

Another product from  
this project is the  
"food safety guidelines"  
which are handled  
by SeaQual.

NOT FOR  
SALE

enquiries to

Commercial Manager

National seafood

Centre

or

AUSEAS.....

**SEAQUAL PACK ONE**

**SEAFOOD SAFETY FRAMEWORK DEVELOPMENT**

**NATIONAL SEAFOOD CENTRE PROJECT 97/412**

**FINAL REPORT – 8<sup>th</sup> APRIL 1999**

**Prepared By :  
Phillip Walsh  
Food Factotum  
667 Silver Hill Road  
Glaziers Bay  
Tasmania 7109  
Tel: 03 6295 1177**

**Katy Saunders  
Seafood Industry Victoria &  
The SeaQual Victoria Committee  
Level 2/177 Toorak Road  
South Yarra, Vic 3141  
Tel: 03 9824 0744**

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## 1. Project Results

Three sector specific 'Food Safety System Guidelines' each with an accompanying floppy disc containing a dummy 'Food Safety Program' are the tangible results of the project.

Intangible benefits in Victoria include closer links between businesses along the seafood distribution chain from catch to retail, recognition by industry of the need for product traceability and better understanding of seafood specific issues by local government and Food Safety Victoria.

The Guidelines are :

- |                                 |   |
|---------------------------------|---|
| Catch and Distribution Sector – | covering catching, handling and on board Processing through to loading of trucks for distribution to wholesalers/markets  |
| Seafood Processing              | covering purchasing, receival and basic fish processing (e.g. filleting fish, shucking oysters) packing and distribution to customers/retailers                             |
| Seafood Retailing               | covering purchasing, receival, display and sale of raw and ready to eat seafood direct to customers. The principles also apply to cooked seafood take-away and restaurants. |

Each guideline has a similar format and the basic template can be adapted for other sectors, for example aquaculture harvesting hot and cold smoked fish; prawn processing.

A one page background covers the reason for the guideline and explains the layout. The first sections cover Good Manufacturing Practice (GMP) and Good Hygiene Practice (GHP) as the essential foundation for any business without which the food safety plan cannot be effective.

The next sections identify the 'processes' - catch, purchase, storage, filleting, display, etc. considering the necessary quality and hygiene controls. Only in the following sections are food safety hazards and critical control points introduced. The logic is that by the time alien terms, such as Hazard Analysis, are introduced 90% of the food safety plan is already in place and the hazard analysis process will not be as hard as the name suggests.

Final sections cover the Food Act Victoria, proposed Australia New Zealand Food Authority (ANZFA) Standards, an introduction to the Hazard Analysis & Critical Control Point (HACCP) technique and a list of contacts for further information.

The project Agreement included the preparation of an audio cassette to supplement the written guidelines. This was raised at the industry workshop in June 1998, but rejected by the participants. It was agreed to replace the audio cassette with a floppy disc containing an outline food safety program and some of the forms described in the guidelines.

One of the concerns was that the guidelines may indicate what to do, but not necessarily how to do it. The template on the disc would enable a company to start putting together a program from Day 1. For example, cleaning rosters and seafood receival forms could be adapted for the businesses, printed and used immediately.

Three separate discs have been prepared, corresponding to the particular guideline. The information is filed in a Rich Text Format, enabling it to be converted by most word processor programs. Few businesses will not have access to a computer with a basic word processing function.

The disc includes additional information and suggestions, thus complementing and improving on the guidelines.

To test the practical usefulness of the guidelines, seven retailers agreed to trial the guideline and start to prepare their own food safety programs. All retailers were positive about the benefit of the guidelines in helping them understand and comply with the regulations. Suggestions for improvement have been incorporated in the final drafts.

The guidelines were discussed with and presented to both ANZFA and Food Safety Victoria. ANZFA have provided verbal advice that the guidelines cover all the issues in their proposed regulations, but cannot comment formally until they have finalised both the Standards and the approval mechanism for industry guidelines.

Food Safety Victoria are using SGS International Certification Services to review industry guidelines. The SGS report was very positive, commenting "The document is well constructed and provides a clear uncomplicated review of the issues involved in a Food Safety Program.....The style is clear and appropriate for its target recipient. In a word "excellent."

Suggestions from SGS for inclusion of a Food Safety Instructor notification form and a corrective action log have been included in the program discs.

Additionally, Ellen Kitson, the Executive Officer, Food Safety Victoria, has formally endorsed the guidelines and provided that advice to the Chief Environmental Health Officers at all local government authorities.

The Project Agreement also included a framework and guidelines for a seafood accreditation arrangement. A discussion paper was prepared and discussed by SeaQual Victoria. Modifications were incorporated and the framework is included with this report.

Prior to finalisation of this project, the FRDC Board approved the SeaQual Australia application (99/357). A key component of this new project is developing a JASANZ approved accreditation system and National Seafood Industry Standard for seafood safety.

The framework will provide a starting point for the National Standards development and we will be encouraging SeaQual Australia to consider a pilot program in Victoria to take advantage of the enthusiasm already generated by the SeaQual Victoria project.

SeaQual Australia has also included the extension of the Food Safety System Guidelines to incorporate other sectors and different State/Territory variations as an urgent priority.

SeaQual Victoria and Seafood Industry Victoria were delighted that this initiative will be taken forward and form the basis of a National Food Safety Strategy for the Seafood Industry.

P.B. Walsh  
Food Factotum  
Principal Investigator

## **2. Seafood Quality & Safety Workshop 29 June 1998**

The project was initiated at a meeting of the SeaQual Victoria committee on 28 April 1998. Preliminary visits were made to a number of retailers, wholesalers, importers, as well as the Melbourne fish markets.

Agreement was reached with a fishermen's co-operative, fish market processor, wholesaler, retailer and importer to follow seafood from catch or import through to retail sale, identifying the processes and food safety issues throughout the chain.

A second visit to Melbourne from 25 – 28 May involved a detailed study of operations at the various businesses, preparation of outline process flows and identification of "hazards". These were used to form the basis of discussion papers at the planned seafood quality and safety workshop.

This workshop was a key component of the project in highlighting food safety issues to the industry, obtaining industry advice on the proposed guidelines and identifying potential participants in future trials.

The workshop was held on 29 June. 50 confirmed attendees from all sectors of the seafood industry in Victoria and some interstate visitors were allocated to one of four groups. Each group was provided with a set of papers covering the major issues in relation to Good Manufacturing Practice, Good Handling Practice, Seafood Quality and Seafood Safety for their particular sector. They were asked to comment on the issues in the papers and make any other comments relevant to the introduction of food safety guidelines for their sector.

The facilitator or a member from each group was asked to report on the issues raised and these were collated into a summary report for the workshop.

Appendix 1 provides an example of one of the workshop sector papers. The format for the other sectors was similar, only the details differed.



## Seafood Quality & Safety Workshop - 29th June 1998

### Summary Report

#### Introduction

The workshop was organised to :

- provide information to the Victorian seafood industry on the new food laws
- describe the background to these laws, with both a national and international perspective
- explore the issues involved in meeting the new requirements
- use the adoption of the new food laws as an opportunity to enhance the image of seafood

The key requirement in the legislation is for all food businesses to identify food safety hazards in their operation, how these are controlled, who monitors the controls and how if out of control, hazards are brought back into control. This requires a written program, maintenance of records, appropriately trained staff and the ability to trace and recall food if required.

Food safety controls cannot operate in isolation and assume a sound base of hygienic preparation of food (clean surfaces, equipment and people) in a suitable environment (construction and design of premises). These Good Manufacturing Practices were also reviewed.

When does fish become food? This is relevant to jurisdiction divisions between Human Services (Health) Victoria and Fisheries Victoria. Fishing vessels on which only catching and icing occur may be outside the current regulations, but since their customers must know the origin and have confidence in the safety of the fish purchased, catchers and aquaculturists must be involved in the process.

The workshop split into four groups :-

1. Catch to distribution of fresh fish
2. Receiving, storage and wholesale
3. Purchase, processing and distribution
4. Purchase and retail sale

To provide a context for the group discussions a simplified process, consisting of -

- catching, gutting and icing of fish on boat;
- land transport to a wholesaler;
- re-icing, storage, sale and distribution to a processor;
- filleting, packing, storage, sale and distribution to retailers;
- receiving, storage, display and sale to customers, was assumed.

Groups were provided with information regarding Good Manufacturing Practices, a process flow and hazard analysis table and asked questions about the relevance of the information to their own situation.

The workshop papers for Sector 3 – Purchase, Processing & Distribution of Fresh Fish, together with the hazard analysis tables for all four workshops, are included at Appendix 1.

## **Results**

### **A) Good Manufacturing Practices**

#### **1. Premises or vessel construction and design**

Each group had been provided with a list of requirements derived from Codex, the international regulatory body.

Most comment regarding construction was raised from the catching sector, where fishing boats need only meet sea worthiness standards and the smaller day boats have very few facilities. Export registered vessels (generally freezer boats) must meet construction standards relating to hygienic handling of fish.

The most significant issue for small boats is protection of the fish once caught and the ability to store sufficient ice.

Premises construction standards received little comment, except to note the wide variety and age of premises, making it difficult to set a standard. The important point was to recognise any hygiene deficiencies in construction and design and to have controls in place to minimise the impact.

Insulation of transport vehicles was raised as an issue, with a request for information on the usefulness of various types of insulation. Perhaps there is a need for a temperature maintenance rating like the R codes for refrigerant materials.

## 2. Equipment & Utensils

***The market fish bins were highlighted for attention. Despite the bin wash system, many of the bins containing fish for sale at the markets are dirty. This is not only a source of potential contamination, but sends the wrong message about seafood hygiene along the chain from catch to customer***

The points in the chain where the bins can become contaminated are many and varied, with some, e.g distribution and storage of empty bins, not considered in the process flow. Additionally, the shape and size of the bins are not ideal for many species, leading to crushing or twisting of fish to fit.

Fish bins are expensive and, as is the case for fruit and veg, often the value of the bin exceeds the value of the content. Fruit and veg, however, use a variety of bins to suit the different products, suggesting this is not impossible for fish.

## 3) Cleaning; personal hygiene; hygiene control

Whilst accepting weaknesses in operations with few written cleaning procedures or personal hygiene requirements and little recording of hygiene effectiveness, coolroom temperature, etc. the workshop considered all requirements are achievable.

Help may be required to set appropriate standards, provide information on suitable chemicals, methods of use and to minimise the amount of documentation needed to meet the regulations.

***A comment made under a number of headings was the need for enforcement. There is a concern that any attempt to lift standards and then use those standards to improve the profile and profitability of the seafood industry may be negated by those who do not comply***

## 4) Traceability and recall

The value of having all sectors of the seafood industry at the same workshop was highlighted by consideration of product trace. Currently, traceability is lost after product is sold at the markets. Since over 80% of all fish landed in Victoria is sold through the market, extending traceability to processors, providers and retailers is a simple chain, if not a simple activity.

The information ideally required by retailers is the same as provided on oyster tags, eg harvest/catch date; lease/area caught; company/vessel; count/weight; species.

***An effective product trace system would not only minimise the damage to individual businesses and the seafood industry in general from recall of unsafe product, but also provide the mechanism by which quality handling from catch to consumer can be measured and recorded***

Many product recalls of potentially unsafe food are undertaken by suppliers in conjunction with Health Departments without public knowledge. This occurs because the supplier can determine exactly where all the product has been distributed and arrange its removal from the shelves.

Whilst unsafe fish should be a rarity, a repeated comment in relation to quality was that pricing tends to be based on the lowest quality, giving little incentive to the fishermen to improve. Buyers at the market select on quality and purchase from known sources, but unless the retailer is the buyer, the information goes no further. It was thought that retailers/restaurants demanding fish from only certain sources would force others to lift their standards.

## 5) Training

An HACCP (hazard analysis and critical control point) training program is being run by the City of Melbourne for market operators. This has been received very positively by the attendees and will need to be extended/adapted for other seafood groups.

Catchers thought that a seafood handling workshop for crews would be beneficial, whilst retailers needed training in seafood handling and risks of contamination cooked to raw.

Some training will be provided in the form of self help workbooks and guidelines, but there is also a need for information on 'best practice' or 'alternative practice' e.g water treatment with anti microbial solutions.

Physical, on the job training was considered most important rather than classroom theory. Particular mention was made of training for casual staff and the suggestion

that induction training should focus on explanation of why certain standards are required.

***The ongoing effectiveness of any initiatives from this workshop depends upon the development and delivery of targeted training. This must be raised as an agenda item for the Victorian and national seafood industry training boards***

## B) Hazard analysis & critical control point (HACCP)

The working papers included reference to HACCP and used the technique to derive 'process flows' and 'hazard analysis tables' for the four sectors. Participants were not expected to be familiar with the technique, but were asked to comment on the hazards and controls in the examples.

All four hazard analysis tables as presented at the workshop are appended to this report. Comments below are sector by sector.

### 1. Catch to distribution

An overall comment was that the table would need to distinguish between bay and inlet fishing over 5 - 6 hours and shark fishing over 5 - 6 days.

The question mark over fish bin hygiene has already been covered, the other major issue being the need for ice on short trips. As a general rule, short trip boats take ice during summer, but not during winter. Space is limited and thus ice limits the volume of catch that can be handled.

***Since fish start to deteriorate immediately on landing, ice should maintain quality longer even in winter. Controlled trials with the fishermen are recommended to prove or disprove the theory before setting standards***

There is obviously scepticism from many in the catching sector that quality can improve value of catch.

### 2. Wholesale

The hazard tables would need to incorporate frozen fish and there was a strong emphasis on enforcement of standards particularly in relation to imported product.

Full identification, including date of catch/harvest, should be part of mandatory labelling and there was also concern with invisible safety issues such as mercury and trace elements.

***A summary document should be prepared by VFIF or ASIC explaining risk in relation to heavy metals, viruses, parasites, etc. which includes the operation of the National Residue, Market Basket Surveys and the standards for metals in the ANZFA Food Standards Code.***

It should be stipulated that the wholesaler only purchases from a reputable supply. Transport records should be available to view at receipt and despatch vehicles should record temperatures on delivery. It was noted that calibration of temperature gauges would be required. Coolroom temperatures on the premises must be checked.

In determining reputable suppliers ratings by relevant authorities could be taken into account, but there is a need for common accreditation. The maintenance of standards and enforcement of these standards is important for the security of the industry.

Whilst acknowledging the value of product trace, the group was concerned about the clerical work involved in its maintenance. Bar coding may be the answer.

### 3. Processing

Since this group has the most diverse range of activities, any guidelines will need to cover the principles in detail but not be too prescriptive, as the standards may vary from one similar operation to another.

***The group was particularly concerned about multiplicity of compliance for various authorities and customers g Food Safety Victoria, AQIS, Woolworths, etc. and needs assurance of mutual recognition. Thus a company operating AQIS FPA would be acknowledged as meeting Food Safety Victoria's requirements.***

Ensuring equal standards for imported foods is essential, as also is traceability.

The level of documentation required must be appropriate to the business and not excessive. The hazard table should indicate who is responsible for both monitoring of controls and corrective action. The documentation records should also be referenced.

An additional step in the table was proposed covering 'value adding' which might be anything from re-packing to a product enhancement. The group also cautioned that seasonality may affect the standards; temperatures achieved in winter may be much more difficult to maintain in summer. They would also like examples or explanations of standards. For example, what is potable water and what is meant by appropriate ice?

#### 4. Retail

Many of the comments made by other groups apply equally to retail. The need to recognise differences between summer and winter when setting standards; the need for traceability and standards for supply; the need for basic training and the absolutely critical need for regulatory enforcement were emphasised.

***The retail group endorsed the SeaQual accreditation approach with its potential to add value, but recognised a need for the industry to pull together and provide back up at point of sale. There must be agreed quality standards and a minimum entry level standard. There may need to be classifications of business and the recognition of different requirements.***

The group highlighted the need for better consumer education, noting perceptions that fish must be iced at retail, believing all fish is from Port Phillip Bay, enquiring about 'free range fish' and needing guidance on storage of fish.

There was concern about quality of supply and indecision about whether a fish is fit for human consumption. There needs to be agreement on physical quality parameters and ideally some easy to use tests for freshness.

Full documentation should arrive with the fish and temperature targets should be 2°C +/- 2°C. Ideally, there should be a table which will indicate shelf life based on the dates of catch, filleting and date of arrival.

It was suggested under storage that the temperatures should lower (2°C) and a light kept on in the cool room, as this apparently retards bacterial growth.

In the hazard analysis table a separate rinsing of fish step prior to overnight storage was suggested. This also raised the issue of how to ensure water quality is 'potable'.

The accreditation scheme and hazard analysis should also be applied to restaurants. Directly serving customers are wet fish shops, wet fish shops with cooked take away, cooked take away only, fish cafes, restaurants. All should be involved in the accreditation scheme design.

The retail group also briefly considered the value of audio tapes as a training device. Most people did not believe tapes would be useful.

#### Conclusion/Action

There was general consensus that progress had been made in identifying many of the issues regarding seafood quality and safety. In bringing together

representatives from all sectors and discussing the process from catch to consumer the interdependence of all parts of the chain was highlighted.

The introduction of food safety programs will require time and effort, thus added cost, to seafood businesses. There is, however, potential for increased profit through reduced wastage and higher prices for better quality, but only if all sectors in the chain progress together.

Seafood quality logos can provide consumer confidence and increase sales, but only as long as the produce matches the image

The need for quality assured supply and traceability have been highlighted in the workshop, but there is a long way to go before these can be guaranteed.

The next stage for the VFIF/SeaQual Victoria project is to review all the outcomes, particularly those highlighted in the text and progress the preparation of quality and safety guidelines. Draft guidelines for at least one sector will be available by the end of August for review by relevant workshop participants.

Two cross sector stumbling blocks - the quality and appropriateness of market fish bins and through chain traceability - require further investigation. Traceability may require a multi-disciplinary approach and could be the subject of an FRDC funding application to determine the most cost effective and appropriate technology. These will be passed to the SeaQual Victoria Committee for review and action.



### 3. Food Safety system Guideline Development

The Project Agreement included the development of one guideline for the catching sector and another for post harvest. The split of businesses at the workshop between processors (including providores and market wholesalers) and retailers suggested that two separate but closely related guidelines for the post harvest sector may be needed.

This was discussed at the SeaQual Victoria meeting on 24<sup>th</sup> August and in meetings with individual retailers and processors in Melbourne the following day. The result was a decision to prepare the two guidelines using examples closely related to the whole sector, but acknowledging that there was considerable overlap.

Retail guidelines would focus on purchasing, storage, seafood display and customer service; whilst processing would focus on purchasing, storage, filleting/shucking, packing and distribution. Some retailers also fillet/shuck; whilst processing also covers a wide range of processes, including cooking, smoking, brining, bread and batter coating, etc.

If the guidelines adequately explained the principles, each business should be able to adapt for their own particular circumstances. It is important that the guidelines do not attempt to provide a definite food safety plan, with all critical control points defined, as this could risk litigation.

Draft Food Safety System Guidelines and the proposed content of the floppy disc were presented and discussed at the subsequent SeaQual Victoria meeting on 28<sup>th</sup> September. Comments from this meeting and comments from others associated with the project were incorporated into the drafts.

At this stage, the drafts appeared practical and comprehensive to the members of SeaQual Victoria, but before finalisation it was essential that they be sighted by others and tested for ease of use and suitability.

Seven retail fish shops – Fishy Business (x 2), Richmond Oysters, Camberwell Fish Market, Claringbolds and Fish Pier (x 2), agreed to trial the draft guidelines, including the disc. A SeaQual Victoria meeting on 9<sup>th</sup> November was followed over two days with demonstrations of the package at the seven retail premises. Deliberately, the instruction was kept to a minimum and no training included. The guidelines when available as part of SeaQual Pack One must be comprehensible to recipients without specific training.

Training ultimately is a critical component in the preparation of food safety plans and is equally important in ensuring staff understand Good Hygiene Practices. This project linked closely with Seafood Training Australia (STA). Roy Palmer, chairman of SeaQual Victoria, is a member of the STA steering committee and Phillip Walsh is chairman of the reference

group reviewing competency standards for the processing and distribution sectors.

The focus on training in this project has assisted with the review of training in Victoria, resulting in the formation of Seafood Training Victoria as part of Seafood Industry Victoria to co-ordinate training across all industry sectors.

Contact with the seven retailers was maintained over the Christmas period, followed by personal visits to coincide with the SeaQual Victoria meeting on 1 February.

Most of the comments on the guidelines were favourable, with few additions/corrections. The significant factor was setting aside time to look at sections, adapt and then implement at the workplace. This issue needs to be considered by SeaQual Australia in the further development of the guidelines. A future issue of the disc may have a timetable incorporated with the first task being to fill in the timetable with "what, by when, by whom".

A final meeting of the project team with SeaQual Victoria was arranged for 1 March in the form of a workshop, where details from the guidelines and discs were presented to a wide audience for discussion and final approval.

The accompanying guidelines incorporate suggested changes from the workshop.

### **3.1 Approval by Regulators**

The SeaQual Victoria committee has representation from both Fisheries Victoria and Food Safety Victoria. Rod Dedman, Food Safety Victoria, was previously manager of the Melbourne Fish Markets and is well acquainted with the specific problems of seafood.

Both Fisheries and Health portfolios therefore had input to the guideline development from the beginning and were present at the June workshop.

It was important for the projects credibility that the guidelines had formal recognition from Food Safety Victoria. The retail guideline and disc were sent to Food Safety Victoria in February for comment. To ensure impartiality SGS International Certification Services are being used to assess the documents against:-

The Food Safety Act 1984 – Amended 1998  
Instructional Content to Target Audience  
Style of Presentation

A copy of the SGS report is included at Appendix 6.

SGS comments were very encouraging. We were concerned that our non-threatening style, which deals with the regulations late in the guidelines rather than at the beginning, may not be acceptable when judged against the template for industry guidelines published by Food Safety Victoria.

These fears were unfounded, indeed SGS commented on style "clear and appropriate for its target recipient. In a word, excellent".

SGS offered two comments as opportunities for further improvement. The first was to create a form for the qualifications and signature of the Food Safety Instructor – a central aspect of the Food Act. The second was to create a log of deviations and corrective actions which would enhance the validity of the entire program.

Both comments have been acted upon and in the final drafts the forms are included on the accompanying discs.

Additionally, Ellen Kitson, the Executive Officer, Food Safety Victoria, has formally endorsed the guidelines and provided that advice to the Chief Environmental Health Officers at all local government authorities.

The advice from Food Safety Victoria is included in Appendix 6.

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Whilst only in Victoria has the food safety legislation been enacted and timetables for implementation drawn up, ultimately all States and Territories will adopt by reference the Australia New Zealand Food Authority (ANZFA) standards.

These guidelines need to be available nationally and suitable for any seafood business. Despite a range of changes to content, description and numbering systems in the ANZFA proposals, the guidelines have been continuously updated and are consistent with the last published ANZFA Standards, dated January 1999.

From the national perspective, it was also important for the project to seek approval from ANZFA for the guidelines. An initial draft was given to Richard Souness at ANZFA in July 1998 and further drafts sent to Tony Johnson at ANZFA in November. Tony Johnson also attended the SeaQual Victoria meeting in February.

The verbal comments from Tony Johnson are supportive. He believes the guidelines incorporate all the requirements in the ANZFA proposals, but is unable to formally comment, as ANZFA have not yet determined how they will carry out the industry guideline assessment.

### **3.2 Translation for Non English Reading Proprietors**

The abandoned audio tape concept had the benefit of being easily translated into a number of languages and therefore of help to those in the industry with poor understanding of written English.

Conscious that the final guidelines and disc do not address the literacy problem, SeaQual Victoria co-opted Linda Wyse (Linda Wyse & Associates), a training consultant to the committee.

Linda has been investigating funding for translation of key parts of the guidelines from the 'WELL' program (Workplace Education Language and Literacy). At this time there is no agreement for funding, but Linda is hopeful of obtaining a grant. This will be pursued by SeaQual Victoria.

### **3.3 Trout Processors**

Following the conference at the International Seafood Fare in Geelong, we were asked by the Marine and Freshwater Resources Institute at Snob's Creek, Lake Eildon, to participate in a workshop for trout farmers and processors. The workshop was attended by 25 industry members and addressed by Food Safety Victoria, the local Shire Environmental Health Officer and ourselves.

The response to the workshop was encouraging and nearly all the material in the guidelines was relevant to the trout industry.

One feature of the industry is the number of small trout farmers who also have facilities for hot smoking of trout or manufacturing pates. Both products would be considered high risk. A guide to food safety for hot smoked products would be a useful document.

## **4. Framework for Retail Accreditation**

For most seafood processing and retailing operations there are few 'critical control points'. Attention to Good Hygiene Practice and trained staff should ensure minimum food safety risks.

The SeaQual Victoria committee believed that there was an opportunity to mitigate the cost of food safety programs by incorporating customer quality parameters into a total quality system for retailers which would add value to their businesses.

This concept was explored at the June workshop, where a number of participants expressed the concern that many retailers may choose to do very little about food safety and still 'pass the test', whereas those who had taken the issue seriously may have committed considerable funds in training and implementation, yet were unable to obtain a business benefit.

A SeaQual certification which had an independent review of the food safety system, but incorporated seafood quality, premises/staff appearance and customer service, was seen to have merit provided costs could be kept low.

Prior to completion of the guidelines, a discussion paper on the certification system was circulated for debate at the SeaQual Victoria workshop on 1<sup>st</sup> March 1999.

Discussion at the workshop supported the general concept. The consumer representative was convinced that a customer focussed scheme was essential for the future of seafood retailing operations. Modifications to the discussion paper have been included in the 'model' that follows

### **Retail Accreditation; SeaQual Certification**

Food Safety auditing of retail seafood premises will be a reality by the end of 1999 in Victoria and within two years on a national basis.

Any specific seafood certification scheme operating in addition to, or replacing, the local authority audit must have

*"A perceived benefit which outweighs the cost of implementation and maintenance".*

Cost will include the actual membership costs and the internal costs to the business.

For the purpose of this paper the 'SeaQual Certification' is assumed to operate in addition to any Local Authority or third party approval and independent audit. There are two reasons for this.

1. The costs for approval of food safety plans/audit may already be included in premises registration fees, or available at reduced fees initially.
2. The mechanism for approval of third party auditors and their necessary qualifications are not well defined. It is advisable to avoid any legal competency issues at the outset.

Incorporating the food safety audit into the certification at a later date is a logical evolution of the scheme, especially since auditors who understand the retail seafood business can add value through suggestions for improvement.

(N.B. Once SeaQual Australia has established standards with JASANZ the SeaQual certification must include the food safety audit against those agreed standards)

#### **Requirements for SeaQual Certification**

1. A food safety program audited and approved by the Local Authority or a third party.
2. Staff trained in seafood handling, inspection, presentation and serving.  
Seafood Training Australia competency standards will provide the benchmark.
3. Staff with sufficient knowledge to assist customers in the selection of seafood and in home preparation.
4. All seafood accurately labelled, maintained at the appropriate temperature and protected from contamination.
5. All raw seafood to have a minimum two days in home shelf life if maintained under chill conditions by the customer. This requires involvement at the catch/wholesaler.
6. Premises to be maintained in a hygienic condition at all times; staff trained in and applying appropriate hygiene standards.
7. Businesses to keep records of all customer comments regarding quality and service, together with the response.
8. Purchasing records to be kept to enable product trace, should the need arise.

## Audits

Audits to verify compliance with the SeaQual Certification would be as follows:

Internal audit	Detailed check of all requirements, max 3 hrs.
First 6 mth audit	Review of compliance; check on use of logos & promotional material, 2 hrs.
12 mth audit	Review of compliance, 1-2 hrs
24 mth audit	Review of compliance, 1-2 hrs
36 mth certification review	Detailed check of all requirements, max 3 hrs
Next audits 48 mths, 60 mths, 72 mths, etc. with detailed check every 3 yrs.	

The audits would be independent, carried out by an organisation contracted for the purpose. Auditors would need to be seafood specialists, but the audit would take the form of a premises inspection and questioning against a check list based on the requirements. A pass against all criteria would be required for certification, with any necessary follow up audit charged separately.

Auditors would be encouraged to offer suggestions for improvements to the businesses.

The customers are ultimately the judges of 'quality' performance. A notice to be displayed with the certificate would encourage customers to comment directly to the business regarding quality and service or to ring a '1300' number. Queries on the 1300 number would be referred back to the store for action.

## System Management

Standards would be agreed nationally and it is envisaged that a central administration would maintain registrations and determine audit fees with the independent auditors. The central administration would handle any problems, receive any communications from the public regarding quality or service and be responsible for negotiation of discounts, special offers, etc. to members as an offset to their fees.

Promotion of the scheme, choice of logos, special events, etc. would be the responsibility of the State committees. States may choose to incorporate the certification into their existing operations, thus using a Westfish quality logo or Tasmanian Quality Assured, rather than the SeaQual logo, but the cost benefits are maximised with a single national program.

For the scheme to be successful, administration costs must be minimised. The clerical functions of the central administration would be put to tender, whilst the Systems Manager would be paid on a salary and incentives basis designed to encourage the introduction of new members and the negotiation of discounts, offers, etc. to members.

The '1300' number referred to previously could be used as a promotion, encouraging the public to contact for information on seafood, recipes, etc. and feeding back to them the address of the nearest approved retailer.

### Membership Fees

The scheme can only be successful with a large number of participants (300-500). These are needed both for the credibility of the certification and to cover the fixed costs of operation.

To encourage participation fees would need to be kept low, perhaps a \$500 joining fee and \$100 per month (direct debit) ongoing. This would result in \$1,700 the first year to cover the extra certification and first compliance audit, then \$1,500 for each subsequent year.

An Extra \$500 per year may be required if/when the scheme also incorporates the food safety audit.

A breakdown of the fee might be :

	1 <sup>st</sup> Year	2 <sup>nd</sup> Year & On
Audit Costs	\$750 (5 hrs)	\$450 (3 hrs ave)
Certificates/Logos	\$200	\$50
Registration Fees	\$150	\$100
Customer Query Line	\$50	\$50
Promotional Material	\$200	\$200
System Manager	\$150	\$150
Other Expenses	\$50	\$50
Repay Debt/Interest on Loan	\$150	\$150



These include both the variable costs e.g. audits/logos/registration fees and the fixed costs of managers, maintenance of customer query line, etc.

Start up debt of \$100,000 would increase to \$200,000 over the first two years assuming membership of 100 at the end of Year 1 and 300 by the end of Year 2. At this point debt is starting to be repaid, but the scheme can only be financially independent with a membership of at least 400, preferably 500.

## **Benefits**

Three areas of benefit would be targeted for promotion

- Customer numbers
- Business improvement
- Cost savings

Increased confidence in seafood safety (a prerequisite), quality, species identity, etc. by customers can be measured by increased turnover. Even a small retailer, with an annual turnover of \$200,000 at a gross margin of 30%, only needs a 2% increase in turnover to cover the annual fee.

Any business costs incurred in meeting the standard for certification, e.g. training, record keeping, will be outweighed by efficiencies in operation. Advice from auditors, information from membership mail-outs and other sources will all aid business improvement.

Membership should enable costs savings on a range of business expenses, including insurance, training, chemicals, packaging and equipment purchase, refrigeration maintenance, etc, together with personal benefits, such as travel, accommodation, even car and electrical purchases.

## **Comparison with the Meat Retailer 'Q' Award**

The 'Q' Award is administered by the National Meat Association (NMA).

Annual fees are \$1,935 for NMA members and \$2,350 for non-members.

The fee includes a food safety plan, updates, food hygiene training through Barton TAFE and auditing twice per year. Also included in the fee are 'Q' award merchandise (caps and aprons) and marketing/promotion of 'Q' Award retailers.

Alternatively, the NMA offers a food safety plan for \$750 (members) or \$1,100 (non-members). This includes updates, hygiene training and two audits per year.

An important distinction in Victoria is that meat retailers are governed not by local councils, but by the Victorian Meat Authority (VMA). SGS provide independent auditors to the VMA and 'Q' Award.

## **The U.K. Sea Fish Industry Quality Award**

A QA assessment (2 hrs +), discussion of findings and report leading to an 'award' which is valid for one year.

The assessment covers raw materials, processes, premises, hygiene, staff skills, management systems, product care and quality, packaging.

There is a one-off fee of about \$200.

The indicative costings clearly demonstrate that the low cost system necessary to encourage participation by retailers can only be achieved by having a large number of companies taking up certification. It also requires an initial injection of funds from a grant or commercial loan.

---

The approval by the FRDC Board of SeaQual Australia and its key objective of developing a JASANZ (Joint Accreditation System of Australia and New Zealand) approved accreditation system for National Seafood Industry Standards clearly put the responsibility for furthering the certification process with SeaQual Australia.

SeaQual Victoria is keen to work with SeaQual Australia in refining the model and testing it's practical application, but it would have been unnecessary duplication for the committee to pursue the model further as part of this project.

Appendix 8 provides an outline of the process for agreeing seafood quality and safety standards and the responsibilities of the various organisations involved.

A key component is the preparation of standards to comply with prescribed JASANZ policy (2/99), the development of an audit standard and the endorsement by Standards Australia.

## Appendix 1

### Examples of Seafood Quality & Safety Workshop Papers

- Sector 3 – Purchase, Processing & Distribution of Frozen Fish

- Final Hazard Analysis Tables from all Four Sectors

Catch to Distribution

Receival and Wholesale

Purchase, Processing and Distribution

Purchase, Storage and Retail

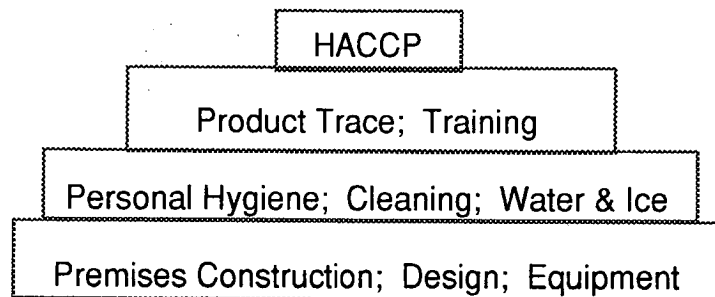
## SEAFOOD QUALITY & SAFETY WORKSHOP 29 JUNE 1998

### Sector 3 - Purchase, Processing & Distribution of Fresh Fish

In this sector the focus is on an intermediate processing eg filleting of fish, shucking of oysters, where fish is "value added" before distributing to retailers or restaurants. Processors may also be wholesalers.

The hazard analysis and critical control point (HACCP) technique, originally developed to ensure 'safe' food for astronauts, is a tool to help analyse food safety risks (hazards) and identify appropriate controls. It can also be used for quality and regulatory controls.

Before HACCP can be introduced there must exist a solid foundation of **Good Manufacturing or Handling Practice (GMP)** :-



Thus hazard analysis assumes the processors premises are properly constructed, hygienic, use potable water and ice, have appropriate, easy to clean equipment and trained staff. Without these the technique may be ineffective

## Processing Premises Construction & Design

Some of the issues (\*) which relate to ensuring hygienic handling of quality fresh fish are as follows :-

*Do premises comply with these?*

For ease of cleaning and disinfection:-

- surfaces of walls, doors and floors impervious and use non toxic materials
- walls and doors are smooth
- floors constructed to allow drainage
- ceilings and overheads constructed to minimise build up of dirt, condensation and shedding of particles
- windows should have sloping ledges, removable fly screens
- joints between floors and walls should be constructed for ease of cleaning

To minimise contamination:-

- all surfaces in fish handling areas should be non toxic, smooth, impervious to minimise build up of contamination with slime, blood, scales, etc.
- prevent the entry of birds, insects, pests, animals and vermin
- drainage should be adequate for volume of water
- lights should be protected to prevent contamination by glass
- adequate facilities for washing and disinfecting
- adequate hand washing and toilet facilities should be available
- an ample supply of cold and hot potable water under adequate pressure
- separate facilities to segregate packaging materials, offal and waste, chemicals

To minimise spoilage

- the premises should be designed for quick and efficient processing of fish
- suitable and adequate facilities for storage and for production of ice
- refrigeration and cold storage systems should provide adequate cooling and freezing capacities

To provide adequate lighting

- on all work surfaces

(\*) Source - draft recommended International Code of Practice for Fish and Fishing Products - Codex

## **Equipment & Utensils**

This relates to any specific equipment, containers or tools (knives, etc.) which come into contact with the fish.

Essential requirements are the same as for fish contact surfaces - corrosion resistant, easy to clean, avoid dirt traps.

Containers should be sound, clean and "fit for purpose".

*Are there separate containers for waste and offal?*

## **Hygiene Control**

The level of hygiene control will be dependent upon the operation, with only basic control necessary for whole fish, a higher level for heading/gutting and highest for filleting, shucking of oysters.

*Do you have cleaning programs; are detergents used?*

*If facilities are shared with other users eg toilets, how are these cleaned?*

*Are staff trained in cleaning, is cleaning supervised?*

Note : Supervision should cover all hygiene related issues, eg prevention of waste build up; protecting fish from contamination; monitoring personal hygiene habits; vermin control; monitoring quality of ice supplies, etc.

## **Personal Hygiene & Health**

Adequate toilet, washing and change facilities for staff are covered under design.

For people :-

"No person who is known to be suffering from, or who is a carrier of any communicable disease or has an infected wound or open lesion should be engaged in the preparation, handling or transporting of fish and fish products."

Everyone should maintain a high degree of personal cleanliness and should take all necessary precautions to prevent contamination of fish.

*How well are personal hygiene standards maintained? Is eating or drinking allowed near fish; is there a policy on protective clothing?*

## **Traceability & Recall**

Contaminated peanuts (Kraft) and contaminated oysters (Wallis Lakes) have highlighted not only the problems with trace back of product, but also

that product considered of low risk (peanuts) can be involved. Since no process is fail safe, traceability is essential.

Identification of fish or shellfish may be maintained by tags whilst in whole form, but once filleted or shucked could be lost.

Elements for a product trace and recall system are :-

- Each container of fish marked identifying the fish, supplier and date of catch or landing or harvesting
- Records kept and easily available stating quantity of fish, when and where sent, relating back to above
- Facilities available to hold and keep separate any recalled or suspect fish

Issues for consideration are :-

*Do records exist for all fish purchased and sold; is it all clearly identified when distributed? If not - how hard would it be to introduce a system and would some fish still be unaccounted for?*

### **Training**

This is fundamental. All staff should be aware of their responsibility in protecting fish from contamination and deterioration. They should have the necessary knowledge to handle fish appropriately, eg speed and technique of filleting fish and be provided with instruction in safe handling of chemicals, etc.

### **Identification of Safety Risks - HACCP**

Despite the rather off putting name, the hazard analysis technique is good because it is logical and thorough. This workshop is not a training program in the technique, more a demonstration of the end results. Do these make sense, are they correct and are any steps or hazards missed?

The first stage in HACCP is to prepare a 'process flow' identifying all the steps in the process and for each step any 'safety' hazards that could conceivably occur. Safety hazards might be bacteria, chemicals or physical contamination.

## Process Flow - Purchase, Processing & Distribution of Fresh Fish

<u>Step</u>	<u>Potential Hazard</u>
Purchase of fish	Contaminated fish or shellfish Deterioration - warm fish/no ice Unsafe fish (*)
Filleting fish Shucking oysters	Contamination - people; dirty water/surface Deterioration - time out of chill Damage
Packing & Storage	Contamination, Deterioration (temp control)
Distribution to customers	Deterioration (insufficient ice for journey vehicle not refrigerated) Contamination

(\*) Unsafe fish - even freshly caught fish from uncontaminated waters may be unsafe.

Examples are :-

### Biological safety hazards

Parasites eg nematodes	not a problem unless fish eaten raw or undercooked
Biological toxins eg ciguatoxin	warm water, reef fish - is not destroyed by cooking
scrombrotoxin	histamine in tuna, mackerel - poor chilling
Pathogenic bacteria eg vibrio	warm water - rapid chilling & cooking prevent
clostridia, listeria	not found in the flesh, contamination from skin, gut, gills. Fish usually spoil before becoming toxic

### Chemical safety hazards

Heavy metals eg mercury other metals	high levels in shark, ling, predatory fish contamination from industrial waste, sewage, etc.
---	---



N.B. Additional pathogenic bacteria, viruses, biotoxins and other heavy metals may be found in molluscan shellfish

## Hazard Analysis Table

For all safety hazards and any relevant quality hazards **controls** must be identified, the methods of control (**monitoring procedures**) determined, any limits set (**target/tolerance**) and **corrective action** (what to do when the controls fail) described. This is put together in a hazard table, which might be :-

<u>Step</u>	<u>Hazards</u>	<u>Control Points</u>	<u>Monitoring Procedure</u>	<u>Target/Tolerance</u>	<u>Corrective Action</u>
1. Purchase of fish	Contamination Deterioration Unsafe fish	Visual inspection Records	Purchaser inspects fish condition, ice levels on fish; ensures fish properly identified and all shellfish control details complete	Fish in sound condition, plenty of clean ice in clean bin. All fish traceable to source. All shellfish tags complete, including lease identification, depuration (if reqd)	Rejects for purchase any fish/molluscan shellfish not meeting the standards or not properly identified
2. Filleting of fish Shucking oysters	Contamination Deterioration Drainage	Visual Time/temp	Operators thoroughly wash fish/oysters in cool running water before preparing, checks filleting/shucking table clean before use. Operator inspects fillets and oysters before passing removes all waste into waste bins washes fillets. Monitors time out of chilling	All equipment sanitised before use; all water potable, less than 20°C. Damaged, contaminated fish removed; final product meets company specifications for appearance. Fish/shellfish out of chill max 1 hr	Damaged etc fish discarded, product not meeting specifications rejected for sale, any long standing fish sold for same day consumption.
3. Packing & storage	Contamination Deterioration	Visual Time/temp	Packers select fillets, weigh (*) layer into lined cartons, label and store in chiller or pack in ice awaiting distribution. Shucked oysters are counted (*) into cartons with interleaves & returned to chill storage	Only sound fillets & oysters packed; chiller storage less than 5°C for fish; 3-8°C for oyster, all ice clean and made from potable water, fish/shellfish chilled immediately after packing	Reject any defective fillets or oysters; report any chiller malfunction & ice fish if necessary. Reject any fish contaminated during packing
4. Sale to customers	Contamination Deterioration	Visual Time/temp	Staff monitors customers to ensure they do not contaminate or damage fish, & monitors time out of ice for any displayed fish	Minimum handling, no eating, drinking, smoking. Fish re-iced target within 1 hr. max 2 hrs	Reject any contaminated or long displayed fish
5. Distribute to customers	Contamination Deterioration	Visual Temp	Supervisor checks transport vehicle condition & if not refrigerated checks sufficient ice on fish for length of journey	Only enclosed, clean vehicles used. If no refrigeration extra bin of ice placed above fish to hold temperature (local del. only)	Rejects unsuitable vehicle

(\*) Note: Weight control and count accuracy are not safety or hygiene issues, but are critical cost controls

Questions from the hazard analysis table are :-

*Is it correct? If not, what are the errors?*

*What difficulties could you see implementing the "corrective actions"?*

*What other processes should be considered for complete coverage?*

*What records could be kept to prove that the procedure has been followed?*

-----

Your customers - retailers, restaurants will have to introduce safety plans and they will be required to know the origin and safety/wholesomeness of the fish they buy.

*What information do you keep? Can fish be traced back from the customer through to the supplier?*

*Do you rate fish for visual quality on receipt and does this influence the price?*

*Could a quality guarantee (based on your inspections of fish on purchase and control of your operation) distance you from competitors and result in better prices for your fish?*

*If you think developing a safety and quality plan for the processor/wholesale sector is worthwhile, what should be in the workbooks and guidelines, what should be the content of an audio tape, what type/duration of training programs would work?*

## Hazard Analysis Table Sector 1 Catch to Distribution of fresh fish.

For all safety hazards and any relevant quality hazards **controls** must be identified, the methods of control (**monitoring procedures**) determined, any limits set (**target/tolerance**) and **corrective action** (what to do when the controls fail) described. This is put together in a hazard table, which might be :-

<u>Step</u>	<u>Hazards</u>	<u>Control Points</u>	<u>Monitoring Procedure</u>	<u>Target/Tolerance</u>	<u>Corrective Action</u>
1. Trawl	Contaminated water Deterioration of fish	Location  Trawl time	Skipper ensures trawl carried out in approved zone & monitors trawl time	No tolerance approved zone. Trawl time max 2 hrs (?)	Hold or dump any fish caught in wrong place. Inspect all fish after long trawl.
2. Land/Sort	Unsafe fish Contamination Spoilage	Visual inspection Time	Crew sorts fish immediately on landing; monitoring time	All by catch or unacceptable fish (e.g large shark) returned to sea, sort completed within 1/2 hr	Fish shaded if sort extended
3. Gut/wash	Contamination	Visual	Crew guts & cleans using plenty of sea water, guts separated from fish	No adhering gut, fresh clean fish; meets quality standard?	Regut/clean as required
4. Box weigh & ice	Contamination Deterioration	Visual Time/temp	Crew immediately fills clean bin with fish to set weight(*), tops with plenty of ice flakes	No delay after gutting before icing sufficient ice to cool fish & retain for storage. Ice made from potable water, flakes not chunks	Hold for assessment any long standing fish or insufficiently iced bins
5. Store & return	Deterioration Contamination	Time Visual	Crew loads bins in hold marked with catch & date	Fish landed within 5 days of catch; boxes well iced, not stacked on each other	Long standing fish inspected on arrival for suitability, contaminated ice rejected.
6. Unload, re-ice, load transport	Contamination	Visual	Crew unloads fish & re-ices before loading truck. Skipper checks all tickets attached	Ensures no contamination & only potable ice used	Reject any contaminated. Re ticket if lost
7. Distribute	Deterioration Contamination	Time/temp Visual	Supervisor checks truck condition refrigeration operating before loading	Clean, enclosed truck, refrig. operating below 5°C	Reject truck if not suitable

(\*) Note: Weight control is not a safety or hygiene issue, but is a critical cost control

## Hazard Analysis Table Sector 2 Receival and Wholesale

For all safety hazards and any relevant quality hazards **controls** must be identified, the methods of control (**monitoring procedures**) determined, any limits set (**target/tolerance**) and **corrective action** (what to do when the controls fail) described. This is put together in a hazard table, which might be :-

<u>Step</u>	<u>Hazards</u>	<u>Control Points</u>	<u>Monitoring Procedure</u>	<u>Target/Tolerance</u>	<u>Corrective Action</u>
1. Receival of fresh fish	Contamination Deterioration Unsafe fish	Visual inspection Records	Supervisor inspects truck condition, ice levels on fish, condition of fish, identification tags before accepting	Truck sound, no contamination, fish well iced in good condition. All fish identified to source. All shellfish tags complete including lease identification, depuration (if applicable) etc.	Rejects any fish or shellfish not meeting the standards or not properly identified
2. Check weigh, sort and re-ice	Contamination Deterioration Damage	Visual Time/temp	Staff randomly check weigh fish to confirm weights (*), repack with fresh ice flakes taking care not to crush fish. Tops up other bins with ice as required	No fish out of ice longer than 1 hr. Ice made from potable water, flakes not chunks, clean bins & surfaces	Keep separate any long standing fish for staff sale. Reject any contaminated fish or ice
3. Storage	Contamination Deterioration	Visual Temp	Supervisor checks all fish not under refrigeration is iced; checks condition of chiller (records temperature) and fish	All fish covered with clean ice, not in contact with bottom of bin, chiller clean and temp below 5°C	Reject any contaminated fish or ice. If chiller temp above 5°C inform maintenance, check condition of fish & ice down to maintain temp.
4. Sale to customers	Contamination Deterioration	Visual Time/temp	Staff monitors customers to ensure they do not contaminate or damage fish, & monitors time out of ice for any displayed fish	Minimum handling, no eating, drinking, smoking. Fish re-iced target within 1 hr. max 2 hrs	Reject any contaminated or long displayed fish
5. Distribute to customers	Contamination Deterioration	Visual Temp	Supervisor checks transport vehicle condition & if not refrigerated checks sufficient ice on fish for length of journey	Only enclosed, clean vehicles used. If no refrigeration extra bin of ice placed above fish to hold temperature (local distribution only)	Rejects unsuitable vehicle

(\*) Note: Weight control is not a safety or hygiene issue, but is a critical cost control

## Hazard Analysis Table Sector 3 Purchase, Processing, and Sale

For all safety hazards and any relevant quality hazards **controls** must be identified, the methods of control (**monitoring procedures**) determined, any limits set (**target/tolerance**) and **corrective action** (what to do when the controls fail) described. This is put together in a hazard table, which might be :-

<u>Step</u>	<u>Hazards</u>	<u>Control Points</u>	<u>Monitoring Procedure</u>	<u>Target/Tolerance</u>	<u>Corrective Action</u>
1. Purchase of fish	Contamination Deterioration Unsafe fish	Visual inspection Records	Purchaser inspects fish condition, ice levels on fish; ensures fish properly identified and all shellfish control details complete	Fish in sound condition, plenty of clean ice in clean bin. All fish traceable to source. All shellfish tags complete, including lease identification, depuration(if reqd)	Rejects for purchase any fish/molluscan shellfish not meeting the standards or not properly identified
2. Filleting of fish Shucking oysters	Contamination Deterioration Drainage	Visual Time/temp	Operators thoroughly wash fish/oysters in cool running water before preparing, checks filleting/shucking table clean before use. Operator inspects fillets and oysters before passing removes all waste into waste bins washes fillets. Monitors time out of chilling	All equipment sanitised before use; all water potable, less than 20°C. Damaged, contaminated fish removed; final product meets company specifications for appearance. Fish/shellfish out of chill max 1 hr	Damaged etc fish discarded, product not meeting specifications rejected for sale, any long standing fish sold for same day consumption.
3. Packing & storage	Contamination Deterioration	Visual Time/temp	Packers select fillets, weigh (*) layer into lined cartons, label and store in chiller or pack in ice awaiting distribution. Shucked oysters are counted (*) into cartons with interleaves & returned to chill storage	Only sound fillets & oysters packed; chiller storage less than 5°C for fish; 3-8°C for oyster, all ice clean and made from potable water, fish/shellfish chilled immediately after packing	Reject any defective fillets or oysters; report any chiller malfunction & ice fish if necessary. Reject any fish contaminated during packing
4. Sale to customers	Contamination Deterioration	Visual Time/temp	Staff monitors customers to ensure they do not contaminate or damage fish, & monitors time out of ice for any displayed fish	Minimum handling, no eating, drinking, smoking. Fish re-iced target within 1 hr. max 2 hrs	Reject any contaminated or long displayed fish
5. Distribute to customers	Contamination Deterioration	Visual Temp	Supervisor checks transport vehicle condition & if not refrigerated checks sufficient ice on fish for length of journey	Only enclosed, clean vehicles used. If no refrigeration extra bin of ice placed above fish to hold temperature (local del. only)	Rejects unsuitable vehicle

(\*) Note: Weight control and count accuracy are not safety or hygiene issues, but are critical cost controls

## Hazard Analysis Table Sector 4 Purchase, Storage and Retail Sale.

For all safety hazards and any relevant quality hazards **controls** must be identified, the methods of control (**monitoring procedures**) determined, any limits set (**target/tolerance**) and **corrective action** (what to do when the controls fail) described. This is put together in a hazard table, which might be :-

<u>Step</u>	<u>Hazards</u>	<u>Control Points</u>	<u>Monitoring Procedure</u>	<u>Target/Tolerance</u>	<u>Corrective Action</u>
1. Purchase/Receival of fish/shellfish	Contamination Deterioration Unsafe fish	Visual Temp Records	Fish purchased only from reputable suppliers who provide documentation. Supervisor checks visual quality and temp of fish on arrival records on invoice	All trace documentation provided with guarantee of quality/safety. Fish appearance meets agreed quality standards & temp below 5°C	Reject if documentation incomplete, fish does not meet specs or temp exceeded
2. Storage prior to display	Contamination Deterioration Damage	Visual Time/temp	Supervisor stacks fish in chiller in appropriate place, date codes & monitors chiller temp	Ready to eat separate from and above raw. New stock behind old - all date coded fish not stacked on each other, temp below 5°C	If risk of contamination of ready to eat - reject. Reject any undated fish. Ice down fish if temp exceeded, sell today & if not sold discard
3. Display for sale	Contamination Deterioration	Visual Temp	Staff lays out fish on clean trays, ready to eat separate from raw, fish iced with flake ice or chiller plate. Temperature recorded	Single layer of fish per tray or totally covered by ice; chiller temp & fish temp below 5°C. Preferably separate tray style & compartment for ready to eat	If any cross contamination reject fish. If temp rises above 5°C for less than 2 hrs sell today only. If above 10°C for more than 2 hrs reject
4. Return to storage/display next day	Deterioration Contamination	Visual Time/temp	Fish returned to chiller & labelled with original codes, supervisor checks freshness before displaying next day	Trace of fish through date codes retained; fish still meets quality standards before display again, other conditions as 2 above	Reject if not suitable for sale
5. Customer sale and storage prior to consumption	Contamination (at sale) Deterioration/ unsafe use	Visual Temp/time	Staff weighs (*) & packs fish without handling using tongs and clean wraps. Staff provides information to customer on storage & use	Separate tongs used for raw/ready to eat. Fish do not touch scale or surfaces Information leaflets available	If wrong tongs used reject fish and reweigh. Clean scale if fish contamination Prepare information sheets as hand outs to customers

(\*) Note: Weight control is not a safety or hygiene issue, but is a critical cost control

## Appendices 2 – 5

Attachments to this Report.



## Appendix 6

- SGS Report on Retail Guidelines to Food Safety Victoria
- Food Safety Victoria Endorsement

CONFIDENTIAL

**DOCUMENTATION REVIEW REPORT**

OF

**GENERIC TEMPLATE**

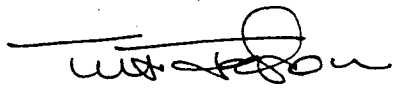
**RETAIL SEAFOOD**

*Food Safety Program*

TO

**Food Act 1984 Amended 1998**





Approved By

Date

21/2/99



**Melbourne**  
Waverley Business Centre  
Aristoc Road  
PO Box 47  
GLEN WAVERLEY VIC 3150

21 February, 1999

Tel: (61-3) 9550.1865  
Fax: (61-3) 9560.3008

MS. Ellen Kitson  
Manager.  
FOOD SAFETY VICTORIA  
120 Spencer Street  
Melbourne  
Vic 3000

**FOOD SAFETY PROGRAM  
DOCUMENTATION REVIEW**

Dear Ellen,

Please find enclosed our Documentation Review Reports based on the following criteria:

- *Food Safety Act 1984 Amended 1998*
- *Instructional Content to Target Audience*
- *Style of presentation.*

If you require any further clarification, please do not hesitate to contact me at ☎ 9550 1865 or mobile 0418 52 52 92

Yours sincerely,  
SGS INTERNATIONAL CERTIFICATION SERVICES PTY LTD

  
Tom Johnson  
Senior Food Safety Auditor



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DRR05

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## INTRODUCTION

### SCOPE

Review of the documentation provided as a template for recipients to use to

- (i) create their own Food Safety Program documentation for submitting to the registration authority,
- (ii) have an understanding of the responsibilities under the Act of the Proprietor and also if another person the Food Safety Instructor.

This Documentation Review was conducted at our Organisation's premises in Glen Waverley Victoria against the requirements of

1. FOOD ACT 1984 AMENDED 1998.
2. STYLE of PRESENTATION
3. INSTRUCTIONAL CONTENT

It is a complete review of the documented system provided by Food Safety Victoria.

- Food Safety System Guidelines Draft 3 d/d 1/2/99
- Food Safety Program Draft 2 d/d 1/2/99

### GENERAL COMMENTS

The documents developed for Retail Seafood is well constructed and provides a clear uncomplicated review of the issues involved in a Food Safety Program.

- The guidelines are logical and clear.
- The Food Safety Program Draft 2 provides further advice on what such a document will look like. The authors have had to make a choice between providing instruction and providing a well developed "typical retail FSP". They have chosen to support instruction rather than creating a template. The risk being that many templates may not consider all activities at individual sites, and users may simply copy the templates. Given that this assumption is correct then any inadequacies identified in the FSP are for this reason.



## APPLICABLE CLAUSES of the 1984 FOOD ACT Amended 1998

See attached checklist.

- 1 The Manual provides adequate instruction for an experienced Sea food retailer to use the guidelines to create their own program.
- 2 The guidelines address all aspects of the Act.  
Indeed this includes advising proprietors of their obligations in advising the registration authorities.

## INSTRUCTIONAL CONTENT

The document is intended as a Guidelines to be used by Managers of Retail Seafood outlets. The approach used is concise and simple. No "jargon" or overtly technical concepts are introduced. It should most adequately meet the needs of its intended market.

Comments intended as opportunities to further improve the documents include.

- Creating a form , that when completed by the Proprietor, for the qualifications of their Food Safety Instructor, will require them to sign that they are appropriate. Including if necessary the signature of the Instructor where this is not the Proprietor. This is a central aspect of the Act and by being proactive will avoid registration authorities the need to request where it is not already provided.
- Consider including a log of deviations and the corrective actions taken. By making provision for a record will enhance the validity of the entire program

## STYLE

Clear and appropriate for its target recipient. In a word, excellent.



This Checklist has been used for a

- Document Review Date: 19/2/99.
 Certification Audit Date: \_\_\_\_\_  
 Surveillance Audit Date: \_\_\_\_\_
  Other \_\_\_\_\_

Company Name: SEAFOOD INDUSTRY.

Address: C/O FOOD FACTORY. Report No: 99/05.

PRODUCT LINES

REQUIREMENTS OF THE ACT	Compliance			COMMENTS
	YES	NO	N/A	
<b>Food Act 1984: Amended as at 1998 REQUIREMENTS</b>				
<b>PART III A Cleanliness of Food Handlers</b>				
<b>19A Duty for Food Handlers to be clean and sanitary condition.</b>				
Does the program identify need to ensure any Food premises Food Vehicles or Food Vending machine must ensure ALL persons employed or engaged by the Proprietor to handle unpackaged food at those premises or vehicle or vending machine	✓			Procedure 6. FSP. Sec. 4. Guidelines. P. 9.
(a) keep themselves & clothing clean at all times ?	✓			
(b) all reasonable care not to render unfit whilst handling. ?				
(c) Don't handle when known or in all the particular circumstances ought reasonably to be known person is suffering from a condition liable to render unfit. ?	✓			
<b>PART III B</b>				
<b>19 D Food Safety Programs</b>				
Does the program identify need to provide Written Document that				
(a) systematically identifies and analyses the potential hazards involved in the activity that is conducted ?	✓			Proc. 13 p.s. 10, 15, 16. FSP. Sec 7. P. 17 - 25. inclusive.
(b) identifies where in each operation involved in the activity each hazard can be controlled. ?	✓			
(c) Provides systematic supervision and monitoring of the controls ?	✓			
(d) Specifies how a hazard that is found not to be under control is to be brought under control?	✓			
(e) Provides for making & keeping appropriate records to facilitate the audit of the program ?	✓			





Company Name: \_\_\_\_\_

Report No: \_\_\_\_\_

REQUIREMENTS OF THE ACT	Compliance			COMMENTS
	YES	NO	N/A	
(f) Provides for (i) training within specified times of all staff by a food safety instructor ensure skills & competencies in food hygiene appropriate for the work they are to do? (ii) mechanism to ensure skills & competencies maintained ?	✓			See. 8. Guidelines. p. 26 + 27 p. 24.
(g) Appropriate arrangements for the recall of food	✓			
<b>19 E Declared premises must have a program</b>				
(1) Does the Program identify that Proprietor must, (a) ensure food safety program and that program is adequate, ? having regard to nature of activities to be carried out.	✓			P 27 + 21
(a) ensure food safety program and that program is adequate, ? having regard to nature of activities to be carried out.	✓			p. 27
(h) comply with the program ?	✓			p. 27
(i) advise proprietor they must give registration authority a copy of any revisions within 14 days.?	✓			p. 27.
<b>DIVISION 2 Food Safety INSTRUCTORS</b>				
<b>19 G Food Safety Instructors</b>				
(1) Does the template Advise Proprietor the definition of Food Safety instructor ?	✓			p. 27
(a) specifically knows how to recognize, prevent and alleviate hazards with the handling of food ?	✓			p. 27.
(b) knows which food safety competencies apply ? how they apply ?	?			Definition on P. 27 very narrow? Why only relevant authorities? Why not include C. o. P. industry Standards - given R.S.J. etc.
(c) has the ability to train other people to safely handle food	✓			
<b>19 H Declared Premises must have nominated Food Safety Instructor.</b>				
(2) Proprietor must ensure no food sold unless (a) Written Notice	✓			p. 27
(i) Does the Program instruct that a Food Handling arrangement be made with respect to premises and be provided to the registration authority.?	✓			p. 27
(ii) And Instructs that the name and qualifications or experience of the Food Safety Instructor with whom the arrangement has been made and the period be written and also provided?	✓			p. 27.





Food Safety Programs CHECKLIST

Company Name: SEAT-007

Report No: 99/05

REQUIREMENTS OF THE ACT	Compliance			COMMENTS
	YES	NO	N/A	
Or (b)				See 8 Guidelines -
(i) If Proprietor is a Food Safety Instructor and will conduct training required by the program ?	✓			p. 27. "does not preclude..."
(ii) Provides details of Proprietors food safety instructor qualifications or experience.	✓			p. 27 detailing name + qualification + period of engagement.
(3) Advise that Proprietor must ensure that person who is to be food safety instructor has the necessary knowledge and ability to act as a food safety instructor. ?	✓			p. 27. Proprietor must ensure person necessary knowledge
(4) Sub section 2 does not apply until registered renewed or transferred.	-			
(5) When food handling arrangement ends Proprietor		x		implied. p. 27.
(a) ensures new arrangement within 14 days. (unless proprietor takes over and has knowledge & ability		b		"
(b) must give registration authority a written notice in form required within 28 days		x		"
<b>19 I Requirement to review and audit</b>				Guidelines.
(1) Proprietor must ensure. Food Safety Program reviewed regularly that it is still adequate, and at least annually.				Div. 2 p. 30
<b>19J Food Safety Program Audit</b>				Guidelines.
Does the program identify the need to arrange for audit using an approved Food Safety Auditor.				p. 24 + p. 30.





Company Name: SEAFOOD

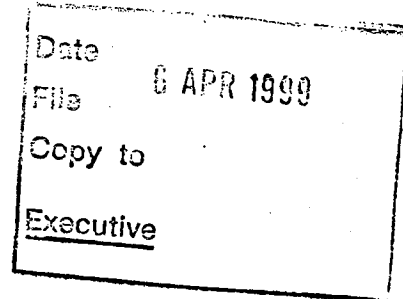
Report No: 99/05

REQUIREMENTS OF THE ACT	Compliance			COMMENTS
	YES	NO	N/A	
Records Identified by Program.				FSP.
1 Nominated Food Safety Instructor	✓	X		X
2 Qualifications of Instructor	✓	X		X
3 Staff Training Records	✓			Form A. FSP.
4 Scope of activities, products	✓			1. Policy.
5 Raw material records	✓			Form C
6 Process records	✓			Form C
7 Finished goods records	✓		✓	Form C. "Sign/Comments."
8 Internal supervisor review records	✓			
9 External audit reports		X		
<b>SUPPORT PROGRAMS Identified by the program</b>				
1 Cleaning Schedule				
Program identifies what when how often & by whom.	✓			Proc. 4. FSP. + Form B.
Reviewed pre operational check?	✓			" " Form B.
Records				
2 Premises Equipment Maintenance Program	✓			
Program identifies what when how often & by whom.				
Records				
3 Personal Hygiene Practices	✓			Proc 6. FSP.
Program identifies what when how often & by whom.	✓			Form A.
Records				Proc 5. FSP.
4 Vermin Control Program	✓			" 5 + → Form B.
Program identifies what when how often & by whom.	✓			
Records	✓			Form C
5 Calibration Program	✓			Form E
Program identifies what when how often & by whom.	✓			Form E.
Records				
6 Non conformance Program	✓			
Program identifies what when how often & by whom.				
Follow up action?		X		
Records		X		



1 April 1999

Mr Roy Palmer  
Chair SeaQual Victoria  
Care of Seafood Industry Victoria  
Level 2  
177 Toorak Road  
SOUTH YARRA VIC 3141



Dear Roy

**Retail Seafood Food Safety Program Template**

Please find attached a written advice on the assessment of your generic food safety program. You may wish to attach this advice to your food safety program template.

This advice has been forwarded to Chief Environmental Health Officers at all local government authorities for their information.

Yours sincerely

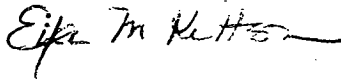


**Ellen M Kittson**  
Executive Officer  
Food Safety Victoria

**TO WHOM IT MAY CONCERN**

**Food Safety Program Template developed by Food Factotum for SeaQual and Seafood Industry Victoria for retail seafood businesses**

This food safety program template has been assessed by SGS Australia Pty Ltd at the request of Food Safety Victoria to determine its compliance with the requirements of the Food Act 1984 and its ease for audit purposes. It has been found to meet the Act's food safety program requirements and is suitable to be adapted by the individual business in the retail seafood sector in the preparation of its food safety program.

A handwritten signature in black ink, appearing to read "Ellen M Kittson".

**Ellen M Kittson**  
Executive Officer  
Food Safety Victoria

RECEIVED  
20/5/99



Ms Jayne Gallagher  
Manager  
SeaQual Australia  
Unit 1, Protech House  
6 Phipps Close  
DEAKIN ACT 2600

Macquarie House  
55 Blackall Street  
Barton ACT 2600  
Ph: 61 2 6271 2222

PO Box 7186  
Canberra MC ACT 2610  
Australia  
Fax: 61 2 6271 2261

Dear Jayne

I am writing to thank you for your circular letter of 13 May enclosing copies of the SeaQual Food Safety Guidelines.

While I have not at this stage read every word of the three booklets, I have had a pretty good look through them and am greatly impressed by the work of ASIC on this. They strike me as being very practical, clearly written and potentially of great help to your industry from the largest operators to the smallest throughout your sector's supply chain. It is critical that no one part of the supply chain fails to ensure the safety of the food it handles.

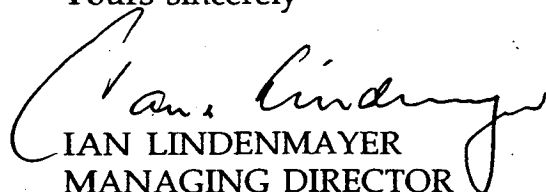
I will be circulating your booklets to my colleagues in the food safety area for their information.

I take this opportunity to again pay tribute to you and your colleagues for the excellent work you are doing in this area. Seafood businesses in Australia will have much to thank you for as they take on the task of complying with the new food safety standards. The practical guidance provided in these documents should save them considerable time, effort and money in ensuring that they comply. Of even greater importance, that guidance should help them to protect their reputation as suppliers of a safe, reliable products.

Again my congratulations.

With best wishes,

Yours sincerely

  
IAN LINDENMAYER  
MANAGING DIRECTOR  
18 MAY 1999

## Appendix 7

### Membership List Victoria

# SeaQual Victoria Members

<i>L Name</i>	<i>F Name</i>	<i>Company</i>
Allen	Arthur	(Fisherman)
Anassis	Jim	Richmond Oyster Supply
Antcliffe	Russell	Manager, Corporate Communications - Woolworths P/L
Baelde	Pascale	Sea Matters P/L
Bartaska	Kaz	Lonimar
Bell	Cate	K & C Fisheries
Beres	Michael	Bottom of the Harbour
Brockwell	Steven	(Fisherman)
Canals	Michael	CQ Seafood
Carter	Dorothy	(Consumer Representative)
Curtis	Alan	San Remo Fisherman's Cooperative
Dance	Barry	Southern Aquaculture P/L
Darton	Margaret	DNRE - Senior Project Officer
Davis	Tom	Lakes Entrance Fisherman's Cooperative
Dedman	Rod	The Food Group
Dinan	Shane	Safeway
Downie	Cheryl	VFITB
Elleway	Lisle	Arrow Fisheries P/L
Fragoulis	Nick	Poseidon Oysters and Seafoods
Gallagher	Jayne	SeaQual
Gambrellis	Chris	M & C Seafoods
Gates	Chad	Australian Retailers Association of Victoria
Geralis	Nick	Saltwater Seafoods
Gervis	Mark	Southern Ocean Mariculture
Gilbert	Jenny	Transport Training Australia
Gindidis	Chris	Electric Solutions
Glasbrenner	Fred	Australian Abalone Exports P/L
Gooley	Mark	Austrimi Seafoods
Goulas	Dimitrios	Conway Fisheries
Hai Xuong	Kenny	Hai Xuong Seafoods
Hand	Paul	PI&RSA - Aquaculture Group
Harris	David	Mussel Co Australia
Harrison	Ray	(Fisherman)
Hodge	Ross	Seafood Industry Victoria
How	Terry	Oceanic Food
Howard	Dawn	WRAPS ITB
Hunt	Rex	D'Lish Fish
Hutchings	Pat	(Fisherman)
Johnson	Tony	ANZFA - Project Manager, Food Safety Program
Jurie	Jason	Jim Jurie Fishmerchant
Katos	Phillip	A & S Katos & Sons
Kendall	Sallie	NSW Fisheries - Seafood Safety Liaison
Kerr	Janet	Office of Food Safety
Kivelos	Rod	Tom Kivelos Fisheries
Lake	Wendy	Restaurant and Catering Association of Vic
Lappas	Andria	Coles Myer P/L Quality Control Officer - Deli
Larkin	Brendan	MAFRI - Inland Aquaculture Extension Officer
Lee	Phillip	Meyers Strategy Group
Levings	Andrew	Levings Commercial Fisheries
Louey	Kevin	Dragonboat Restaurant Group

<i>L Name</i>	<i>F Name</i>	<i>Company</i>
Mantzaris	Steve	Mantzaris Fisheries P/L
Mason	Frank	Frank Mason & Associates
McCarthy	Pat	PFD Food Services
McLaughlin	Andrew	RF McLaughlin & Sons
Megas	Peter	Claringbold's Seafood P/L
Meggitt	Derrick	Gouldburn River Trout P/L
Meyers	John	Meyers Strategy Group
Mirabella	Tim	(Fisherman)
Miriklis	Nick	N.A.K. Seafood Processors
Monaghan	Jim	Melbourne Wholesale Fish Market
Nelson	David	VPITB
Newman	Chris	(Fisherman)
O'Brien	John	Central Gippsland Institute
Oughtred	Terry	Food Safety Victoria
Palmer	Roy	Fishy Business
Pappadopolous	Jim	Bi-Low Supermarkets
Parianos	Manuel	Planet Seafoods
Parsons	Mick	(Fisherman)
Pettersen	Rob	(Fisherman)
Philades	Peter	ANZ Fisheries
Podlena	John	Environmental Health Officer
Quinn	Peter	Montague Cold Storage
Riordan	Frank	Ian's Seafood
Roach	John	Master Fish Merchants Association
Rossack	Cliff	(Fisherman)
Sanzaro	Liz	Box Hill Institute of TAFE Centre for Hospitality
Sealey	John	(Fisherman)
Siderellis	Bill	Tim & Terry Wholesalers
Smith	John	Director - Environmental Health Officers
Soper	Barry	The Original Crumbing Co
Spencer	Trevor	Seafood Imports
Stafford	Vicki	Frionor Australia
Stevens	Richard	WAFIC
Tandy	Chris	Parkdale Seafoods
Tripatgis	Peter	Camberwell Market Seafoods
Valentine	Gayle	International Quality Systems P/L
Wallace	Greg	Sweetwater
Walsh	Phillip	Food Factotum
Warn	Lyn	FWD Abalone
Webster	Doug	Bay Seafoods
Wells	Ian	National Seafood Centre
Wong	Susie	The Fish Pier
Wood	Robert	Narangi & Alpine Trout
Wyse	Linda	Linda Wyse & Associates

## Appendix 8 Seafood Standards and Accreditation

