stuff shall not be used without the approval of Authorized Officer; and

(b) all curing ingredients shall be food grade standard.

14. Crab, tortoise, turtles shall be processed as per approved procedures of Authorized Officer.

15. Different kinds of fish shall be processed separately.

16. In canning plant-

(a) heat shall be applied in such a way at the time of canning so that the taste and color of fish is not changed; and

(b) record of disinfection for every batch of canned fish shall be maintained for 24

hours.

17. Chemical and dyes which are not food-grade quality shall not be used in value added product.
18. Utmost hygienic measures shall be taken at the time of producing value added product.
19. packing materials shall be kept in separate and dry places from processing area.
20. Cleaned and new packing materials shall be used for packaging and used packing materials can not be re-used.

SCHEDULE-3

{ See Rule 5(2), 15(2) }

NECESSARY FACILITIES AND CONDITIONS FOR PROCESSING PLANT IN VESSEL.

1. Vessel shall be made in such a design so as to each hatch shall be kept separately and a separate fish receiving room shall be made in such a way so as to be easy to clean and to protect the fish from the sun, rain or any form of contaminant.
2. There shall remain following facilities in processing and freezing area of vessel, namely:-
 - (a) floor shall be non-slippery and so slope so as to liquid substances easily fall in drain and can easily be cleaned and disinfected;
 - (b) adequate measure shall be taken for running out ventilation with vapor;
 - (c) arrangement shall be made for sufficient lighting;
 - (d) electric fittings shall be water-proof;
 - (e) there shall have facilities for cleaning and disinfecting the utensils and articles used for processing;
 - (f) table, tray, tub, pot, cutting articles conveyor belt gutting and filleting machine shall be made by the substances which is non-corrodible and rust free;
 - (g) There shall have such a “refrigeration plant” which is capable brought down the core temperature of block -18°C within four hours;
 - (h) there shall have “cooling unit” to maintain temperature in frozen storage under -18°C and head of temperature sensor be located in the gate of cold store and thermometer be kept in the conspicuous place of the room; and
 - (i) arrangement shall be made to record the temperature of frozen storage in every days.
3. Frozen storage of fish and fish products in vessel shall be made in such a way which is easy for cleaning and protect from other contamination.
4. There shall have a separate frozen storage for maintaining by products processed in the vessel.
5. There shall be separate storage for packing materials.
6. Waste material storage area shall be separated from fish processing area in the vessel.
7. Fish products which is not suitable for human consumption or waste materials shall be removed so as to the same could not come into contact of holding water or fish.
8. There shall be arrangement for supplying potable water and pressurized and cleaned sea water.
9. Final washing and panning of fish shall be done by potable cold water.

- 10.** There shall be adequate number of dress changing rooms, foot-operated taps with basin and rest-rooms for workers.
- 11.** The gate of toilet shall not be made facing to fish processing area or fish products storage.
- 12.** Receiving rooms, processing rooms and other place of the vessel shall be cleaned by washing brightly after every shift or if necessary, in any other time and the disinfection work would be done in such a way that disinfection materials could not come into contact of fish.
- 13.** The machinery, articles, utensils used for processing or other articles may come into contact with fish shall be cleaned and disinfected by washing brightly after every shift and before starting work of the day and after finishing the work and it well get dried in the air and be kept in hygienic condition.

SCHEDULE- 4
{ See Rule 6, 15(1) }

**NECESSARY FACILITIES AND CONDITIONS FOR
CURED FISH PROCESSING PLANT**

1. Fish drying yard shall be cleaned and covered and measures shall be taken to eliminate and exclude rodents, insects, birds and animals from the said drying yard.
2. There shall be an arrangement for drying fish in a high raised platforms where natural or artificial air
3. In case of processing of cured fish edible quality of salt shall be used.
4. Intestines of fish shall be removed and it will be cut into pieces and it necessary head may be removed.
5. Fish shall be washed clearly in potable water and said shall be dried by sun or other artificial way in cleaned and hygienic manner.
6. In case production of slated dry fish shall be washed clearly in potable water and mixture of salt and fish shall be 1:4 ratio.
7. In flesh and skin of the dried fish shall have a color of the characteristic of species and shall not show any pink or brown discoloration by microbial contamination.
8. Flesh of dried fish shall be firm and fibrous and not yield to finger pressure and shall be crumbly, nor mealy or pasty.
9. Dried fish shall not be off-odor, rotten or contaminated
10. The products of dried fish shall be free from insects, mushrooms and mould;
11. The maximum limit of broken dried fish shall not exceed 5% unless contrary is made in the agreement;
12. Saltash and moisture of dried fish shall conform to the standard as determined by BSTI;
13. Unless contrary is made in the agreement, the dried fish shall be packed uniformly in a suitable polythene bags or in other containers capable of withstanding the ingress of insects, dust and dirt and moisture during storing and transpiration;
14. Insecticides or pesticides shall not be permitted to use in dried fish unless they are at levels not hazardous to public health; and
15. Packaged dried fish shall be kept in a temperature at +5⁰c to -10⁰c.

SCHEDULE- 5
{ See Rule 6, 15(1) }

**CONDITIONS APPLICABLE FOR CONVEYANCES USED
FOR TRANSPORTING FISH.**

1. Vehicles used for transporting fish shall have facilities for protecting the fish from the sun, rain and other contaminations. .
2. All walls of fish holder shall be water-proof and temperature non-absorbent.
3. Fish-holds, pen-boards and shelf-boards shall be smooth and impervious and capable of being properly cleaned.
4. Fish shall be stored in transport in such a way as to prevent damage or crushing.
5. Fish shall transport in covered vessel shall be fully protected from the sun, rain, dust, dirt, insects and any other form of contamination.
6. Decks, holds, pen-boards and shelf-boards shall be thoroughly cleaned and disinfected as soon as fish have been discharged in the transport.
7. Fresh fish shall be transported covering with ice and shall keep in under 5⁰c.
8. Fresh fish while transport under refrigerated carriers shall be kept under 5⁰c.
9. Frozen fish while under the control of carrier shall be kept well refrigerated at all times and maintain a temperature of -180c with fluctuation of not more than 2⁰c.
10. Exportable or processed or fish under processing shall be protected from the sun and rain and contamination during loading and unloading.

SCHEDULE- 6
{ See Rule 6, 15(1) }

**CONDITIONS OF NECESSARY FACILITIES FOR FISH LANDING
CENTRE, SERVICE CENTRE AND VENDING CENTRE.**

Fish landing centre, service centre and vending centre shall be constructed with building materials and for transport the arrangement of pucca roads and amongst other following facilities, namely:-

- (a) platform for grading fish shall be reasonably high;
- (b) it shall be surrounded by wall and easily can be cleaned;
- (c) floor shall be smooth and water-proof which can be easily cleaned and for drainage of water, there shall be hygienic arrangement;
- (d) there shall be drain for drainage of water hygienically;
- (e) the height of roof shall be at least 3.5 meter height;
- (f) there shall be an arrangement of sufficient natural and artificial air and electric fittings shall be water-proof and bulbs be covered with;
- (g) arrangement shall be made for supplying potable water;
- (h) arrangement shall be made for supplying ice in potable water;
- (i) machines for breaking ice, lift machines and other articles shall be made of such material which are non-corrodible and rust free;
- (j) there shall be sufficient toilets for use of the workers and arrangement be made to clean the same hygienically; and
- (h) there shall be specific room for Authorized Officer.

SCHEDULE- 7
{ See Rule 6, 15(1) }

**CONDITIONS OF NECESSARY FACILITIES FOR FISH LANDING CENTRE,
SERVICE CENTRE AND VENDING CENTRE.**

The Management of Landing Centre, Service and Vending Center shall be proceed with hygienic condition and shall follow the requirements properly mentioned below, namely:-

- (a) no person shall be appointed as worker or allowed to enter who has been suffering from any disease which may communicate disease in fish;
- (b) every worker shall clean their hands with soap and disinfectant material before starting the work and after using the toilet;
- (c) every worker shall use clean dress, gloves and gum-boot;
- (d) the arrangement shall be in such away so that insects, rats, birds and other domestic animal could not enter into.
- (e) the handling of fish shall be done quickly and with adequate ice;
- (f) used equipment shall be handled with caution and in such way so that fish is not destroyed by receiving shock;
- (g) scale, head and intestine of fish shall not be driven away; and
- (h) before starting the work and after every sale used machinery equipments, utensils and area shall be washed properly and disinfected by using detergent and disinfectant materials.

SCHEDULE-8

[See rule 6, 15(1)]

CONDITIONS OF NECESSARY FACILITIES FOR ICE PLANT.

1. Floor for the ice plants shall be constructed smooth. water proof and the same be so slopping for easy drainage of liquid substance in the drain.
2. Interior walls of the ice plant shall be constructed smooth and water proof and it shall made in such a way for easy washing and disinfected.
3. Roof of the ice plant shall be such high so that easy movement and won can be possible under the roof.
4. Electric fittings shall be installed with water proof materials and both be fitted with covers.
5. Doors shall be constructed with smooth. non-absorbent materials and insect proof nets of screens.
6. Drains shall be covered and the external end shall be covered by nets to prevent the entrance of insects, rats etc.
7. Furniture and equipment in the ice plant shall be made of non-corrodible and rust-free materials.
8. Ice manufacture cans shall be made of rust-free and non-corrodible material and be covered with lids.
9. Potable water shall be used for manufacturing ice and for removal of ice from can.
10. The temperature of ice storage room shall be below the range of 0 °c.
11. Equipment and utensils used for manufacture of flake. tube and partial ice shall be made with rust-free and non-corrodible materials.
12. Ice shall be carried on rust-free and non-corrodible trolleys or belts.
13. Adequate number of toilets and hand washing facilities shall be provided.
14. There shall be adequate space provided to mitigate the satisfactory performance of work.
15. The area of ice plant shall be maintained clean and disinfected by using disinfectant.

SCHEDULE-9

[See rule 5(1),19]

IMPLEMENTATION QUALITY ASSURENCE PROGRAMME BASED ON HACCP.

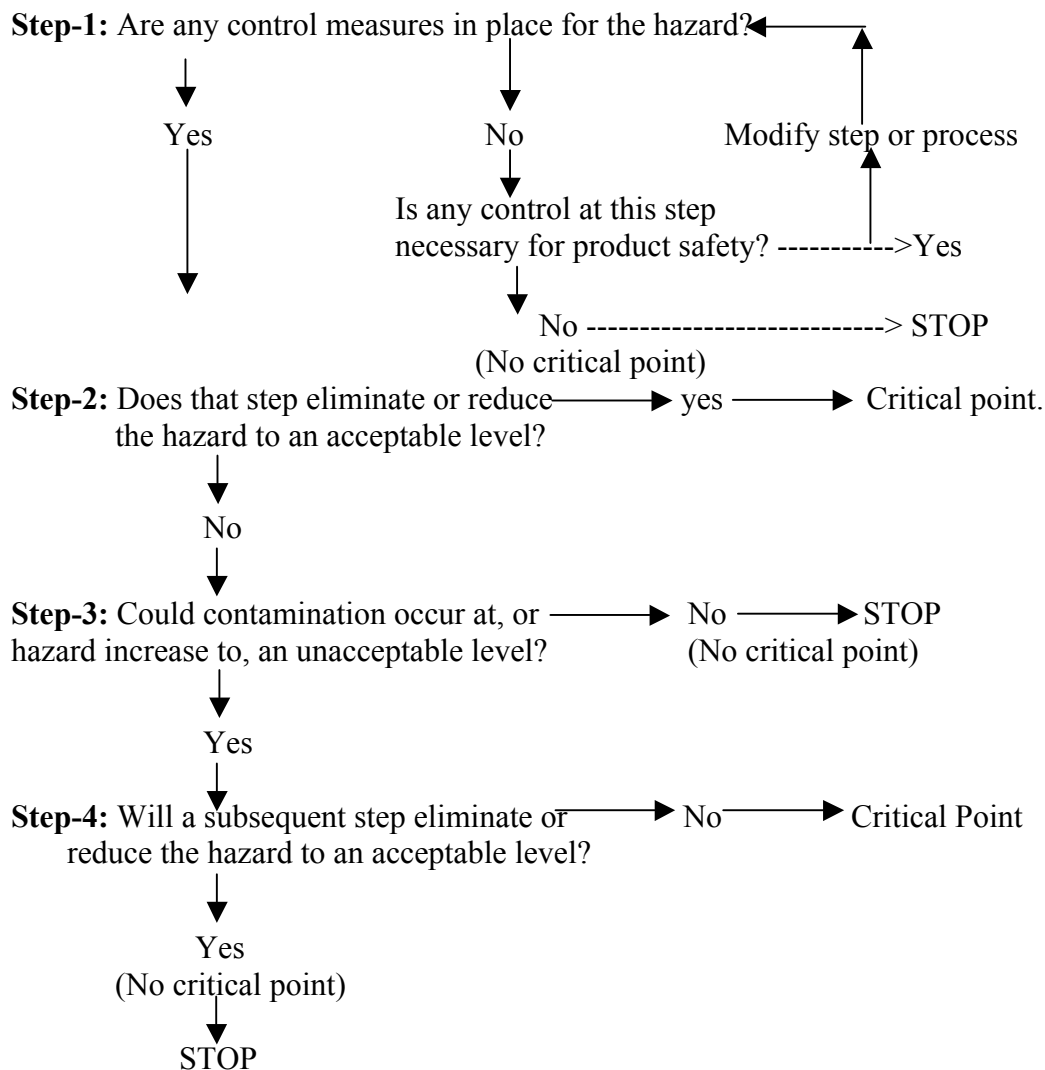
Part one: own-check system

1. There shall have an arrangement for measurement of the standard of product in processing plant by means of own-check system.
2. The plant where fishes are handled transformed, wrapped, re-wrapped, packed or stored, the Authorized Officer or owner of the plant shall take all necessary measure to ensure that all stage of production, the health rules are observed.
3. The owner of the processing plant or person in charge. depending on the manufacturing Process, the size of establishment and nature of product shall establish a permanent own-check system where there shall be the following measures, namely:-
 - (a) there shall be an arrangement for analyzing hazards of the fish processing plant and identification of critical points;
 - (b) establishment and implementation of appropriate methods of application for monitoring and checking of critical points;
 - (c) whether checking, clearing, disinfecting measure are rightly acting in maintaining health standard in the plant. with that end, there shall be an arrangement to make sample verification by a Authorized Officer in an approved laboratory;
 - (d) the result of said verification shall be placed by the Authorized Officer and the same shall be preserved for 24 months ; and
 - (e) from the result appears to the Authorized person of the plant that information system is at risk to health. in that case appropriate measure shall be taken for smooth control.
4. After verification of fish, fish product or its raw materials processed in the place appear to be at the risk of human health, the responsible officer or owner shall destroy the same or shall use for other purpose than human food. then the fish or fish product shall be kept under the custody of Authorized Officer till destroy. Due to processing defect health risk causes. the owner or responsible officer having been taken prior approval of the Authorized Officer may amend own-check system programme or may increase the scope of monitoring the products.
5. The owner of the plant or Authorized person in charge in order to produce hygienic products in the plant. measure shall be taken for imparting necessary training to workers, as to health rules.

Part two: Implementation of own-check system

1. The owner of the fish processing plant or Authorized person in case of implementation and application-
 - (a) shall identify hazards, analyze scope of the risk of hazards and step for controlling the same;
 - (b) shall identify critical points;
 - (c) shall identify the critical limits of every critical points;
 - (d) shall identify monitoring and checking system;
 - (e) shall adopt corrective action in case of necessary;
 - (f) shall determine verification procedures and review process; and
 - (g) shall maintain documentations of all procedures and records.
2. In case of identifying critical points the Authorized Officer of the plant-
 - (i) shall constitute a multidisciplinary team with the efficient to solve the raised problems. the following efficient person shall be included in multidisciplinary team. namely:-
 - (a) specialists in the field of biological, chemical or physical hazards;
 - (b) a production specialist who has responsibility for technical process of manufacturing product;
 - (c) however who has knowledge hygiene and operation of the processing plant and equipment ; and
 - (d) the person with special knowledge of microbiological. hygiene and food technology.
 - (ii) If a person or more than a person of the plant is knowledgeable as per clause (a),(b),(c) and (d) of paragraph (I), then with that person or more than a person, the said group may be constituted but consultant from other establishment may be appointed. when that said knowledgeable person is not available.
3. In case of identifying critical points. the description of the product shall be such as mentioned below:-
 - (a) there shall have a description as to raw materials, ingredients. additives by which composition production was made;
 - (b) structure of products and their physico-chemical characteristic (Viz: hard. liquid, AW,PH) shall be stated there to;
 - (c) processing (Viz;freezing, drying, saltingm smoking) procedure shall be stated there to;
 - (d) the environment of folding (Viz; leakage free. Air free) shall be mentioned;
 - (e) system of holding and distribution shall be stated;
 - (f) the last date of selling and shalf life of product shall be mentioned;
 - (g) instruction as to consumption shall be mentioned; and
 - (h) biological and chemical standard shall be mentioned.
4. Multidisciplinary team at the tail of determining the field of intended use, shall determine that what class of consumers will consume the products produced in plant.
5. In order to form flow diagram from the time of processing raw-materials up to the stage of processing and time between our step to another. what is required to perform with adequate technological information that there would be no cross contamination, surely. it be placed in flow diagram and the following subject shall be included in the diagram. namely:-
 - (a) action plan and plan of adjacent area:
 - (b) description and Characteristic of equipment;
 - (c) sequence of every step of processing (raw material, ingredients and composition of additives with consumption of time in every step and between two steps;

- (d) technological aspects of operation (specific time, temperature and consumption time);
 - (e) flow of product (apprehension of potential contamination);
 - (f) separation of cleared and dirty areas (high or low risk area);
 - (g) cleaning and disinfection system;
 - (h) hygienic environment of the establishment;
 - (i) maintain workers routes and hygiene; and
 - (j) product storage and distribution system.
6. The constituted Multidisciplinary team shall confirm the flow diagram appearing in the site during operation hours of plant and make sure that the flow diagram is functioning actively and any deviation observed shall take measure to get the same amended.
 7. For preparation of hazard list and making arrangement its control measure, the constituted Multidisciplinary team shall follow the flow diagram and the team shall prepare the hazard list and making arrangement of its control in accordance with the procedure mentioned below. namely:-
 - (a) listing of potential biological, chemical and physical hazards in every processing step. which hazard is subject to elimination or reduction to acceptable level is essential to the production of safe food, the name of that hazards shall be included in the list. and
 - (b) description shall be made for the control measure for every hazard, if any, exist, and how it can be controlled. with the help of decision tree, analysis and control of hazard shall be done.
 8. with the help of the following decision tree critical points shall be indemnified and controlled the pollution and in every step with a view to make arrangement as to human of the question with regard to identified pollution. namely:-



For the application of the “decision tree” each process step identified in flow diagram shall be describe in sequence.

9. After identifying the critical points the multi-disciplinary team shall ensure the control measure effectively designed implemented. If a hazard has been identified in any step or control of hazard limit is necessary for Production of safety food or if no control measure exists at that step. in that stage process of production shall be modified or any other process shall be maintained. It shall include in the HACCAAP that if any control measure taken place is modifying the production process and monitoring and checking system shall be established and implemented.
10. Each control measure associated with critical point shall give specification of critical limits. For production of safety product. critical limits shall be fixed with in the extreme acceptable limits and the said critical limit shall be determine by competent observation or measurable parameters which can demonstrate the critical points is under control.
11. For establishment of monitoring and checking system for critical points shall-
 - (a) for establishment own-check system for critical of observing frequency, every critical points to be monitored to secure specified limit and the procedure of minting record shall be depicted;
 - (b) observation of measurement shall be able to detect loss of control at critical points and provide information in time for corrective action to be taken.
 - (c) it shall be specified that who is to perform monitoring. when monitoring and checking is performed and how it can be performed the observation program for every critical points.
12. Establishment of corrective action plan shall be as follows, namely:-
 - (a) observation and measurement shall indicate that if parameter monitored tends to deviate from its specified critical limits indicating a trend toward loss of control. then appropriate corrective action to maintain control shall be taken before occurrence of hazard.
 - (b) that the parameter monitored has deviated from its specified control limits, indicating a loss of control, it that case. it shall necessary to take appropriate corrective action to regain control.
13. It shall be checked by the Multi-disciplinary team that own-check system whether acted on properly or not and it shall follow the process mentioned below, namely:-
 - (a) survey of reinforced analysis of critical points, examining the immediate or final product by random sampling, during storage distribution and on actual use of the product.
 - (b) verification procedures shall include, inspection of operations, validation of critical limits, review of deviations, corrective action and measure taken with regard to the product, audit to the own-check system and its records.

SCHEDULE-10
[See rule 15(1)]

CONDITIONS AND QUALITY STANDARDS OF POTABLE WATER

1. To determine the physical, chemical and biological quality standards in accordance with the Tables mentioned below. namely:-

(A) Organoleptic parameters :

Sl.No	parameters	Expression of the results	Guide level (GL)	Maximum admissible concentration (MAC)	Comments
1	Colour	mg/IPL/Co scale	1	20	
2	Turbidity	mg/l SiO ₂ (Jackson units)	1 0.4	10 4	Replaced in certain circumstances by a transparency test with a Secchi disc reading in meters. GL :6m MAC:2m
3	Odour	Dilution number	0	2 at 12 °C 3 at 25 °C	To be related to the taste tests.
4	Taste	Dilution number	0	2 at 12 °C 3 at 25 °C	To be related to the taste tests.

(B) Physico-chemical parameters:

Sl.No	parameters	Expression of the results	Guide level (GL)	Maximum admissible concentration (MAC)	Comments
1	Temperature	°C	12	25	
2	Hydrogenion concentration	P ^H unit	6.5 ≤ P ^H ≤ 8.5		-The water should not be aggressive. -The P ^H values do not apply to water closed containers. -Maximum admissible value 9.5
3	Conductivity	MS cm-1 at 20 °C	400		- Corresponding to the mineralization of the water. - Corresponding resistivity values in ohms/cm 2.500
4	Chlorides	Cl mg/l	25		Approximate concentration above which effects might occur: 200 mg/l
5	Sulphates	SO ₄ mg/l	25	250	
5	Silica	SiO ₂ mg/l			As per WHO'S Standards.
6	Calcium	Ca mg/l	100		
7	Magnesium	Mg mg/l	30	50	
8	Sodium	Na mg/l	20	175	The values of this parameter take account of the recommendation of a WHO working party (The Hague, May 1978) on the progressive reduction of the current total daily salt intakes to 6 g.
9	Potassium	K mg/l	10		
10	Aluminium	Al mg/l	0.05	0.2	

11	Total hardness				See Table F
12	Dry residues	mg/l after drying at 180°C		1500	
13	Dissolved oxygen	% % O ₂ Saturation			-Saturation value > 75 except for underground water.
14	Free carbon	CO ₂ mg/l			The water should not be aggressive.

(C) Parameters concerning substances undesirable in excess amount:

Sl.No	parameters	Expression of the results	Guide level (GL)	Maximum admissible concentration (MAC)	Comments
1	Nitrates	NO ₃ mg/l	25	50	
2	Nitrates	NO ₂ mg/l		0.1	
3	Ammonium	NH ₄ mg/l	0.05	0.5	
4	Kjeldahl Nitrogen (excluding N in NO ₂ and NO ₃)	N mg/l		1	
5	(K Mn O ₄ Oxidizability)	O ₂ mg/l	2	5	Measured when heated in acid medium.
6	Total organic carbon (TOC)	C mg/l			The reason for any increase in the use concentration must be investigated.
7	Hydrogen sulphide	S µg/l		undetectable organoleptically	
8	Substances extractable in chloroform	µg/l dry residue	0.1		
9	Dissolved or emulsified hydrocarbons (after extraction by petroleum ether); Mineral oils	µg/l		10	
10	phenols (phenol index)	C ₆ H ₅ OH mg/l		0.5	Excluding natural phenols which react to chlorine.
11	Boron	B mg/l	1000		
12	Other organochlorine compounds not covered by parameter No 55	mg/l	1		Haloform concentrations must be as low as possible.
13	Iron	Fe mg/l	50	200	
14	Manganese	Mn mg/l	20	50	

15	Copper	Cu mg/1	100 at outlets of pumping and/or treatment works and their sub- stations 3000. - after the water has been standing for 12 hours in the piping and at the point where the water is made available to the consumer.		-Above 3000 Hg/1 astringent taste. discoloration + corrosion may occur.
16	Zinc	Zn mg/1	100 at outlets of pumping and/or treatment works and their sub- stations 5000. - after the water has been standing for 12 hours in the piping and at the point where the water is made available to the consumer.		-Above 5000 Hg/1 astringent taste. opalescence and snad- like deposits may occur.
17	Pholphours	P205 mg/1	400	5000	
18	Fluoride	F mg/1 8-12 °C 25-30 °C		1500 700	
19	Coblat	Co mg/1			
20	Suspended solids		None		
21	Residual Chlorine	Cl mg/1	0.2	5	
22	Barium	Ba mg/1	100		
23	Silver	Ag mg/1		10	If exceptionally silver is used non-systematically to process the water MAC value of 80 may be authorized.

(1) Certain of these substances may even be toxic when present in very substantial quantities.

(D) Parameters concerning toxic substance:

Sl.No	parameters	Expression of the results	Guide level (GL)	Maximum admissible concentration (MAC)	Comments
1	Arsenic	As mg/1		50	
2	Beryllium	Be mg/1			
3	Cadmium	Cd mg/1		5	
4	Cyanides	CN mg/1		50	
5	Chromium	Cr mg/1		50	
6	Mercury	Hg mg/1		1	
7	Nickel	Ni mg/1		50	
8	Lead	Pb mg/1		50 (in running water)	where lead pipes are present the lead content should not exceed 50 Hg/1 in a sample taken after flushing. If the sample is taken either directly or after flushing and the lead content either frequently or to an appreciable extent exceeds 100 Hg/1. suitable measures must be taken to reduce the exposure the lead on the part of the consumer.
9	Antimony	Sb mg/1			
10	Selenium	Se mg/1			
11	Vanadium	V mg/1			
12	Pesticides and related products -substances considered separately -Total	mg/1		0.5	Pesticides and related products means: -insecticides: -persistent organochlorine compounds -organophosphorou compounds -carbamates -herbicides -fungicides -PCB ₆ and PCT ₆
13	Polyeyclic aromatic hydrocarbons	mg/1		0.2	-reference substance flu fluoranthene/benzo: -fluoranthene/benzo - fluoranthene/benzo -Pyrene//benzo -perylene/indeno(1.2.3-cd) pyrene.

(E) Microbiological Parameters:

Sl.No	parameters	Expression of the results	Guide level (GL)	Maximum admissible (MAC)	
				concentrations Membrane filter method	Multiple tube method (MPN)
1	Total coliforms (i)	100	--	0	MPN<1
2	Fecal coliforms	100	--	0	MPN<1
3	Fecal streptococci	100	--	0	MPN<1
4	Sulphit-reducing clostridia	20	--	0	MPN<1

(F) Water intended for human consumption shall not contain path organisms. If it is necessary to supplement the microbiological analysis of intended for human consumption. the samples be examined not only to the bacteria referred to in Table E but also for pathogens including: salment pathogenic staphylococci, fecal bacteriohhages, entero-viruses, nor should such and contain, parasites, algas, other organisms such as animalcules.

Sl.No	parameters		Expressio n of the results	Guide level (GL)	Maximum admissible concentration (MAC)	Comments
1	Total bacteria counts for water supplied for human consumption	37 ⁰ C	1	10 (1) (2)	--	
		----- -- 22 ⁰ C	----- -- 1	----- -- 100(1) (2)	----- -- --	
2	Total bacteria counts for water in closed consumption	37 ⁰ C	1	5 (1) (2)	20	
		----- -- 22 ⁰ C	----- -- 1	----- -- 20(1) (2)	----- -- 100	

- (1) For disinfected water the corresponding values should be considerably at the point where it leaves processing plant.
- (2) If, during successive sampling any of these values is consistently exceed check should be carried out.

(G) Minimum required concentration for softened water intended for human consumption.

Sl.No	parameters	Expression of the results	Maximum admissible concentration (MAC)	Comments
1	Total hardness	mg/l Ca	60	Calcium or equitable captions
2	Hydrogen ion concentration	PH	$6.5 \leq P^H \leq 8.5$	The water should not be aggressive.
3	Alkalinity	mg/l $IIICO_3$	30	
4	Dissolved oxygen			

NB:-The provision for hardness, hydrogen ion concentration, dissolved oxygen and calcium also apply to desalinated water.

- It shall consider the nature of examination. presence of substances microbiological limit or ratio before monitoring water quality standards and shall follow the table mentioned below for analysis examination of water:-

Sl. No	Standard analysis ----- parameters to be considered	Minimum monitoring (C1)	Current monitoring (C2)	Periodic monitoring (C3)	Occasional monitoring in special situation or in case of accidents (C4)
A	Organoleptic parameters	-Odour (1) - taste(2)	-Odour -taste -turbidity (appearance)		
B	Physico-chemical parameters	conductivity or other physicochemical parameter -residual chlorine (3)	temperature (2)- conductivity or other physicochemical parameter -PH -residual chlorine (3)	Current monitoring analyses + other parameter as in foot note (4)	The competent national authority will determine the parameters (5) according to circumstances taking account of all factors which might have an adverse affect on the quality of drinking water supplied to consumer.
C	Undersirable parameters		-nitrates -nitrates -ammonia		
D	Toxic parameters				
E	Microbiological parameters	-Total coliforms or total counts of 22^0 and 37^0 -fecal coliforms	-Total coliforms -fecal coliforms - total counts of 22^0 and 37^0		

- Qualitative assessment.
- Except for water supplied in containers.
- Or other disinfectants and only in the case of treatment.
- These parameters will be determined by the competent national authorised taking account to all factors which might affect the quality of drinking and supplied to users and which could enable the in onic balance at the constituents to be assessed.
- The competent national authority may use parameters other then mentioned in Annex 1 to this Directive.

FROM-A
[See rule 11(2)]

**FORM OF APPLICATION FOR SALUBRITY
CERTIFICATE OF EXPORTABLE FISH.**

(To be submitted to the Deputy Director.. Inspect and Quality Control, Department of Fisheries Dhaka/Chittagone/Khulna. approximately 10 days before the date of shipment. A sum of Tk 200/- to be paid through treasury and the copy of the challan to be attached with application).

- (1) Name of the Application (exporter) with :
address
- (2) Licence No of the applicant with date and :
place of issue
- (3) Export licence (E,R,C) No. with date and :
place of issue
- (4) Name and address of fish processing :
establishment with licence No and its date of
issue
- (5) Name and address of Importer :
- (6) Type of Commodity (Live, frozen, dried, :
canned, iced, salted, head on/off, shall on/off
etc)
- (7) Varieties/ Species of fish :
- (8) Quantiy : (a) Net weight :
(b) Gross weight :
- (9) Invoice no and date :
- (10) C & F value (in taka and U.S Dollar) :
- (11) Kind of packing :
- (12) Shipping/packing mark :
- (13) Brand name of commodity :
- (14) Lot No :
- (15) Number of master carton.(Cartons of similar
commodity of same weight and size shall be
store together)

Sl. No	Carton size	weight of each carton with its content	Serial number of carton	Total carton number under the group	Name of commodity in the carton
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- (16) Mode of transportation :
- (17) Port of exit :
- (18) Port of entry :
- (19) Tentative date of shipment :

Date:

Signature of applicant (Exporter)

Name:

Designation:

Official seal:

FROM-B
[See rule 11(3)]

Government of the people's Republic of Bangladesh
Department of Fisheries
Office of the Deputy Director
Fish Inspection and Quality Control
Dhaka/Chittagon/Khulna.

Memo No.

Date:

SALUBRITY CERTIFICATE FOR EXPORTABLE FISH

Certified that the consignment of fish as detailed below has been examination and inspected and was found wholesome and fit for human consumption at time of inspection.

- (1) Name and address of the exporter :
- (2) Export licence Number with date and place of issue :
- (3) Name and address with fish processing establishment with licence Number and date :
- (4) Name and address of Importer :
- (5) Type of Commodity (Live, frozen, dried, canned, iced, salted, head on/off, shall on/off etc) :
- (6) Varieties/ Species of fish :
- (7) Quantity : (a) Nos of carton :
(b) Net weight :
- (8) Invoice number and date :
- (9) Kind of packing :
- (10) Shipping/packing mark :
- (11) Brand name of commodity :
- (12) Lot Number :
- (13) Country of origin of the commodity :
Bangladesh
- (14) Mode of transportation :
- (15) Port of exit :
- (16) Port of entry :
- (17) Date of inspection :
- (18) Special Microbiological information :
(a) Salmonella :
(b) Vibrio cholera :
(c) E.Coli/Faecal coliform :
(d) Standare plate count :
(e) Other Microbes :
- (19) Products are processed under approved HACCP Programme :
- (20) Other information :

This certificate will remain valid for export for fifteen days from the date of issue and this has been issued without any over writhing and erasing.

**(Signature of Authorised
Officer with seal)**

FROM-C
[See rule 14(1)]

APPLICATION FORM OF LICENCE

[Fish processing plant (Land)/Fish Processing plant in vessel/lee plant/fish vending Centre/ Fish Supplier/Fish Exporter/Service Centre/ Landing Centre/ Cured Fish Processing Plant]

(To be submitted to the Deputy Director. Department of Fisheries. Inspect and Quality Control Dhaka/Chittagone/ Khulna. A sum of Tk 300/- to be through treasury challan and the copy of the challan to be attached with application).

1. **GENERAAL.** (Applicable to all)

- (1) Name of the Application with :
designation
- (2) Name of establishment :
- (3) Description of site :
- (4) Nature of establishment (Public/ :
Privet/Limited Company)etc.
- (5) Name of proprietor/Head of :
establishment with designation
- (6) Father's name :
- (7) Present address :
- (8) Permanent address :

2. Struck off the items except the required one .

(A) Fish Processing Plant (Land-based)

- (1) Description of site and premises :
- (2) Nature of Processing :
- (3) Description of equipment, drainage :
system etc. (please attach attested
copies of drawing & lay out plan and
HACCP Plan)
- (4) Production capacity :
- (5) Source of water (Please attach the :
report of physical, micro-biological
and chemical examination of water)

(B) Fish Processing Plant (Factory vessel)

- (1) Name of the vessel and its :
Registration Number
- (2) Number of vessel :
- (3) Nature of Processing :
- (4) Description of main equipment, deck :
lay-out and plant (please attach
attested copy of drawing & lay out
plan and HACCP Plan)
- (5) Production capacity :
- (6) Source of water (Please attach the :
report of physical, micro-biological
and chemical examination of water)

- (7) Name and registration number of the :
vessel

(C) Cured Fish Processing Plant

- (1) Description of site and premises :
- (2) Type of Cured Fish :

- (3) Description of the equipment and drainage etc. (Please attach attested copies of drawing and lay-out plan). :
- (4) Production capacity :
- (D) Landing Centre/Service Centre
- (1) Description of site and premises :
- (2) Description of work :
- (3) Description of the equipment and drainage etc.(please attach attested copies of drawing and lay-out plan). :
- (E) Fish vending Centre/Fish supplier
- (1) Description of site and premises :
- (2) Manner of collection and preservation of fish :
- (3) Name and agency number of fish processing plant in which fish indented for supply :
- (4) Description of transport :
- (F) Ice Plant
- (1) Description of site and premises (Drawing and layout plan would be attached) :
- (2) Manufacturing process (Ammonia Freon etc) :
- (3) Type of ice Manufactories (Flack/block etc) :
- (4) Production capacity :
- (5) Source of water (Please attach the report of physical, Microbiological and chemical examination of water) :
- (G) Fish Export
- (1) Name of processing plant where the fish is processed with licence No and address :

Signature of applicant
Name/Designation of applicant