# CHAPTER 211

## BELIZE AGRICULTURAL HEALTH AUTHORITY (FOOD SAFETY) REGULATIONS

25/2001.

## ARRANGEMENT OF REGULATIONS





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# CHAPTER 211

25/2001.

## BELIZE AGRICULTURAL HEALTH AUTHORITY (FOOD SAFETY) REGULATIONS

*[17th February, 2001.]*

Short title.

1. These Regulations may be cited as the

**BELIZE AGRICULTURAL HEALTH AUTHORITY (FOOD SAFETY) REGULATIONS.**

Interpretation.

2. (1) In these Regulations, unless the context otherwise requires:-

CAP. 211.

"Act" or "the Act" means the Belize Agricultural Health Authority Act;

"audit" means a systematic and independent examination to determine whether quality activities and related results comply with planned arrangements and whether these arrangements are implemented effectively and are suitable to achieve objectives;

"Authority" means the Belize Agricultural Health Authority established under section 3 of the Act;

"certification" means the procedure under which official certificates are issued under the seal or with the approval, of the Authority, certifying that any food or food control system complies with the requirements of the Act and these Regulations;

"designated officer" means a person designated by the Authority to perform any function or discharge any duty under these Regulations, and includes an



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officer of the Authority;

"enterprise" means any company, partnership or entity operated as a business or commercial venture which is involved in the rearing, handling, conveyance, storage, processing, and packaging of raw or primary agricultural or marine food products, and includes farm operations registered for the exportation of raw or primary products or for the distribution of such products locally, nationally or internationally and factory or freezer vessels and all fishing vessels used to fish or process fish for export;

"food" means any article used as food or drink for human consumption, other than drugs, water or tobacco substances, and includes:-

*(a)* any substance which is intended for use in the composition or preparation of food;

*(b)* any flavouring matter or condiment; and

*(c)* any colouring matter intended for use in food;

"food safety system" means systematic programmes employed to ensure food safety in processed or preprocessed animals, fish or plant products, and includes any system employed in the production of food from the farm or sea or other source of the food to the table for human consumption;

"Hazard Analysis and Critical Control Point System" or "HACCP" means a system which identifies, evaluates and controls hazards which are significant for food safety, using the guidelines, practices and procedures set out in the First, Second and Third Schedules to these Regulations;

First Schedule.
Second Schedule.
Third Schedule.

"health hazard", in relation to food, means any indicator of a food safety system that may lead to a deterioration of human or animal health, and include



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microbiological, physical, irradiation, or chemical indicators.

(2) A word or phrase used but not defined in these Regulations which is defined in the Act shall have the corresponding meaning assigned to it in the Act.

(3) The Schedules form part of these Regulations and shall be read and construed as one with these Regulations.

Designation of the Authority as the competent Authority

3. (1) It is hereby declared that the Authority shall be the Competent Authority in Belize with responsibility for monitoring, inspecting, approving and controlling food safety systems in respect of all enterprises (including all land-based processing enterprises and all sea-based processing enterprises) that produce or process food for export from Belize or for consumption within Belize.

(2) In performing its functions and discharging its duties as specified in subregulation (1), the Authority shall consult with an Advisory Committee consisting of members appointed by the Managing Director of the Authority.

(3) The Managing Director of the Authority shall appoint one of the members of the Advisory Committee to be the Chairman of the Committee.

Food exporting enterprises to register with the Authority.

First Schedule.
Second Schedule.
Third Schedule.

4. (1) All food exporting enterprises shall be and are hereby required to register with the Authority.

(2) All food exporting enterprises shall be and are hereby required to comply with the HACCP guidelines set out in the First, Second and Third Schedules to these Regulations.

(3) Every enterprise registered pursuant to this Regulation shall have the duty of affording designated officers all facilities to enable them to


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monitor, inspect, audit and control all aspects of food production, processing, delivery and exportation which ensures food safety to the ultimate consumers.

(4) Any person or enterprise which contravenes subregulation (3) commits an offence and is liable upon summary conviction to a fine not exceeding two thousand dollars.

(5) Every enterprise registered under these Regulations shall implement a system of inventory and tracking of any batches or lots.

(6) Every enterprise registered under these Regulations shall prominently display at all times, in a conspicuous place at its office or principal place of business, the certificate of food safety issued to it by the Authority.

Consequences of non-compliance.

5. (1) If any enterprise involved in the exportation of food from Belize fails to comply with any of the provisions of these Regulations, the Authority may:-

*(a)* grant a grace period to the enterprise, within which it must comply with the Regulations in accordance with any system of monitoring and inspections carried out by designated officers;

*(b)* if the contravention continues after the grace period, refuse to issue to the enterprise, after the expiration of the grace period, any food safety certificate;

*(c)* if the contravention continues after the expiration of the grace period, revoke any certificates previously issued to the enterprise pursuant to the Act and these Regulations.

(2) Where the Authority revokes or suspends any certificate under



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sub-regulation (1), such revocation or suspension shall not prevent any enterprise the certificate of which has been revoked or suspended from reapplying upon complying with the requirements of these Regulations.

(3) The Authority shall, before suspending or revoking the certificate of any enterprise pursuant to these Regulations:-

*(a)* furnish the enterprise with all documents and information specifying the reasons why the certificate of the enterprise is being revoked or suspended;

*(b)* afford the enterprise to make written or oral representations concerning the matter.

Recalling of hazardous food products.

6. (1) Where a food product which is produced, processed, manufactured, delivered or exported by an enterprise registered pursuant to these Regulations is found to be a health hazard, it shall be lawful for the Authority:-

*(a)* to recall the food product for analysis or destruction if the food product has not yet been exported;

*(b)* to liase with the competent authorities of any country which imports the food product from Belize and to ensure that the food product is:-

*(i)* not released for sale upon arrival in that country; or

*(ii)* if it has already arrived in that country and released for sale, that it is recalled for analysis or destruction by the competent authority of that country.



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(2) The enterprise which produces any hazardous food products referred to in subregulation (1) shall be responsible for the expenses of:-

*(a)* calling back the food product;

*(b)* analysing the food product; or

*(c)* destroying the food product.

Compensation.

7. The provisions of section 50 of the Act applies to any act or omission done *bona fide* by the Authority or a designated officer pursuant to Regulation 6.

Food testing laboratory.

8. (1) The Central Investigation Laboratory in Belize City is hereby designated as the food testing laboratory for the purposes of these Regulations.

(2) Notwithstanding subregulation (1), the Authority may, after consulting with the competent authorities of any country importing any food products from Belize, or after consulting with any enterprise, designate under the hand of the Managing Director and the Seal of the Authority, any other laboratory to be a food testing laboratory for the purposes of these Regulations.

(3) Any food testing conducted at a food testing laboratory pursuant to subregulation (2) shall be at the expense of the enterprise whose food is being tested.

Fees.

9. (1) The Authority may charge and collect fees for any services performed for an enterprise pursuant to these Regulations.

(2) All fees collected by the Authority shall be credited to the account of the Authority.



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Sanitary certificate for fishery products exported from Belize.
Fourth Schedule.

10. The Authority shall issue, in respect of fish and fishery products exported from Belize by any enterprise registered under these Regulations, a Sanitary Certificate which shall be in the form specified in the Fourth Schedule.

Commencement.

11. These Regulations shall come into force on the 12th day of February, 2001.

**MADE** by the Minister responsible for Agricultural and Fisheries this 12th day of February, 2001.

**(DANIEL SILVA)**
Minister Responsible for Agriculture and Fisheries.



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## FIRST SCHEDULE
[Regulations 2 and 4]

## HAZARD ANALYSIS AND CRITICAL CONTROL POINT SYSTEM (HACCP) GUIDELINES

### Preliminary

Belize's role in international food trade and as a destination for tourists is increasing, bringing about important positive socio-economic benefits, but unfortunately also increasing the risk of spreading food borne diseases from unmonitored and uncontrolled food products, which can lead to significant losses in foreign currency earnings, reduction in export trade in the food products sector, reduction in tourism, erosion of consumer confidence and increased litigation costs.

Effective hygiene control for food products, therefore, is a condition *sine qua non* to avoid adverse human health problems, and the resultant economic consequences caused by foodborne illnesses, foodborne injuries and food spoilage.

Additionally, the World Trade Organisation (WTO) regime, the European Economic Community (EEC) regime, and the regimes of most, if not all, of Belize's most important food products trading allies are increasingly calling for Belize to adopt sanitary and phytosanitary certification measures ensuring the health safety of food products from Belize. In this respect, the Codex Alimentarius standards developed by the World Health Organisation are the benchmark standard on which these HACCP guidelines are built.

The general principles of the Codex Alimentarius basically recommended a Hazard Analysis and Critical Control Points (HACCP) – based approach to enhancing a scientifically proven food security system. The application of the HACCP system consists of a logical sequence of twelve



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(12) steps encompassing seven (7) basic principles. The key system of a HACCP based food safety system is its preventative nature, with an emphasis on exercising better control at critical steps along the manufacturing process. These critical steps are called **"critical control points".**

By adopting the critical control points of the HACCP system, defects which would impact on food safety are readily detected and corrected at specific points during the manufacturing process, instead of just relying on end-product inspection and testing. HACCP therefore ensures an even greater and consistent food safety product assurance for consumers.

The purpose of this Schedule is to provide a simplified manual for enterprises on the operations of the HACCP system.

## REGISTRATION PROCEDURES
### Application for Registration

Each enterprise shall apply to be registered with the Authority using FORM 1, set out in the Annex. Such enterprise must have written prerequisite programmes and HACCP plan(s) for a working HACCP system. The Authority will evaluate the premises and processes of the enterprise for compliance with the Regulations and the Act and with requirements specified by the importing country through inspections, testing, reviews and audits.

## NOTIFICATION PROCEDURE

On receipt of an application to register as an enterprise employing a HACCP system, the Authority will communicate with the enterprise by telephone or fax and by mailing a letter of notification (See Appendix on Notification Procedure). This letter will inform the manager of the enterprise of a date for submission of its document package (see Document Submission below).



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## NUMBERING SCHEME FOR ENTERPRISES

Each enterprise will be given an Enterprise Log Number (ELN) at the submission of the report of the Full audit. This number will be in the following format, namely:-

| | |
|---|---|
| Abbreviation for: | Belize<br>Region<br>Telephone area code<br>Three letters of abbreviation of enterprise's name<br>Three digit sequential number |
| e.g. | **BZE-CZL-04-CSF-001** (Belize-Corozal-04-Corozal Shrimp Farm-001) |

This number will be allotted to the enterprise for its life span and must be stated on all correspondence. Should an enterprise cease operation for six (6) months or more or in cases of change ownership, with a change in management, it will be classified as a new plant. As such, an enterprise must then go through whole registration procedure afresh.

A confidential file labelled with the ELN of that enterprise will be opened and will house all correspondence and submissions made with and by the enterprise.

## DOCUMENT SUBMISSION [PREREQUISITES AND HACCP PLAN]

### Introduction

HACCP systems shall follow, as far as possible, the provisions of Annex 1 of this Schedule.


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**Prerequisite programmes**

HACCP systems must be built upon a firm foundation of compliance with current Good Manufacturing Practices (GMPs) and acceptable Sanitation Standard Operating Procedures (SSOPs). The institution and maintenance of these prerequisite programmes are important steps that must be done prior to the development of product/process specific HACCP plans. The operator must have a complete written and fully documented programme for all prerequisite programmes, and their sub-elements, which will enable the Authority to audit these programmes. The programmes must conform to the specifications and principles laid out in regulations published by the importing country.

**HACCP Plan**

For exporting, it is the enterprise's responsibility to develop, implement and maintain HACCP systems. The plans must conform to the specifications and principles articulated by regulations published by the importing country. In general, the regulations require that every processor perform a hazard analysis. At minimum the HACCP plan shall:-

*(a)* list the food-safety hazards that are reasonably likely to occur;
*(b)* list the Critical Control Points (CCPs);
*(c)* list the critical limits;
*(d)* list the monitoring procedures;
*(e)* list pre-determined corrective action plans;
*(f)* list the verification measures including:-

*(i)* timely reassessment of HACCP plan;
*(ii)* scheduled calibration of equipment;

(g) provide for a system of monitoring records.



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Even without HACCP, the level of plant sanitation and GMPs must comply with Belize's domestic laws.

**Signing and dating the documents**

The HACCP plan and prerequisite documents shall be signed and dated by the most responsible individual or a higher level official at the enterprise. The HACCP plan shall be signed and dated upon initial acceptance, upon any modification, and at least annually. This signature shall signify that the HACCP plan has been accepted for implementation by the enterprise.

**Submission**

A complete, comprehensive documentation package will facilitate the efficient review of the HACCP system by the Authority. The enterprise is responsible for the submission of this complete documentation package that details the prerequisite programmes and HACCP plans and also confirms management's commitment to HACCP.

This package should be sent as registered mail or hand delivered to:

Belize Agricultural Health Authority
Food Safety Service
P.O. Box 181
Central Investigation Laboratory
Belize City, Belize

If hand delivered, a logbook that asks for date, time and name of person delivering and person receiving package will be signed.



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**Documents required:**

a. **The Prerequisite programmes and HACCP plans**

The prerequisite programmes and HACCP plans must be fully developed, validated and documented by the enterprise. The HACCP system must be in operation with staff appropriately trained, and with records and other necessary data for audit of the system. An entire copy of these documents must then be included in the package submitted under 4.5.

b. **Letter of endorsement from senior management**

A letter of endorsement signed and dated by senior management must be included in the documentation package. It is necessary that it indicates:-

*(i)* the accuracy of the information;
*(ii)* the guidelines used in preparing the documents;
*(iii)* the full support and commitment of senior management to the activities, procedures, and resources as outlined in the documentation package; and
*(iv)* the HACCP coordinator or contact member of HACCP team, with the training received by this person regarding HACCP.

Initial acceptance of these written manuals by the Authority should not be taken as approval of such a system.

**EVALUATION OF DOCUMENTS**

On receipt of the package, the Authority will fill out the Enterprise


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Tracking Form, using Form 2 set out in the Annex.

The form will serve a number of purposes, namely:-

*(a)* the Authority will be able to know the status of the enterprise at all times with regard to HACCP recognition phase;

*(b)* the stage the plant may be at with each section of the evaluation process;

*(c)* when the situation arises in which there is funding available for training, a choice can be made of which enterprise and personnel to receive such training.

All sections of the form are to be filled out by the Authority and kept as confidential in the file held for the enterprise until the review is completed. A copy of the form will be forwarded to the Managing Director of the Authority and to the enterprise that submitted the documents.

**Checking the Document package**

The document package will be checked for the required contents. Each item or information present will be checked as submitted and initialled in the appropriate box in Section 1 of the Tracking Form. The document evaluation is then conducted in two steps:-

*(i)* review of HACCP plan(s); and
*(ii)* on-site evaluation of HACCP plans.



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## THE REVIEW

The Authority will review the documents, compare them to the applicable guidelines or regulations, and note any disparity. In general, during the recognition phase, the Authority shall use the guidelines given in the Third Schedule to these Regulations or the WHO manual. In cases in which the enterprise has stated the use of the guidelines other than those mentioned above, the reviewer will use the appropriate references.

The review will be done in two parts:-

**PART I** - The Authority will use the applicable Document Checklists, set out as Forms 3A and 3B in the Annex, to look for elements expected to be common to all prerequisite manuals and HACCP plans.

**PART II** - Details elements of specific prerequisite programmes and HACCP plans and will be used to review all submitted plans.

Where the written documents is found to be deficient, the relevant incomplete box will be checked off and deficiencies will be described in the Corrective Action Request Form, set out as Form 5 in the Annex, along with the appropriate reference(s). A copy of this form will be sent to the HACCP coordinator for him to ensure the deficiencies are corrected. When notified, the Authority will verify that all deficiencies have been corrected, the "complete" box will be checked, dated and initialled by the member checking the documents. Written documents must be assessed as complete before the on-site evaluation can begin.

This concludes the in-office review of the documents. A date will then be set to perform an on-site evaluation of the documents. This evaluation is only to determine the conformity to actual enterprise setting and processing.



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## NOTIFICATION PROCEDURE

On the basis that the complete document package has been submitted by an enterprise, the date set for on-site evaluation of the submitted documents will be communicated to the manager of the enterprise by telephone or fax. If this date is agreed upon, it will be entered in the Enterprise Tracking Form. As a confirmation, the date will be submitted in a letter (see specimen letter captioned "Notification Procedure" in the Annex).

### On-site evaluation of the documents

The on-site confirmation of implementation of the stated HACCP system consists of review of records and on-site verification. This is done by the designated officers to gather evidence needed to assess whether the registered enterprise's written prerequisites and HACCP plan(s) are implemented as described and are effective (i.e. whether they conform or do not conform to the written HACCP plan).

Beside each question on the On-site Evaluation checklist, set out as Form 4 in the Annex, a column is provided for noting the implementation status of record keeping and a separate column for noting implementation if confirmed by observation and/or interviews.

When non-conformity is found, the "No" column is marked. If the evidence gathered shows conformity, then the "Yes" column is marked. In the case of a major non-conformity, the enterprise will be issued with a *Corrective Action Request (CAR)* (FORM 5) so as to develop and initiate an action plan to correct the situation to amend the problem. Repetitive minor non-conformities, if possible, will be cumulated into a major non-conformity and also result in the issuance of a Corrective Action Request Form.

All major non-conformities must be corrected and CAR's closed before proceeding to HACCP audit.



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If singly minor non-conformities are found, a CAR is issued to the enterprise which must develop and initiate an action plan to correct the situation. Minor non-conformities will be followed up in a subsequent audit to confirm that the corrective action is adhered to and effective.

## QUALITY ASSURANCE SYSTEM AUDIT

The Authority's audit programme will only apply to HACCP recognized and registered enterprises that have implemented prerequisite programmes and HACCP plans which have been reviewed and found to correlate to the importing countries regulations. The successful implementation of prerequisite programmes and HACCP plans by an enterprise will lead to a system audit protocol. The audit approach is to verify that the prerequisite programmes and HACCP plans are in fact being implemented as planned on a continuous basis.

The Authority will be verifying the HACCP plan by determining that critical hazards have been properly identified and that the enterprise is consistently controlling these hazards. This has been started already, in part, by reviewing the HACCP plan and checking its correlation to in-plant processing.

The inspector will accomplish this by first surveying the enterprise (plant), which could also include checks on suppliers and transport vehicles or vessels.

The audit programme under the Authority will have both a full and a partial audit component, each with its own frequency.

## FULL AUDIT

The full audit will consist of an evaluation of HACCP plans and prerequisite programmes to determine if the documented procedures are up



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to date, properly implemented, and measure the effectiveness of the quality assurance system. This is a planned and announced audit performed by an audit team with the appropriate management personnel, and with the HACCP coordinator of the enterprise in attendance.

The intent of the audit will be threefold, namely:-

*(a)* to confirm that the documented procedures (prerequisite programmes and HACCP plans) are up-to-date;

*(b)* to review the HACCP system for its conformity with the documented procedures;

*(c)* to measure the effectiveness of the HACCP system in meeting the objectives set out in the documented procedures.

Performing the full audit will involve the following procedures, namely:-

*(a)* audit plan preparation, as specified in paragraph 6.1.1;
*(b)* notification procedure, as specified in paragraph 6.1.2;
*(c)* audit checklist preparation, as specified in paragraph 6.1.3;
*(d)* opening meeting, as specified in paragraph 6.1.4;
*(e)* audit proper, as specified in paragraph 6.1.5;
*(f)* closing meeting, as specified in paragraph 6.1.6;
*(g)* audit report, as specified in paragraph 6.1.7.


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### 6.1.1 Audit Plan preparation

The auditing group will initially designate an audit leader, review the previous audit reports (full and partial) if applicable, and then prepare an audit plan. Preparation of this plan will include the following, using Form 6 set out in the Annex:-

*(a)* date of the audit;

*(b)* audit scope, which establishes the boundaries and identifies item groups and activities to be examined, for instance, process audit or system audit, which will include all HACCP plans and prerequisite programmes but may be influenced by such factors as results of partial audits (if performed before), plant profile, health and safety, consumer complaints and other information, for example, the audit will examine the activities related to the frozen shrimp tails production from May 15th until present date;

*(c)* the purpose, namely, what is to be achieved by the audit. This should be unique to each audit. For example, it should state "the purpose of this audit is to evaluate the adequacy and implementation of internal HACCP controls in meeting food manufacturing safety requirements.";

*(d)* identification of the members of the audit team;

*(e)* identification of reference documents required, e.g. records sheet;

*(f)* expected duration of the audit; and



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*(g)* schedule of meetings to be held with plant personnel.

The audit plan preparation will include the review of previous audit reports (full and partial) and development of a technical understanding of the processes to be audited.

### 6.1.2 Notification Procedure

At the conclusion of the plan, since this is an announced audit; notification of the scheduled date for a full audit will be done not less than four weeks in advance. The communication of the date set will initially be by telephone or fax. If agreed upon, this fixed date shall be entered on the Enterprise Tracking Form. This will then be followed up by a letter with a copy of the Audit plan attached.

### 6.1.3 Systems Audit Checklist Preparation

To obtain a Systems Audit checklist for an enterprise, the generic checklist given in Form 7 in the Annex will be customized and questions added. The main function of the checklist is to gather data and facts. To do this efficiently, each question should address one piece of information and request a YES or NO answer.

### 6.1.4 Opening meeting

The opening meeting will be used to introduce the members of the audit team to the management of the enterprise and to review the key areas of the planned audit. This brief meeting will be between the entire audit team and the persons involved from the enterprise. The written schedule sent will be reconfirmed.

The audit team will find out what HACCP plans are operating. All HACCP plans and all prerequisite programmes will be audited during a full



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system audit.

The opening meeting will also:

*(a)* set up the official communication links between the audit team and the enterprise (e.g. with HACCP Coordinator);

*(b)* establish the purpose and scope of the audit;

*(c)* confirm that the resources, documents (records) and facilities needed are available;

*(d)* confirm the time and date of closing meeting and any necessary interim meetings;

*(e)* include presentation of checklist to the auditee;

*(f)* discuss previous audit reports (full and partial) and action plans, if applicable;

(g) recognize any changes to the HACCP system;

*(h)* set the working conditions (meeting rooms, telephone access, computer access, safety considerations, hours of operation and lunch room facilities).

### 6.1.5 Audit Proper

This phase of the audit is based on gathering five types of data:

*(a)* physical property;


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*(b)* sensory evaluation;

*(c)* documents and records;

*(d)* interviews;

*(e)* patterns.

Throughout this phase, the team will hold 30-minute meetings prior to the end of the day. The purpose of each meeting will be to:-

*(a)* share facts, tentative conclusions and problems;

*(b)* replan next day's activities;

*(c)* develop a draft of the report.

The audit team will attempt to hold daily meetings (approximately 15 minutes) with the auditee, if possible.

### 6.1.6 Closing meeting

At the end of the full audit, prior to concluding the audit report, the audit team will meet with enterprise management (including HACCP Coordinator) to present the audit observations and the Corrective Action Request Form (FORM 5) (if required), and to ensure the results of the audit are clearly understood. Copies of corrective action request forms will be left with management to be completed and returned to the office of the Authority.

Conclusions as to the effectiveness of the prerequisite programmes and HACCP plans to ensure that food safety objectives are met, will be presented and discussed at the closing meeting.



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### 6.1.7 Audit Reports and Grading of Enterprise

The audit report is the final product. This report will be submitted not later than a week after the closing meeting.

The audit report will contain the following items, as applicable:-

*(a)* the scope and objectives of the audit (e.g. HACCP plan(s) audited) which will be from the audit plan form;

*(b)* the identification of the reference documents against which the audit was conducted (e.g. documentation package, and associated documented procedures such as sanitation programme records);

*(c)* non-conformities found (if applicable);

*(d)* the corrective action request forms (if applicable);

*(e)* audit team judgment of the extent of the conformity with the applicable documentation package and other related documentation (e.g. sanitation program records);

*(f)* audit result, current number of passes, resultant category, and partial audit frequency (see below) as a result of the audit.

Using the results of the audits, the Authority will group enterprises into categories as shown below:-


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| CATEGORY | STATUS* | FREQUENCY OF AUDIT | NUMBER OF PASSES FOR CATEGORY ADVANCE |
|---|---|---|---|
| A | Excellent | Every 6 months | —— |
| B | Very Good | Every 2 months | 4 |
| C | Good | Once a month | 3 |
| D | Pass | Every 2 weeks | 3 |
| E | Inadequate | Continuous | 5 |

All establishments will enter as Category D (pass status) until audits prove otherwise.

## PARTIAL AUDITS

Partial audits will consist of smaller scale audits to provide for an indication of continued conformity to and the effectiveness of prerequisite programmes and HACCP plans. They will have a similar intent as the full audit, but will only cover part of the HACCP system. Partial audit activities will be unannounced. However, notice may be given up to 24 hours as a means to confirm operation of the enterprise and availability of appropriate attending personnel. How often partial audits will be done on a particular enterprise is dependent on the category of that enterprise. Only category enterprises A, B and C will be subject to partial audits.

## APPEALS

In case of objections by an enterprise to a failing grade or report, the enterprise may appeal within twenty-one days of receiving the report or grade against such grade or report to the Managing Director of the Authority.


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## ANNEX

## FORM 1
## REGISTRATION FORM

<table>
<tr><td>Establishment/Enterprise</td><td colspan="2">Type of Establishment/Enterprise</td></tr>
<tr><td>Address:<br><br>Tel: Fax:<br>E-mail:</td><td>Products:<br>1.<br>2.<br>3.</td><td>4.<br>5.<br>6.</td></tr>
<tr><td></td><td>Exporting to Countries:<br>1.<br>2.<br>3.</td><td>4.<br>5.<br>6.</td></tr>
<tr><td colspan="3">The Management of this establishment/enterprise hereby applies to be registered with BAHA, being the Competent Authority in regulating HACCP systems in Belize.</td></tr>
<tr><td colspan="2">General Manager's Signature:</td><td></td></tr>
<tr><td colspan="2">General's Manager's Name: (Please print)</td><td></td></tr>
<tr><td colspan="2">DATE:</td><td></td></tr>
</table>



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## FORM 2

## ENTERPRISE TRACKING FORM

*Name of copy of this form to be sent to the Managing Director, BAHA, to indicate the HACCP recognition status of the establishment*

| | | | |
|---|---|---|---|
| Establishment/Enterprise: | DATE: | | |
| | | | |
| Plant Manager: | | | |
| Contact person: | Position: | | |
| Name of Reviewer: | Signature: | | |
| SECTION 1: Documentation Package | INCLUDED (Circle) | | Initials |
| 1. Management's endorsement letter | NO | YES | |
| 2. Prerequisite programs included | NO | YES | |
| 3. HACCP Plan(s) included | NO | YES | |
| 4. Designated HACCP Coordinator: Name: | NO | YES | |
| 5. Designated HACCP Team members (if applicable) | NO | YES | |
| | | | |

SECTION 2: The Review

| | Date Received: | Date Review started: | Date completed |
|---|---|---|---|
| 6. Prerequisites | | | |
| 7. HACCP Plans | | | |
| 8. Prerequisites are complete & conform to guidelines (see FORM 3A) | NO | YES | |
| 9. HACCP Plan(s) complete & conform to guidelines (see FORM 3B) | | | |
| Note of Deficiencies and plan for correction (if applicable: | | | |



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## FORM 2 (Cont'd)

| SECTION 3: Visits<br>HACCP plan(s) on-site evaluation<br>DATE: | | | | | |
|---|---|---|---|---|---|
| Number of HACCP plans necessary to cover all processes/products | | | | | |
| Deficiences or non-correlation between plan and Processes:<br><br>1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>Other (attach) | | Recommended corrections:<br><br>1.<br>2.<br>3.<br>4.<br>5.<br>6.<br>Other (attach) | | | |
| Appeal of result of review process? | YES | No | Date: | Ref. No. | |
| Exit interview with Company | YES | No | Date: | Ref. No. | |
| Full Audit: | YES | No | Date: | Ref. No. | |
| Letter of certification and Grade dispatched | YES | No<br>Date: | GRADE | Ref. No | |
| Appeal of result of Audit? | YES | No<br>Date: | | | |
| Appeal results: | | | | | |
| Initial frequency of partial audits - No. Per year: 24 11 6 2<br>Starting on date: _____ | | | | | |



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**FORM 2 (CONT'D)**

COMMENTS:

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Seen by:

Plant
Management:_____Date:_____
Reviewer:_____ Date:_____
Chief, Food Safety Service, BAHA_____Date:_____



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## FORM 3A

## SSOP DOCUMENT CHECKLIST

| Establishment | Complete | Incomplete | Initials |
|---|---|---|---|
| **Composite Item** | | | |
| **1. Safety of processing Water and Ice** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **2. Condition and Cleanliness of Food Contact Surfaces including Utensils, Gloves, and Outer Garments** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **3. Prevention of Cross-Contamination** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **4. Hand Washing/Sanitizing, and Toilet Facilities** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **5. Protection of Food, Food Packaging Material, and Food-Contact Surfaces from Adulteration** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **6. Labelling, Storage, and Use of Toxic Compounds** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **7. Employee Health** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| **8. Exclusion of Pests** | | | |
| Recording Procedure | | | |
| Corrective Action | | | |
| | | | |
| Are all written Prerequisite programmes in conformity? | | | |
| Checked by:<br><br><br>Post:<br>Date: | | | |



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## FORM 3B
## HACCP PLAN CHECKLIST

| Enterprise | Complete | Incomplete | Initials |
|---|---|---|---|
| Required Item | | | |
| Cover Sheet | | | |
| *Contents Page | | | |
| Organizational Chart | | | |
| *Organizational Chart Narrative | | | |
| *Product Description and End Use | | | |
| **For each similar Product Group:* | | | |
| -Process Flow Chart | | | |
| **For each Critical Point* | | | |
| i. Location | | | |
| ii. Hazard(s) to be controlled | | | |
| iii. Preventive Measure | | | |
| iv. Critical Limits | | | |
| v. Monitoring Procedures | | | |
| vi. Corrective Action(s) | | | |
| vii. Record Names | | | |
| * Record Keeping Procedure | | | |
| * Verification Procedure | | | |
| Recall Procedures | | | |
| * Consumer Complaint Procedures | | | |
| * Labels/Specifications | | | |
| Is the common name included in the product specifications? | | | |
| Does the plan cover all hazards as given by the relevant food product Hazard and control guides? | | | |
| The HACCP plan includes a description on how the product is to be used. | | | |



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| MAINTENANCE OF THE HACCP SYSTEM<br><br>A review of the HACCP system(s) by the plant must be scheduled and in place in order to identify any necessary changes in the HACCP system. | | | |
|---|---|---|---|
| All ingredients, incoming materials and processing aids coming in contact with the product(s) or used in the preparation of the product(s) are listed. | | | |
| The HACCP plan indicates where the product(s) is to be sold, e.g. restaurant, retail, isntitution, etc.. | | | |
| Hazards identified for each incoming material are specific (e.g. Salmonella, antibiotics, metallic versus non-metallic) and includes a full description for each (e.g) microbial growth versus microbial contamination should be kept separate. | | | |
| The HACCP plan includes a description on how the product is to be used, e.g. ready to eat/ready to cook. This is consistent with the information on the label. | | | |
| Critical Control Points are properly identified. The HACCP plan should highlight how the CCPs have been determined. | | | |
| Critical limits are determined for each identified CCP. | | | |
| Critical limits must at least meet relevant regulatory and procedural requirements. | | | |
| Corrective actions are effective to deal with the non-compliant product. | | | |
| The HACCP plan includes a description of any special controls required during shipping and storage, e.g. temperature and humidity requirements, if applicable. | | | |
| Verification procedures include a review of operations to determine if the HACCP system is working properly. An assessment is made to ensure that critical limits, monitoring procedures, and deviation procedures are appropriate to ensure food safety. (E.g. On-line product sampling, finished product sampling and/or in-laboratory challenge testing. | | | |
| Checked by:<br><br>Post:<br><br>Date: | | | |



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## FORM 4

## ON-SITE EVALUATION CHECKLIST

| | | |
|---|---|---|
| **PROCESS FLOW DIAGRAM**<br>On-site verification validates Flow diagram for accuracy and completeness. The process flow diagram is complete and indicates all pertinent processing steps and where ingredients enter at the various steps. | YES | NO |
| **HACCP COORDINATOR AND TEAM**<br>The HACCP Coordinator and a responsible HACCP team member identified and are on site. | | |
| HACCP Coordinator has adequate knowledge of Codex HACCP principles. | | |
| HACCP team has been appointed based on position and appropriate expertise. | | |
| THE PRODUCT<br>The product description is consistent with the information on the label. | | |
| All types of packaging used for the product line(s) are identified. It is accurate and complete for all products listed in the HACCP plan. | | |
| The anticipated shelf life of the product(s) listed under normal marketing conditions at given temperatures and/or humidity levels as identified if applicable. | | |
| If the shelf life exceeds industry practices, data or studies supporting the chosen shelf life used by the company should substantiate the shelf life and be readily available. Validation of the shelf life should be highlighted in the company's policy. | | |
| No additional ingredients are used in the preparation of the product. | | |
| Ingredient specification sheets are to be documented and be made available upon request. | | |
| The label for each product is available and consistent with what is identified on the HACCP plan. | | |
| The product characteristics listed are accurate, complete and are similar for all products covered by this HACCP plan. | | |
| "Labelling" should be cross-referenced to ensure consistency with "Shelf Life", "Special Distribution Control", Important Product Characteristics" and "How It Is To Be Used". | | |
| Ingredient specification sheets are to be documented and be made available upon request | | |



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| | | |
|---|---|---|
| **CRITICAL LIMITS**<br>Data used to establish critical limits should be readily available to be reviewed by BAHA. | | |
| Procedures have been developed to validate that the established critical limits are appropriate (e.g. sampling plan, laboratory procedures). | | |
| All monitoring activities are recorded and signed by the person doing the monitoring on a timely basis. | | |
| Individuals are interviewed and should be able to demonstrate that they have received sufficient training to have understanding of the critical limits, monitoring CCPs and their related monitoring procedures. | | |
| Individuals are interviewed and should be able to demonstarate that they have received sufficient training to monitor CCPs and their related deviation procedures. | | |
| Verification actions are recorded, dated and initiated.<br>Individuals are interviewed and shoulod be able to demonstrate that they have received sufficient training to monitor CCPs and their related verification procedures. | | |
| **RECORD KEEPING**<br>In-plant records of monitoring, deviation, and verification procedures are kept with appropriate sign-off and review. they must be maintained in the plant. | | |
| Document control is important. Are the correct documents being used at the proper CCP? | | |
| Are they up to date, and complete for each CCP? | | |
| Records should be retained at the establishment for a minimum of one (1) year or at least for the extent of the shelf life of the product if it exceeds one (1) year and are available upon request. | | |
| **PREREQUISITE PROGRAMMES** | | |
| Building facility not located in close proximity to any environmental contaminants and is free of debris and refuse. | | |
| Roadways properly graded, compacted, dust proofed, and drained. | | |
| Sanitation Standard Operating Procedures (SSOP) in effect (see SSOP document checklist). | | |



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**FORM 5**

**CORRECTIVE ACTION REQUEST**

| BAHA - HACCP Audit Non-Compliance Note # |
|---|
| Processor:<br><br>ELN: |

HACCP Ref. No.

| |
|---|
| 1. a. Area of reference:<br><br>b. Non-compliance<br><br>Level of Non-Compliance (Minor/Major): |



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| | | | |
|---|---|---|---|
| Auditor:<br>Date: | | | |
| | | | |
| Corrective Action to be implemented (to be completed by HACCP Coordinator of the Establishment): | | | |
| Implemented by date: | | Signature:<br>Date: | |
| Verified by:<br>(Auditor) | | Signature:<br>Date: | |
| Circulated to: | | | |



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**FORM 6**

**AUDIT PLAN**

| | |
|---|---|
| Establishment:<br><br>ELN NO. | Audit Date:<br>Audit Scope:<br>Audit Purpose:<br>Audit team members:<br>EXPECTED DURATION OF AUDIT: |

| Schedule of meetings | Topic | Date | Time |
|---|---|---|---|

1.

2.

3.

Reference documents required:

1.

2.

3.

Distribution



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## FORM 7

## GENERIC SYSTEMS AUDIT CHECKLISTS

Generic checklists for the Full Audit of Prerequisite Programs

References:

1. US FDA, Office of Seafood, Fish & Fishery products Hazard & Control Guides, 1st Edition, September, 1996.

2. Guidance on the Regulatory Assessment of HACCP, Report of a joint FAO/WHO consultation on the role of Government Agencies in Assessing HACCP. FAO/WHO, June 1998.

3. EU Council Directive 91/493/EEC "laying down the Health Conditions for the production and placing on the Market of fishery products".

4. Codex Alimentarius and the FAO/WHO Food Standards Programme – Basic text on Food Hygiene.

5. Sanitation Control Procedures for Processing Fish and Fishery Products. Seafood HACCP Alliance Course, 1st Edition 2000.



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**NOTIFICATION PROCEDURE:**

**SAMPLE**

**ADDRESS OF AUTHORITY**

**DATE**

Enterprise's Name
Address

Dear Sir/Madam,

The Belize Agricultural Health Authority ("the Authority") hereby acknowledges your application for registration with this body in order to become certified as having a functional HACCP system. With this application your establishment agrees to go through the Establishment Evaluation process as laid out in the Operations manual of the Authority.

The Authority will start this by reviewing your documents on the (specify appropriate date).

Yours sincerely,

_____
(signature and designation).



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**ADDRESS OF AUTHORITY**

**DATE**

Enterprise's Name
Address

Dear Sir/Madam,

The Belize Agricultural Health Authority has reviewed your document package, and as the documents have been corrected or have been corrected or have all the required components, (specify date) has been set as the start date for on-site evaluation.

During this phase, an attempt will be made to confirm that the systems laid out in the documents in applied to actual plant setting and processing.

Yours sincerely,

_____
(signature and designation)



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SAMPLE

**ADDRESS OF THE AUTHORITY**

**DATE**

Manager's Name
Enterprise's Name
Address

Dear Sir/Madam,

The Belize Agricultural Health Authority has reviewed your document package and, as a result of the on-site review, is satisfied that the systems outlined in these documents are fully implemented in your establishment. The next step in the evaluation process is the performing of a Full System Audit. It has been agreed that this audit will commence on (specify date).

Please find attached the audit plan.

Yours sincerely,

_____
(signature and designation).



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## SECOND SCHEDULE

**[Regulations 2 and 4]**

## GENERAL PRINCIPLES OF FOOD HYGIENE

### APPLICATION

1. This Schedule follows the food chain from primary production to the final consumer, setting out the necessary hygiene conditions for producing food which is safe and suitable for human consumption, and the provisions of this Schedule shall be observed by all enterprises.

### DEFINITIONS

2. For the purpose of this Schedule, the following definitions shall apply:-

"cleaning" means the removal of soil, food residue, dirt, grease or other objectionable matter;

"contaminant" means any biological or chemical agent, foreign matter, or other substance not intentionally added to food which may compromise food safety or suitability;

"contamination" means the introduction or occurrence of a contaminant in food or food environment;

"disinfection" means the reduction, by means of chemical agents and/or physical methods, of the number of micro-organisms in the environment, to a level that does not compromise food safety or suitability;

"establishment" means any building or area and the surroundings in which food is handled under the control of the same management;



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"food safety" means the assurance that food will not cause harm to the consumer when it is prepared and/or eaten according to its intended use;

"food handler" means any person who directly handles packaged or unpackaged food, food equipment and utensils, or food contact surfaces and is therefore expected to comply with food hygiene requirements;

"food hygiene" means all conditions and measures necessary to ensure the safety and suitability of food at all stages of the food chain;

"food suitability" means the assurance that food is acceptable for human consumption according to its intended use;

"hazard" means a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect;

"primary suitability" means the assurance that food is acceptable for human consumption according to its intended use.

## 3. PRIMARY PRODUCTION

### 3.1 ENVIRONMENTAL HYGIENE

3.1.1 Potential sources of contamination from the environment shall be considered. In particular, primary food production shall not be carried on in areas where the presence of potentially harmful substances are likely to lead to an unacceptable level of such substances in food.

### 3.2 HYGIENE PRODUCTION OF FOOD SOURCES

3.2.1 The potential effects of primary production activities on the safety and suitability of food shall be considered at all times.



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In particular, this includes identifying any specific points in such activities where a high probability of contamination may exist and taking specific measures to minimize that probability. The HACCP-based approach may assist in the taking of such measures.

3.2.2 Producers shall as far as practicable implement measures to:-

*(a)* control contamination from air, soil, water, feedstuffs, fertilizers (including natural fertilizers), pesticides, veterinary drugs or any other agent used in primary production;

*(b)* control plant and animal health so that it does not pose a threat to human health through food consumption, or adversely affect the suitability of the product; and

*(c)* protect food sources from faecal and other contamination.

3.2.3 In particular, care should be taken to manage wastes, and store harmful substances appropriately. On-farm programmes which achieve specific food safety goals are becoming an important part of primary production and should be encouraged.

## 3.3 HANDLING, STORAGE AND TRANSPORT

3.3.1 Procedures shall be in place to:

*(a)* sort food and food ingredients to segregate



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material which is evidently unfit for human consumption;

*(b)* dispose of any rejected material in a hygienic manner; and

*(c)* protect food and food ingredients from contamination by pests, or by chemical, physical or microbiological contaminants or other objectionable substances during handling, storage and transport.

3.3.2 Care shall be taken to prevent, so far as reasonably practicable, deterioration and spoilage through appropriate measures which may include controlling temperature, humidity, and/or other controls.

## 3.4 CLEANING, MAINTENANCE AND PERSONNEL HYGIENE AT PRIMARY PRODUCTION

3.4.1 Appropriate facilities and procedures shall be in place to ensure that:

*(a)* any necessary cleaning and maintenance is carried out effectively; and

*(b)* an appropriate degree of personal hygiene is maintained.


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## 4. ESTABLISHMENT: DESIGN AND FACILITIES

### 4.1 LOCATION

#### 4.1.1 ESTABLISHMENTS

4.1.1.1 Potential sources of contamination need to be considered when deciding where to locate food establishments, as well as the effectiveness of any reasonable measures that may be taken to protect food. Establishments shall not be located anywhere where, after considering such protective measures, it is clear that there will remain a threat to food safety or suitability. In particular, establishments shall normally be located away from:

*(a)* environmentally polluted areas and industrial activities which pose a serious threat of contaminating food;

*(b)* areas subject to flooding unless sufficient safeguards are provided;

*(c)* areas prone to infestations of pests;

*(d)* areas where wastes, either solid or liquid, cannot be removed effectively.

#### 4.1.2 EQUIPMENT

4.1.2.1 Equipment shall be located so that it:-

*(a)* permits adequate maintenance and cleaning;


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*(b)* functions in accordance with its intended use; and

*(c)* facilitates good hygiene practices, including monitoring.

## 4.2 PREMISES AND ROOMS

### 4.2.1 DESIGN AND LAYOUT

4.2.1.1 Where appropriate, the internal design and layout of food establishments shall permit good food hygiene practices, including protection against cross-contamination between and during operations by foodstuffs.

### 4.2.2 INTERNAL STRUCTURES AND FITTINGS

4.2.2.1 Structures within food establishments shall be soundly built of durable materials and be easy to maintain, clean and where appropriate, able to be disinfected. In particular, the following specific condition shall be satisfied, where necessary, to protect the safety and suitability of food:

*(a)* the surfaces of walls, partitions and floors shall be made of impervious materials, cleanable with no toxic effect in intended use;

*(b)* walls and partitions shall have a smooth surface up to a height appropriate to the operation;

*(c)* floors shall be constructed to allow adequate



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drainage and cleaning, running towards draining points;

*(d)* ceilings and overhead fixtures shall be constructed and finished to minimize the build up of dirt and condensation, and the shedding of particulars;

*(e)* windows shall be easy to clean, be constructed to minimize the build up of dirt and where necessary, to be fitted with removable and cleanable insect-proof screens. Where necessary, windows of safe solid material such as plastic, coated glass or pospex shall be installed to prevent opening;

*(f)* doors shall have smooth, non-absorbent surfaces, and be easy to clean and, where necessary, disinfect;

*(g)* working surfaces that come into direct contact with food shall be in sound condition, durable, easy to clean, maintain and disinfect. They shall be made of smooth, non-absorbent materials, and inert to the food, detergents and disinfectants under normal operating conditions.



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## 4.3 EQUIPMENT

### 4.3.1 GENERAL

4.3.1.1 Equipment and containers (other than once-only containers and packaging) coming into contact with food, shall be designed and constructed to ensure that, where necessary, they can be adequately cleaned, disinfected and maintained to avoid the contamination of food. Equipment and containers shall be made of materials with no toxic effect in intended use. Where necessary, equipment shall be durable and movable or capable of being disassembled to allow for maintenance, cleaning, disinfection, monitoring and, for example, to facilitate inspection for pests.

4.3.1.2 Containers and equipment used for food or coming in contact with food shall not be used for handling or storing waste or inedible substances.

### 4.3.2 FOOD CONTROL AND MONITORING EQUIPMENT

4.3.2.1 In addition to the general requirements in paragraph 4.3.1, equipment used to cook, heat, treat, cool, store or freeze food shall be designed to achieve the required food temperatures as rapidly as necessary in the interests of food safety and suitability, and maintain them effectively. Such equipment shall also be designed to allow temperatures to be monitored and controlled. Where necessary, such equipment shall have effective means of controlling and monitoring humidity, air-flow and any other characteristics likely to have a detrimental effect on the safety or suitability of food. These requirements are intended to ensure that:-



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(a) harmful or undesirable micro-organisms or their toxins are eliminated or reduced to safe levels or their survival and growth are effectively controlled;

(b) where appropriate, critical limits established in HACCP-based plans are monitored; and

(c) temperatures and other conditions necessary to food safety and suitability can be rapidly achieved and maintained.

4.3.3 **CONTAINERS FOR WASTE AND INEDIBLE SUBSTANCES**

4.3.3.1 Containers for waste, by-products and inedible or dangerous substances, shall be specifically identifiable, suitably constructed and, where appropriate, made of impervious material. Containers used to hold dangerous substances shall be identified and, where appropriate, be lockable to prevent malicious or accidental contamination of food.

4.3.3.2 Containers previously used for waste or inedible substances shall not be used for handling or storing food products or ingredients.

**4.4 FACILITIES**

4.4.1 **WATER SUPPLY**

4.4.1.1 An adequate supply of potable water with appropriate facilities for its storage, distribution and temperature control,



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shall be available whenever possible to ensure the safety and suitability of food.

4.4.1.2 Potable water shall be as specified in the latest edition of WHO Guidelines for Drinking Water Quality or water of a higher standard. Non-potable water (for use in, for example, fire control, steam production, refrigeration and other similar purposes where it would not contaminate food), shall have a separate system. Non-potable water system shall be identified and shall not connect with, or allow reflux into, potable water systems.

### 4.4.2 DRAINAGE AND WASTE DISPOSAL

4.4.2.1 Adequate drainage and waste disposal systems facilities shall be provided. They shall be designed and constructed so that the risk of contaminating food or the potable water supply is avoided.

### 4.4.3 CLEANING

4.4.3.1 Adequate facilities, suitably designated, shall be provided for cleaning food, utensils and equipment. Such facilities shall have an adequate supply of hot and cold potable water where appropriate.

### 4.4.4 PERSONNEL HYGIENE FACILITIES AND TOILETS

4.4.4.1 Personnel hygiene facilities shall be available to ensure that an appropriate degree of personal hygiene can be maintained and to avoid contaminating food. When appropriate, facilities shall include:-


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*(a)* adequate means of hygienically washing and drying hands, including wash basins and a supply of hot and cold (or suitably temperature controlled) water;

*(b)* lavatories of appropriate hygienic design; and

*(c)* adequate changing facilities for personnel.

4.4.4.2 Such facilities shall be suitably located and designated so that they do not open directly into food production areas. Rooms containing lavatories shall have self closing doors and notices requesting hand washing.

### 4.4.5 TEMPERATURE CONTROL

4.4.5.1 Depending on the nature of the food operations undertaken, adequate facilities shall be available for heating, cooling, cooking, refrigerating and freezing food, for storing refrigerated or frozen foods, monitoring food temperatures, and when necessary, controlling ambient temperatures to ensure the safety and suitability of food.

### 4.4.6 AIR QUALITY AND VENTILATION

4.4.6.1 Adequate means of natural or mechanical ventilation shall be provided, in particular to:-

*(a)* minimize air-borne contamination of food, for example, from aerosols and condensation droplets;


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*(b)* control ambient temperatures;

*(c)* control odours which might affect the suitability of food; and

*(d)* control humidity, where necessary, to ensure the safety and suitability of food.

4.4.6.2 Ventilation systems shall be designed and constructed so that air does not flow from contaminated areas to clean areas and, where necessary, they can be adequately maintained and cleaned.

4.4.7 **LIGHTING**

4.4.7.1 Adequate natural or artificial lighting shall be provided to enable the enterprise to operate in a hygienic manner. Where necessary, lighting shall not be such that the resulting colour is misleading. The intensity shall be adequate to the nature of the operation. Lighting fixtures shall, where appropriate, be protected to ensure that food is not contaminated by breakages.

4.4.8 **STORAGE**

4.4.8.1 Where necessary, adequate facilities for the storage of food, ingredients and non-food chemicals (e.g. cleaning materials, lubricants, fuels) shall be provided.

4.4.8.2 Where appropriate, food storage facilities shall be designed and contracted to:-

*(a)* permit adequate maintenance and cleaning;


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*(b)* avoid pest access and habourage;

*(c)* enable food to be effectively protected from contamination during storage; and

*(d)* where necessary, provide an environment which minimizes the deterioration of food (e.g. by temperature and humidity control).

4.4.8.3 The type of storage facilities required will depend on the nature of the food. Where necessary, separate, secure storage facilities for cleaning materials and hazardous substances shall be provided.

## 5 CONTROL OF OPERATION

### 5.1 CONTROL OF FOOD HAZARDS

Food business operators shall control food hazards through the use of systems such as HACCP. They shall:-

*(a)* identify any steps in their operations which are critical to the safety of food;

*(b)* implement effective control procedures at those steps;

*(c)* monitor control procedures to ensure their continuing effectiveness; and

*(d)* review control procedures periodically, and whenever the operations change.


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## 5.2 KEY ASPECTS OF HYGIENE CONTROL SYSTEMS

### 5.2.1 TIME AND TEMPERATURE CONTROL

Inadequate food temperature control is one of the most common causes of food-borne illness or food spoilage. Such controls include time and temperature of cooking, cooling, processing and storage. Systems shall be in place to ensure that temperature is controlled effectively where it is critical to the safety and suitability of food.

Temperature control systems shall take into account:

*(a)* the nature of the food, e.g. its water activity, pH, and likely initial level and types of micro-organisms;

*(b)* the intended shelf-life of the product;

*(c)* the method of packaging and processing; and

*(d)* how the product is intended to be used, e.g. further cooking/processing or ready-to-eat.

Such systems shall also specify tolerance limits for time temperature variations.

Temperature recording devices shall be checked at regular intervals and tested for accuracy.



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5.2.2 **SPECIFIC PROCESS STEPS**

Other steps which contribute to food hygiene may include, for example:-

(a) chilling;

(b) thermal processing;

(c) irradiation;

(d) drying;

(e) chemical preservation;

(f) vacuum or modified atmospheric packaging.

5.2.3 **MICROBIOLOGICAL AND OTHER SPECIFICATIONS**

Management systems described in paragraph 5.1 offer an effective way of ensuring the safety and suitability of food. Where microbiological, chemical or physical specifications are used in any food control system, such specifications shall be based on sound scientific principles and state, where appropriate, monitoring procedures, analytical methods and action limits.

5.2.4 **MICROBIOLOGICAL CROSS-CONTAMINATION**

Pathogens can be transferred from one food to another,



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either by direct contact with food handlers, contact surfaces or the air. Raw, unprocessed food shall be effectively separated, either physically or by time, from ready-to-eat food, with effective intermediate cleaning and where appropriate disinfection.

Access to processing areas may be restricted or controlled. Where risks are particularly high, access to processing areas shall be only via a changing facility. Personnel may need to be required to put on clean protective clothing, including footwear, and wash their hands before entering.

Surfaces, utensils, equipment, fixtures and fitting shall be thoroughly cleaned and where necessary disinfected after raw food, particularly meat and poultry, has been handled or processed.

### 5.2.5 PHYSICAL AND CHEMICAL CONTAMINATION

Systems shall be in place to prevent contamination of food by foreign bodies such as glass or metal shards from machinery, dust, harmful fumes and unwanted chemicals. In manufacturing and processing, suitable detection or screening devices shall be used where necessary.

## 5.3 INCOMING MATERIAL REQUIREMENTS

No raw material or ingredients shall be accepted by an establishment if it is known to contain parasites, undesirable micro-organisms, pesticides, veterinary drugs or toxic, decomposed or extraneous substances which would not be reduced to an acceptable level by normal sorting and/or processing. Where appropriate, specifications for raw



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materials shall be identified and applied.

## 5.4 PACKAGING

Packaging design and materials shall provide adequate protection for products to minimize contamination, prevent damage, and accommodate proper labelling. Packaging materials or gases where used must be non-toxic and not pose a threat to the safety and suitability of food under the specified conditions of storage and use. Where appropriate, reusable packaging shall be suitably durable, easy to clean and, where necessary, disinfect.

Packaging shall be stored in a clean and sanitary manner.

## 5.5 WATER

### 5.5.1 IN CONTACT WITH FOOD

Only potable water shall be used in food handling and processing with the following exceptions:

*(a)* for steam production, fire control and other similar purposes not connected with food; and

*(b)* in certain food process, e.g. chilling, and in food handling areas, provided this does not constitute a hazard to the safety and suitability of food (e.g. the use of clean sea water).


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Water recirculated for reuse shall be treated and maintained in such a condition that no risk to the safety and suitability of food results from its use. The treatment process shall be effectively monitored. Recirculated water which has received no further treatment in the process of food processing by evaporation or drying may be used, provided its use does not constitute a risk to the safety and suitability of food.

5.5.2 **AS AN INGREDIENT**

Potable water shall be used wherever necessary to avoid food contamination.

5.5.3 **ICE AND STEAM**

Ice shall be made from water that complies with section 4.4.1. Ice and steam shall be produced, handled and stored to protect them from contamination.

**5.6 MANAGEMENT AND SUPERVISION**

The type of control and supervision needed will depend on the size of the business, the nature of its activities and the types of food involved. Managers and supervisors shall have enough knowledge of food hygiene principles and practices to be able to judge potential risks, take appropriate preventive and creative action, and ensure that effective monitoring and supervision takes place.

**5.7 DOCUMENTATION AND RECORDS**

Where necessary, appropriate records of processing, production and distribution shall be kept and retained for a period that



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exceeds the self-life of the product. Documentation can enhance the credibility and effectiveness of the food safety control system.

### 5.8 RECALL PROCEDURES

Managers shall ensure that effective procedures are in place to deal with any food safety hazard and to enable the complete, rapid recall of any implicated lot of the finished food from the market. Where a product has been withdrawn because of an immediate health hazard, other products which are produced under similar conditions, and which may present a similar hazard to public health, shall be evaluated for safety and may need to be withdrawn. The need for public warnings shall be considered.

Recalled products shall be held under supervision until they are destroyed, used for purposes other than human consumption, determined to be safe for human consumption, or reprocessed in a suitable manner to ensure their safety.

## 6. ESTABLISHMENT: MAINTENANCE AND SANITATION

### 6.1 MAINTENANCE AND CLEANING

#### 6.1.1 GENERAL

Establishments and equipment shall be kept in an appropriate state of repair and condition to:

*(a)* facilitate all sanitation procedures;



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*(b)* function as intended, particularly at critical steps (see paragraph 5.1);

*(c)* prevent contamination of food, e.g. from metal shards, flaking plaster, debris and chemicals.

Cleaning shall remove food residues and dirt which may be a source of contamination. The necessary cleaning methods and materials will depend on the nature of the food business. Disinfection may be necessary after cleaning.

Cleaning chemicals shall be handled and used carefully and in accordance with manufacturer's instructions and stored, where necessary, separated from food, in clearly identified containers to avoid the risk of contaminating.

### 6.1.2 CLEANING PROCEDURES AND METHODS

Cleaning can be carried out by the separate or the combined use of physical methods, such as heat, scrubbing, turbulent flow, vacuum cleaning or other methods that avoid the use of water, and chemical methods using detergents, alkalis or acids.

Cleaning procedures will involve, where appropriate:-

*(a)* removing gross debris from surfaces;

*(b)* applying a detergent solution to loosen soil and bacterial film and hold them in solution or suspension;


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*(c)* ringing with water which complies with paragraph 4, to remove loosened soil and residues of detergent;

*(d)* dry cleaning or other appropriate methods for removing and collecting residues and debris; and

*(e)* where necessary, disinfection.

**6.2 CLEANING PROGRAMMES**

Cleaning and disinfection programmes shall ensure that all parts of the establishment are appropriately clean, and shall include the cleaning of cleaning equipment.

Where written cleaning programmes are used, they shall specify:

*(a)* areas, items of equipment and utensils to be cleaned;

*(b)* responsibility for particular tasks;

*(c)* method and frequency of cleaning; and

*(d)* monitoring arrangements.

Where appropriate, programmes shall be drawn up in consultation with relevant specialist expert advisors.


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## 6.3 PEST CONTROL SYSTEMS

### 6.3.1 GENERAL

Pests pose a major threat to the safety and suitability of food. Pest infestations can occur where there are breeding sites and a supply of food. Good hygiene practices shall be employed to avoid creating an environment conducive to pests. Good sanitation, inspection of incoming materials and good monitoring can minimize the likelihood of infestation and thereby limit the need for pesticides.

### 6.3.2 PREVENTING ACCESS

Buildings shall be kept in good repair and condition to prevent pest access and to eliminate potential breeding sites. Holes, drains and other places where pests are likely to gain access shall be kept sealed. Wire mesh screens, for example on open windows, doors and ventilators, will reduce the problem of pest entry. Animals shall, wherever possible, be excluded from the grounds of factories and food processing plants.

### 6.3.3 HARBOURAGE AND INFESTATION

The availability of food and water encourages pest harbourage and infestation. Potential food sources shall be stored in pest-proof containers and/or stacked above the ground and away from wells. Areas both inside and outside food premises shall be kept clean. Where appropriate, refuse shall be stored in covered, pest-proof containers.



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### 6.3.4 MONITORING AND DETECTION

Establishment and surrounding areas shall be regularly examined for evidence of infestation.

### 6.3.5 ERADICATION

Pest infestations shall be dealt with immediately and without adversely affecting food safety or suitability. Treatment with chemical, physical or biological agents shall be carried out without posing a threat to the safety or suitability of food.

## 6.4 WASTE MANAGEMENT

Suitable provision must be made for the removal and storage of waste. Waste must not be allowed to accumulate in food handling, food storage, and other working areas and the adjoining environment except so far as is unavoidable for the proper functioning of the business.

Waste stores must be kept appropriately clean, waste storage and collection areas must be cleanable and designed to prevent pests (e.g. lids for bins and containers and emptied regularly).

## 6.5. MONITORING EFFECTIVENESS

Sanitation systems shall be monitored for effectiveness, which are periodically verified by means such as audit pre-operational inspections or, where appropriate, microbiological sampling of environment and food contact surfaces and regularly reviewed and adapted to reflect changed circumstances.



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## 7. ESTABLISHMENT: PERSONAL HYGIENE

### 7.1 HEALTH STATUS

People known, or suspected, to be suffering from, or to be a carrier of a disease or illness likely to be transmitted through food, shall not be allowed to enter any food handling area if there is a likelihood of their contaminating food. Any person so affected shall immediately report illness or symptoms of illness to the management.

Medical examination of a food handler shall be carried out by a certified medical practitioner.

### 7.2 ILLNESS AND INJURIES

Conditions which shall be reported to management so that any need for medical examination and/or possible exclusion from food handling can be considered, include:-

*(a)* jaundice;

*(b)* diarrhoea;

*(c)* vomiting;

*(d)* fever;

*(e)* sore throat with fever;

*(f)* visibly infected skin lesions (boils, cuts, etc.);



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*(g)* discharges from the ear, eye or nose.

## 7.3 PERSONAL CLEANLINESS

Food handlers shall maintain a high degree of personal cleanliness and, where appropriate, wear suitable protective clothing, head covering, and footwear shall be regularly replaced, laundered or cleaned, and not worn outside of the food production premises. Cuts and wounds, where personnel are permitted to continue working, shall be covered by suitable water proof dressings which shall be of a colour easily visible if contaminating the food product or equipment.

Personnel shall always wash their hands when personal cleanliness may affect food safety, for example:-

*(a)* at the start of food handling activities;

*(b)* immediately after using the toilet; and

*(c)* after handling raw food or any contaminated material, where this could result in contamination of other food items; they shall avoid handling ready-to-eat food, where appropriate.

## 7.4 PERSONAL BEHAVIOUR

People engaged in food handling activities shall refrain from behaviour which could result in contamination of food, for example:



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*(a)* smoking;

*(b)* spitting;

*(c)* chewing or eating;

*(d)* sneezing or coughing over unprotected food.

Personal effects such as jewellery, watches, pins or other items shall not be worn or brought into food handling areas if they pose a threat to the safety and suitability of food.

**7.5 VISITORS**

Visitors to food manufacturing, processing or handling areas shall, where appropriate, wear protective clothing and adhere to the other personal hygiene provisions in this section.

8. **TRANSPORTATION**

**8.1 GENERAL**

Food must be adequately protected during transport. The type of conveyances or containers required depends on the nature of the food and the conditions under which it has to be transported.

**8.2 REQUIREMENTS**

Where necessary, conveyances and bulk containers shall be designed and constructed so that they:



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*(a)* do not contaminate food or packaging;

*(b)* can be effectively cleaned and, where necessary, disinfected;

*(c)* permit effective protection from contamination, including dust and fumes;

*(d)* can effectively maintain the temperature, humidity, atmosphere and other conditions necessary to protect food from harmful or undesirable microbial growth and deterioration likely to render it unsuitable for consumption; and

*(e)* allow any necessary temperature, humidity and other conditions to be checked.

**8.3 USE AND MAINTENANCE**

Conveyances and containers for transporting food shall be kept in an appropriate state of cleanliness, repair and condition. Where the same conveyance or container is used for transporting different foods, or non-foods, effective cleaning and, where necessary, disinfection shall take place between loads.

Where appropriate, particularly in bulk transport, containers and conveyances shall be designated and marked for food use only and be used only for that purpose.


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## 9. PRODUCT INFORMATION AND CONSUMER AWARENESS

### 9.1 LOT IDENTIFICATION

Lot identification is essential in product recall and also helps effective stock rotation. Each container of food shall be permanently marked to identify the producers and the lot. Belize National Standard Specification for the Labelling of Prepackaged Foods (BZS1: Part 3:1998) applies.

### 9.2 PRODUCT INFORMATION

All food products shall be accompanied by or bear adequate information to enable the next person in the food chain to handle, display, store and prepare and use the product safely and correctly.

### 9.3 LABELLING

Prepackaged foods shall be labelled with clear instructions to enable the next person in the food chain to handle, display, store and use the product safely. Belize National Standard Specification for the Labelling of Prepackaged Foods (BZS1: Part:1998) applies. S.I. 118/1999.

### 9.4 CONSUMER EDUCATION

Health education programmes shall cover general food hygiene. Such programmes shall enable consumers to understand the importance of any product information and to follow any instructions accompanying products, and make informed choices. In particular consumers shall be informed



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of the relationship between time/temperature control and food-borne illness.

## 10. TRAINING

### 10.1 AWARENESS AND RESPONSIBILITIES

Food hygiene training is fundamentally important. All personnel shall be aware of their role and responsibility in protecting food from contamination or deterioration. Food handlers shall have the necessary knowledge and skills to enable them to handle food hygienically. Those who handle strong cleaning chemicals or other potentially hazardous chemicals shall be instructed in safe handling techniques.

### 10.2 TRAINING PROGRAMMES

Factors to take into account in assessing the level of training required include:

*(a)* the nature of the food, in particular its ability to sustain growth of pathogenic or spoilage micro-organisms;

*(b)* the manner in which the food is handled and packed, including the probability of contamination;

*(c)* the extent and nature of processing or further preparation before final consumption;

*(d)* the conditions under which the food will


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be stored; and

*(e)* the expected length of time before consumption.

**10.3 INSTRUCTION AND SUPERVISION**

Periodic assessments of the effectiveness of training and instruction programmes shall be made, as well as routine supervision and checks to ensure that procedures are being carried out effectively.

Managers and supervisors of food processes shall have the necessary knowledge of food hygiene principles and practice to be able to judge potential risks and take the necessary action to remedy deficiencies.

**10.4 REFRESHER TRAINING**

Training programmes shall be routinely reviewed and updated where necessary. Systems shall be in place to ensure that food handlers remain aware of all procedures necessary to maintain the safety and suitability of food.



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## THIRD SCHEDULE

**[Regulations 2 and 4]**

## APPLICATION OF THE HACCP SYSTEM

### 1. APPLICATION

This Schedule specifies the application of the HACCP system.

### DEFINITIONS

2. In this Schedule, unless the context otherwise requires:-

"control", when used as a verb, means to take all necessary actions to ensure and maintain compliance with criteria established in the HACCP plan;

"control", when used as a noun, means the state wherein correct procedures are being followed and criteria are being met;

"control measure" means any action and activity that can be used to prevent or eliminate a food safety hazard or reduce it to an acceptable level;

"corrective action" means any action to be taken when the results of monitoring at the CCP indicate a loss of control;

"Critical Control Point" or "(CCP)" means a step at which control can be applied and is essential to prevent or eliminate food safety hazard or reduce it to an acceptable level;

"critical limit" means a criterion which separates acceptability from unacceptability;



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"deviation" means failure to meet a critical limit;

"flow diagram" means a systematic representation of the sequence of steps or operations used in the production or manufacture of a particular food item;

"HACCP" means a system which identifies, evaluates, and controls hazards which are significant for food safety;

"HACCP plan" means a document prepared in accordance with the principles of HACCP to ensure control of hazards which are significant for food safety in the segment of the food chain under consideration;

"hazard" means a biological, chemical or physical agent in, or condition of, food with the potential to cause an adverse health effect;

"hazard analysis" means the process of collecting and evaluating information on hazards and conditions leading to their presence to decide which are significant for food safety and therefore should be addressed in the HACCP plan;

"monitor" means the act of conducting a planned sequence of observations or measurements of control parameters to assess whether a CCP is under control;

"step" means a point, procedure, operation or stage in the food chain, including raw materials, from primary production to final consumption;

"validation" means obtaining evidence that the elements of the HACCP plan are effective;

"verification" means the application of methods, procedures, tests and other evaluations, in addition to monitoring, to determine compliance with the HACCP plan.



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3. **PRINCIPLES OF THE HACCP SYSTEM**

**3.1** The HACCP system consists of the following seven principles:-

(a) **Principle 1**
Conduct a hazard analysis.

(b) **Principle 2**
Determine the Critical Control Points (CCPs).

(c ) **Principle 3**
Establish critical limit(s).

(d) **Principle 4**
Establish a system to monitor control of the CCP.

(e) **Principle 5**
Establish the corrective action to be taken when monitoring indicates that a particular CCP is not under control.

(f) **Principle 6**
Establish procedures for verification to confirm that the HACCP system is working effectively.

(g) **Principle 7**
Establish documentation concerning all procedures and records appropriate to these principles and their application.


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## 4. GUIDELINES FOR THE APPLICATION OF THE HACCP SYSTEM

4.1 Prior to application of HACCP to any sector of the food chain, there should be operation according to the Codex General Principles of Food Hygiene, the appropriate Codex Codes of Practice, and appropriate food safety legislation. Management commitment is necessary for implementation of an effective HACCP system. During hazard identification, evaluation, and subsequent operations in designing and applying HACCP systems, consideration must be given to the impact of raw materials, ingredients, food manufacturing practices, role of manufacturing processes to control hazards, likely end-use of the product, categories of consumers of concern, and epidemiological evidence relative to food safety.

4.2 The intent of the HACCP system is to focus control at CCPs. Redesign of the operation should be considered if a hazard which must be controlled is identified but no CCPs are found.

4.3 HACCP should be applied to each specific operation separately. CCPs identified in any given example in any Codex Code of Hygienic Practice might not be the only ones identified for a specific application or might be of a different nature.

4.4 The HACCP application should be reviewed and necessary changes made when any modification is made in the product, process, or any step.

4.5 It is important when applying HACCP to be flexible where appropriate, given the context of the application taking into account the nature and the size of the operation.



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4.6 **APPLICATION**

The application of HACCP principles consists of the following tasks as identified in the Logic Sequence for Application of HACCP (Diagram 1).

4.6.1 **ASSEMBLE HACCP TEAM**

4.6.1.1 The food operation should assure that the appropriate product specific knowledge and expertise is available for the development of an effective HACCP plan. Optimally, this may be accomplished by assembling a multi-disciplinary team. Where such expertise is not available on site, expert advice should be obtained from other sources. The scope of the HACCP plan should be identified. The scope should describe which segment of the food chain is involved and the general classes of hazards to be addressed (e.g. does it cover all classes of hazards or only selected classes).

4.6.2 **DESCRIBE PRODUCT**

4.6.2.1 A full description of the product should be drawn up, including relevant safety information such as: composition, physical/chemical structure (including $A_w$, pH, etc.), microcidal/static treatments (heat-treatment, freezing, brining, smoking, etc.), packaging, durability and storage conditions and method of distribution.

4.6.3. **IDENTIFY INTENDED USE**

4.6.3.1 The intended use should be based on the expected uses of the product by the end user or consumer. In specific



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cases, vulnerable groups of the population, e.g. institutional feeding, may have to be considered.

4.6.4 **CONSTRUCT FLOW DIAGRAM**

4.6.4.1 The flow diagram should be constructed by the HACCP team. The flow diagram should cover all steps in the operation. When applying HACCP to a given operation, consideration should be given to steps preceding and following the specified operation.

4.6.5 **ON-SITE CONFIRMATION OF FLOW DIAGRAM**

4.6.5.1 The HACCP team should confirm the processing operation against the flow diagram during all stages and hours of operation and amend the flow diagram where appropriate.

4.6.6 **LIST ALL POTENTIAL HAZARDS ASSOCIATED WITH EACH STEP, CONDUCT A HAZARD ANALYSIS, AND CONSIDER ANY MEASURES TO CONTROL IDENTIFIED HAZARDS. (SEE PRINCIPLE 1)**

4.6.6.1 The HACCP team should list all of the hazards that may be reasonably expected to occur at each step from primary production, processing, manufacture, and distribution until the point of consumption.

4.6.6.2 The HACCP team should next conduct a hazard analysis to identify (for the HACCP plan) which hazards are of such a nature that their elimination or reduction to acceptable levels is essential to the production of safe food.



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4.6.6.3 In conducting the hazard analysis, wherever possible the following should be included:-

*(a)* the likely occurrence of hazards and severity of their adverse health effects;

*(b)* the qualitative and/or quantitative evaluation of the presence of hazards;

*(c)* survival or multiplication of micro-organisms of con-cern;

*(d)* production or persistence in foods of toxins, chemicals or physical agents; and

*(e)* conditions leading to the above.

4.6.6.4 The HACCP team must then consider what control measures, if any, exist which can be applied for each hazard.

4.6.6.5 More than one control measure may be required to control a specific hazard(s) and more than one hazard may be controlled by a specified control measure.

4.6.7 **DETERMINE CRITICAL CONTROL POINTS (SEE PRINCIPLE 2)[1]**

4.6.7.1 There may be more than one CCP at which control is applied to address the same hazard. The determination

[1] Since the publication of the decision tree by Codex, its use has been implemented many times for training purposes. In many instances, while this tree has been useful to explain the logic and depth of understanding needed to determine CCPs, it is not specific to all food operations, e.g. slaughter, and therefore it should be used in conjunction with professional judgment, and modified in some cases.



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of a CCP in the HACCP system can be facilitated by the application of a decision tree (e.g. Diagram 2), which indicates a logic reasoning approach. Application of a decision tree should be flexible, given whether the operation is for production, slaughter, processing, storage, distribution or other. It should be used for guidance when determining CCPs. This example of a decision tree may not be applicable to all situations. Other approaches may be used. Training in the application of the decision tree is recommended.

### 4.6.8 ESTABLISH CRITICAL LIMITS FOR EACH CCP (SEE PRINCIPLE 3)

4.6.8.1 Critical limits must be specified and validated if possible for each Critical Control Point. In some cases more than one critical limit will be elaborated at a particular step. Criteria often used include measurements of temperature, time, moisture level, pH, $A_w$, available chlorine, and sensory parameters such as visual appearance and texture.

### 4.6.9 ESTABLISH A MONITORING SYSTEM FOR EACH CCP (SEE PRINCIPLE 4)

4.6.9.1 Monitoring is the scheduled measurement or observation of a CCP relative to its critical limits. The monitoring procedures must be able to detect loss of control at the CCP. Further, monitoring should ideally provide this information in time to make adjustments to ensure control of the process to prevent violating the critical limits. Where possible, process adjustments should be made when monitoring results indicate a trend towards loss of control


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at a CCP. The adjustments should be taken before a deviation occurs. Data derived from monitoring must be evaluated by a designated person with knowledge and authority to carry out corrective actions when indicated. If monitoring is not continuous, then the amount or frequency of monitoring must be sufficient to guarantee the CCP is in control. Most monitoring procedures for CCPs will need to be done rapidly because they relate to on-line processes and there will not be time for lengthy analytical testing. Physical and chemical measurements are often preferred to microbiological testing because they may be done rapidly and often indicate the microbiological control of the product. All records and documents associated with monitoring CCPs must be signed by the person(s) doing the monitoring and by a responsible reviewing official(s) of the company.

4.6.10 **ESTABLISH CORRECTIVE ACTIONS (SEE PRINCIPLE 5)**

4.6.10.1 Specific corrective actions must be developed for each CCP in the HACCP system in order to deal with deviations when they occur.

4.6.10.2 The actions must ensure that the CCP has been brought under control. Actions taken must also include proper disposition of the affected product. Deviation and product disposition procedures must be documented in the HACCP record keeping.

4.6.11 **ESTABLISH VERIFICATION PROCEDURES (SEE PRINCIPLE 6)**

4.6.11.1 Establish procedures for verification. Verification and



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auditing methods, procedures and tests, including random sampling and analysis, can be used to determine if the HACCP system is working correctly. The frequency of verification should be sufficient to confirm that the HACCP system is working effectively.

Examples of verification activities include:-

*(a)* review of HACCP system and its records;

*(b)* review of deviations and product dispositions;

*(c)* confirmation that CCPs are kept under control.

4.6.11.2 Where possible, validation activities should include actions to confirm the efficacy of all elements of the HACCP plan.

4.6.12 **ESTABLISH DOCUMENTATION AND RECORD KEEPING (SEE PRINCIPLE 7)**

4.6.12.1 Efficient and accurate record keeping is essential to the application of a HACCP system. HACCP procedures should be documented. Documentation and record keeping should be appropriate to the nature and size of the operation.

Documentation examples are:

*(a)* hazard analysis;



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*(b)* CCP determination;

*(c)* critical limit determination.

Record examples are:

*(a)* CCP monitoring activities;

*(b)* deviations and associated corrective actions;

*(c)* modifications to the HACCP system.

An example of a HACCP worksheet is attached as Diagram 3.

**5. TRAINING**

5.1 Training of personnel in industry, government and academia in HACCP principles and applications, and increasing awareness of consumers are essential elements for the effective implementation of HACCP. As an aid in developing specific training to support a HACCP plan, working instructions and procedures should be developed which define the tasks of the operating personnel to be stationed at each Critical Control Point.

5.2 Cooperation between primary producer, industry, trade groups, consumer organizations, and responsible authorities is of vital importance. Opportunities should be provided for the joint training of industry and control authorities to encourage and maintain a continuous dialogue and create a climate of understanding in the practical application of HACCP.



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**DIAGRAM 1**

**LOGIC SEQUENCE FOR APPLICATION OF HACCP**

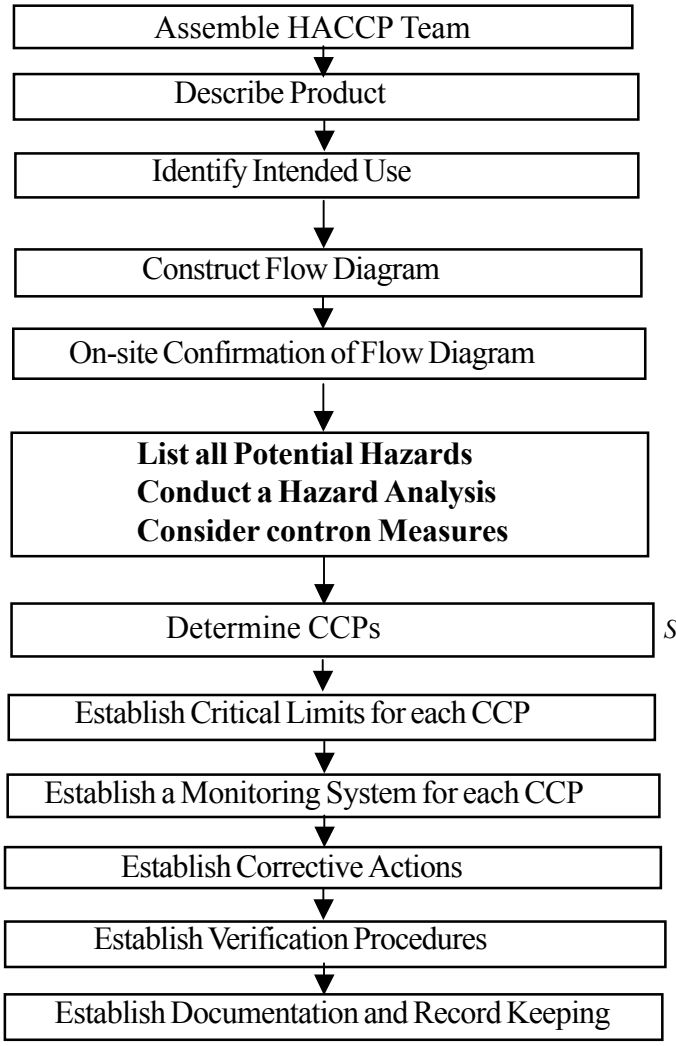




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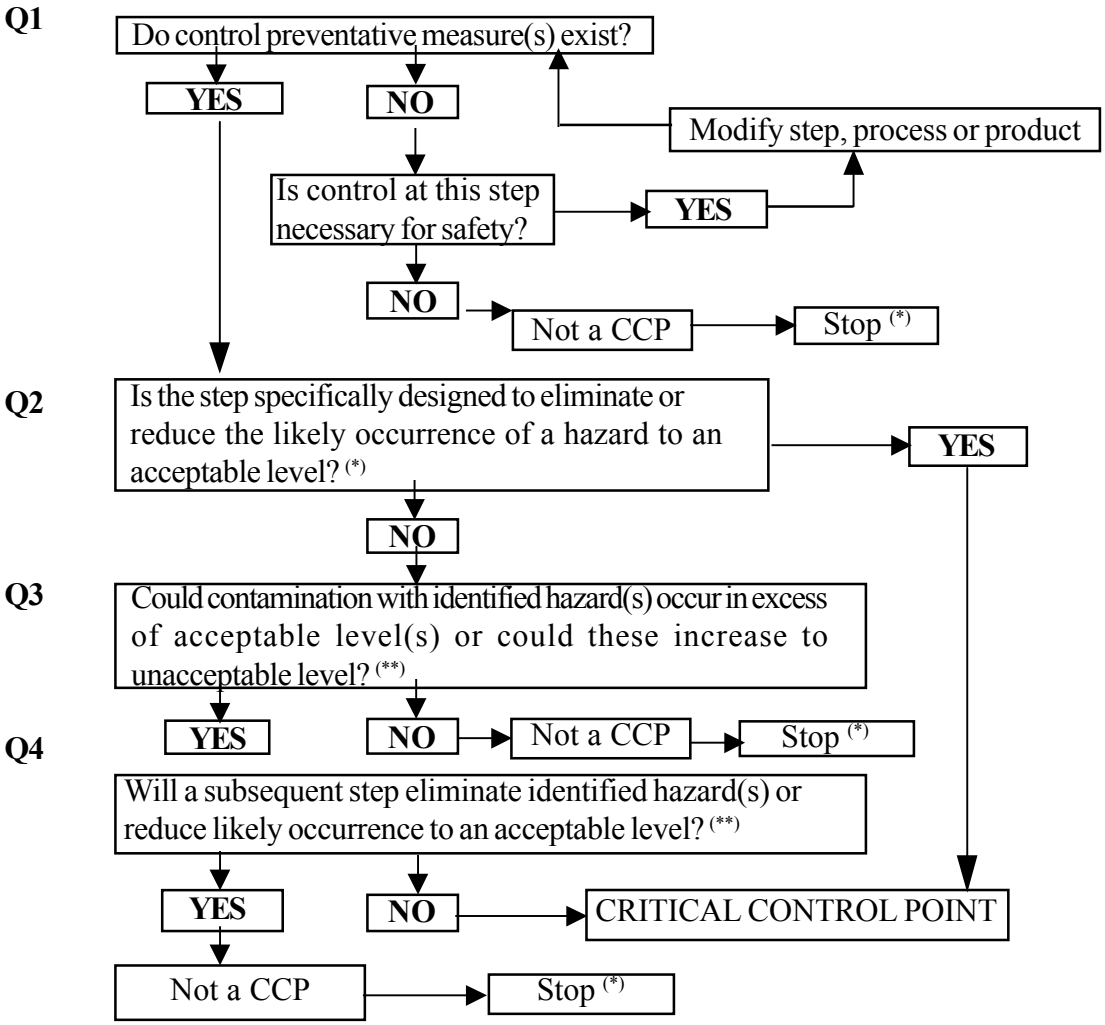
**DIAGRAM 2**
**EXAMPLE OF DECISION TREE TO IDENTIFY CCPs**
(answer question in sequence)




(*) Proceed to the next identified hazard in the described process.
(**) Acceptable and unacceptable levels need to be defined within the overall objectives in identifying the CCP of HACCP Plan



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## DIAGRAM 3

## EXAMPLE OF A HACCP WORKSHEET

Describe Product

Diagram Process Flow

| LIST | | | | | | | |
|---|---|---|---|---|---|---|---|
| Step | Hazard(s) | Control Measure(s) | CCPs | Critical Limit(s) | Monitoring Procedure(s) | Corrective Action(s) | Record(s) |
| | | | | | | | |

***Verification***



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## FOURTH SCHEDULE
## [Regulation 10]
## SANITARY CERTIFICATE OF BELIZE FOR FISH AND FISHERY PRODUCTS

**Reference number: BAHA 00-11-fp-001**

Country of dispatch: **Belize**
Competent Authority: **Belize Agricultural Health Authority**
Inspection body: **Belize Agricultural Health Authority**
Address:
Telephone/Fax: **Tel: 501-2-44794 Fax: 501-2-45230**
E-mail: baha@btl.net

### I. Details identifying the fishery products

| Description - Species (scientific name): | Approval no. of Establishment | State or type of processing: | Type of packaging: | Lot identifier/date coding | Number of packages: | Net weight |
|---|---|---|---|---|---|---|
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | | | |
| | | | | Sum: | | |

Temperature required during storage and transport:_____ °C

### II. Origin of the fishery

Name and address of consignor:_____

_____



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### III. Destination of the fishery products

The fishery products are to be dispatched from:_____
to:_____by the following means of transport:_____

Name of consignee and address at place of destination:_____
_____

### IV. Attestation

The undersigned official inspector hereby certifies that at the time of inspection: the products described above originate from an approved establishment; and have been handled, prepared or processed, identified, stored and transported under a competent HACCP and sanitary programme consistently implemented and in accordance with the requirements laid down in the Belize Agricultural Health Authority (Food Safety) Regulations, 2001.

Done at_____on _____200_____

_____ _____

(Signature of official inspector) (PRINT Name and Official position in capitals)



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