

ABC Prawn Trawlers Pty Ltd



**11 King Road
Tiger Bay
Queensland 4990**

Food Quality & Safety Program

Index

Date of Issue 01.11.00

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Appendix Forms

Contains blank copies of all the forms included in the dummy food safety and quality program

Note:

This disc has been prepared to assist the sea caught prawn industry implement a quality and food safety system. The intent is to provide examples of the detail required and blank forms for completion by individual operators or companies. It should be completed by reference to Part 4 Guidelines for complying with the Prawn Industry Quality Standard. Explanations, such as this note, are written in italics.

ABC Prawn Trawlers Pty Ltd	Date:
1. Commitment and Authorisation	01.11.00

An example is given below. A commitment to the supply of quality safe prawns by setting up and maintaining a Food Quality and Safety Program is essential to meet the requirements of the Prawn Industry Quality Standard. Authorised signatories are required by AQIS

ABC Prawn Trawlers aim to provide customers with prawns of a consistent high quality. To help us achieve this we have adopted the Australian Sea Caught Prawn Industry Quality Standard. My fellow directors/managers and I are committed to maintaining this Food Safety and Quality Program in all our operations.

This program applies to the catching, handling and storage of prawns on the vessels

**ABC Premium
ABC First
ABC Excellence**

The documentation is updated as required. It is an agenda item for our AGM, and (at least) annually reviewed. Changes require approval by the Managing Director.

Signed :_____John Wilson

Title:_____Managing Director

Date:_____01.05.00

The following are authorised to approve product for shipment:

Ben Jones	Ben Jones	Skipper	ABC Premium
Stan Brown	Stan Brown	Skipper	ABC First
Peter Elton	Peter Elton	Skipper	ABC Excellence

<p>ABC Prawn Trawlers Pty Ltd</p> <p>2. Crew Responsibilities & Training</p>	<p>Date:</p> <p>01.11.00</p>
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ABC Prawn Trawlers Pty Ltd believe that the safety and effectiveness of crews at sea can only be ensured by having clear assigned responsibilities for each crew member and a thorough ongoing training program for all crew, as detailed below.

Responsibilities

Skipper / Engineer

- Safety of the crew and vessel at all times is a primary responsibility.
- Must ensure all crew are trained in safety, quality and hygiene practices.
- Is responsible for determining optimum trawl times with regard to both quality and efficiency.
- Must ensure transfer certificates are prepared and records complete before unloading product.
- Must ensure efficient running of the engines, freezers and all mechanical equipment.
- Is responsible for recording information in log books regarding trawl locations quantities of catch, freezer temperatures etc.

Mate / Leading Hand

- Is responsible for safety on the back deck, particularly during landing of product and deploying nets.
- Must ensure the quality of product, including grading, sorting, packing and freezing.
- Must inform the skipper of any issues affecting safety of crew or quality of product.
- Is responsible for ensuring all deck crew follow hygiene procedures.

Deck Crew

- Must follow all safety procedures. Are responsible for their own safety and must not endanger the safety of other crew.
- Must be aware of and comply with all hygiene requirements regarding processing of product.
- Are responsible for grading, sorting, weighing, packing and freezing of product.
- Must inform the mate/leading hand of any problems meeting hygiene, quality, or safety standards.

Training

Training is primarily carried out using demonstration by the trainer and by observing the trainee carry out the task on a number of occasions. Some tasks require the trainee to learn instructions and these are checked by verbal test. Topics are:

- Induction – introduction to the company/ operation;
- Safety on board – basic rules, specific requirements;
- Personal Hygiene, Cleaning – list of requirements;
- Protective and safety clothing - provision and use;
- Specific training instructions for various tasks;
- Administration – pay, problems, sickness etc.

ABC Premium						
<u>Staff Training Check List</u>						
Date of issue __01.05.00						
Staff ⇒ Task ↓	John. M		Mary .T		Tony. W	
Induction	<i>jm</i> 10/8	BJ 10/8 BJ5/9*	<i>mt</i> 5/9	BJ 5/9		
Safety on Board	<i>jm</i> 10/8	BJ 10/8	<i>mt</i> 5/9	BJ 5/9		
Personal Hygiene	<i>jm</i> 11/8	BJ 11/8	<i>mt</i> 5/9	BJ 5/9		
Safety/Protective Clothing	<i>jm</i> 10/8	BJ 10/8	<i>mt</i> 5/9	BJ 5/9		
Administration	<i>jm</i> 10/8	BJ 10/8	<i>mt</i> 5/9	BJ 5/9		
Cleaning Methods	<i>jm</i> 11/8	BJ 11/8				
Net handling and repair	<i>jm</i> 12/8	BJ 12/8				
Prawn sorting	<i>jm</i> 12/8	BJ 12/8				
Prawn grading/packing	<i>jm</i> 13/8	BJ 13/8				
Weighing/carton markings	<i>jm</i> 15/8	BJ 15/8				
Freezer operations	<i>jm</i> 17/8	BJ 17/8				
Cooking Prawns	<i>jm</i> 19/8	BJ 19/8				
Trainer and crew to sign and date when each task completed. Trainer to carry out refresher training as required and update check list(*)						

ABC Prawn Trawlers Pty Ltd 3. Cleaning & Personal Hygiene	Date: 01.11.00
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All vessels are registered for export. Design of the trawlers has included attempts to minimise risk to product by eliminating dirt traps, avoiding sharp corners and using stainless steel wherever practical and affordable.

A cleaning schedule has been prepared to identify the cleaning tasks, methods and assign responsibilities. Cleaning is supervised and checked by the mate on each vessel.

ABC Premium Cleaning Schedule		
Date of Issue 01.05.00		
Task/Method	Frequency	Responsibility
<u>Amenities</u> - Toilets/Shower/Hand basins, etc. Check soap, brushes, paper and general cleanliness, rinse if necessary Spray and wipe all surfaces with 'Chemical X' solution, scrub toilets with neat 'toilet aid', mop floors with 'toilet aid' diluted 1 cap per bucket <u>hot</u> water	Daily	John M
	Weekly	John M
<u>Operational Areas</u> <u>Deck/Sorting</u> Hose down deck and tables prior to unloading catch; rinse again between shots; hose at end of day.	Daily	Mary T
Spray tables with detergent/sanitiser solution 'Chemical Y' diluted 1 cap per bucket. Leave 10 minutes, rinse off	2x per week	Mary T
	-	-
<u>Baskets</u>	-	-
<u>Carton Store</u>	-	-
<u>Blast Freezer</u>	-	-
<u>etc. etc.</u>		

The enforcement of Personal Hygiene Standards is also important in ensuring the quality and particularly the microbiological safety of prawns. The hygiene standards given below are reprinted as reminder notices laminated and fixed near the toilets and the deck area.

ABC Premium

Personal Hygiene Standards

Date of issue 01.05.00

-
- **Hands must be washed after going to the toilet or returning to the process area after a break.**
 - **When handling prawns long hair must be tied back and aprons/clothes clean to avoid contaminating the prawns.**
 - **Any cuts or sores must be covered when handling prawns. Gloves must be clean.**
 - **Smoking is not allowed anywhere near product.**
 - **No food/eating during processing.**
 - **Sickness/diarrhoea must be reported to the skipper who will reallocate tasks.**
 - **Anyone handling cooked prawns must not handle raw prawns wearing the same gloves.**

ABC Prawn Trawlers Pty Ltd 4. Food Quality & Safety Plan	Date: 01.11.00
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ABC Prawn Trawlers Pty Ltd has adopted the Hazard Analysis and Critical Control Point technique to identify food safety hazards in the prawn processing operations. The technique has also been applied to identify quality control points that ensure our customer requirements are met.

To avoid confusion we have not attempted to distinguish between quality and food safety controls except to identify critical control points in bold and italics in the hazard tables. Targets, tolerances and corrective actions are all based on the importance of the step with regard to food safety.

ABC Premium Process Flow --Raw Prawns		Date of Issue 01.05.00
<u>Process Step</u>	<u>Potential Hazard</u>	
Trawling	Fishing in contaminated or unapproved waters; too long trawl time (damaged prawns).	
Landing	Contaminated sorting tray, contamination from other fish, or left over prawns on tray.	
Sorting	Spoilage/black spot from sorting in hot/sun. Damaged prawns; contamination from other fish.	
Grading	No safety hazard, but quality hazards – wrong grade, wrong species, prawn defects, long time resulting in black spot.	
Dipping	Too much metabisulphite is a safety hazard, too little may result in black spot. Contaminated dip water.	
Packing & Weighing	Wrong weights, packaging, labelling, excess water (all quality or trade description hazards).	
Freezing	Spoilage from slow or insufficient freezing.	
Frozen Storage	Deterioration, black spot formation if temperature fluctuates.	
Unload	Deterioration from too long out of the freezer, damage from poor handling.	

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ABC Premium		Hazard Analysis Table – Raw Prawns		Date of Issue 01.05.00	
Process Step	Potential Hazard	(Critical) Control Point	Monitoring Procedure & Recording	Target & Tolerance	Corrective Action
Trawling	Contaminated prawns Damage/deterioration	Location Time	Trawling in approved location; Visual check of product on landing. Recorded in skippers log	Time dependent on location and conditions – not fixed	Reject catch from wrong location; adjust trawl time
Landing	Contamination on tray	Visual Clean tray	Mate ensures sorting tray empty & cleaned between shots as cleaning schedule – not recorded	No left over prawns Clean tray No tolerance	If prawns unloaded onto previous catch, check product after freezing for quality & black spot
Sorting	Spoilage, Damaged prawns, Contamination	Visual Time	Deck crew sort & separate other fish, all defective & diseased prawns. Prawns protected from sun (day trawl)	No defective or diseased prawns retained No black spot formation (no delay)	If delays prawns checked after freezing for eating quality & black spot
Grading	Incorrect grades, species, Prawn defects Contamination	Visual Product standards	Crew rinse prawns with clean water then grade according to procedures; Random check by mate, recorded in production log.	As product specifications	Product re-graded or cartons re-labelled to alternative specification
Dipping	Insufficient/excess (unsafe) meta	Solution make up Quantity Time	Mate prepares dip; crew dip to set time/quantity before replacing – dip procedure & production log, external testing	Max 30 ppm residual domestic Max 100 ppm residual export	Product held for testing by laboratory & re-packing/processing as appropriate
Packing & Weighing	Incorrect weight; Package (trade description) Excess water	Visual Weights	Mate ensures packaging marked, scales tared. Crew pack after draining prawns, marking grades & weight. Totals recorded in packing log	All weights = or above net weight Correctly marked cartons	Re-pack underweight or wrongly marked cartons
Freezing	Microbiological Spoilage	Temperature Time	Mate loads freezer to ensure good air flow, checks freezer operating temp – packing log	Freezer max –30°C Product –18°C or colder after 12 hrs	Continue freezing; repair refrigeration. Check for quality & black spot
Frozen Storage	Spoilage	Temperature	Engineer checks storage temperatures & records in packing log	Target –25°C Max –18°C Min –30°C	Transfer to blast freezer if temp above –18°C. If above –12°C hold – do not export
Unload	Deterioration Damage	Visual Time Temperature	Mate checks temp before unload. Product unloaded rapidly & carefully direct to transport. Transfer certificate prepared	Max –18°C at unload. No delays	Do not unload if product warm, transport unsuitable. Separate for assessment any dropped/damaged cartons

n.b. critical control points identified in bold and italics

Cooked Prawns

Prawns are processed as described in the raw prawn process flow and hazard analysis tables up to and including grading. ABC Prawn Trawlers do not dip prawns before cooking.

ABC Premium Process Flow --Cooked Prawns	
Date of Issue 01.05.00	
<u>Process Step</u>	<u>Potential Hazard</u>
Prepare boiling water	Contaminated cooker & water Too much water (safety of crew)
Add pre-graded prawns	Possible undercooking if size varies greatly Splashing (safety of crew)
Cooking	Undercooking (food safety) Overcooking (quality)
Cooling in sea water	Contaminated water Spoilage – insufficient cooling before packing
Packing	Contamination at packing

After chilling the cooked prawns are packed and frozen in the same way as raw prawns. The packing step is included here to emphasise the hygiene hazards when packing cooked prawns.

ABC Premium		Hazard Analysis Table – Cooked Prawns			Date of Issue 01.05.00
<u>Process Step</u>	<u>Potential Hazard</u>	<u>(Critical) Control Point</u>	<u>Monitoring Procedure & Recording</u>	<u>Target & Tolerance</u>	<u>Corrective Action</u>
Prepare boiling water	Contamination Scalding	Cleaning checks Visual	Crew(*) checks cooker clean, uses clean sea water – fills only to set level, burners full on. Ref cooking procedure	No tolerance hygiene	Re-clean cooker, rinse & replace water
Add pre-graded prawns	<i>Undercooking (microbiological)</i>	<i>Visual</i>	<i>Crew* adds specified quantity of graded prawns- visually checking size. Ref cooking procedure</i>	<i>Visually to target grade. Max qty prawns predetermined</i>	<i>Re-grade prawns before cooking</i>
Cooking	<i>Undercooking (microbiological)</i>	<i>Visual Time</i>	<i>Crew* cooks for at least min specified time & visually checks prawns at end of cook. Ref cooking procedure.</i>	<i>No tolerance for Undercooking</i>	<i>Re-cook if undercooked Overcooked keep chilled for taste test before packing</i>
Cooling in sea water	Contamination	Visual	Crew* removes cooker basket, places in tank with running sea water	Clean sea water for min 3 minutes	Reject if contamination Continue cooling if time insufficient
Packing	Contamination Underweight	Visual Wt check	Crew* drains prawns & packs into clean lined cartons wearing clean gloves. Cartons check weighed before sealing <i>Recorded production log</i>	No tolerance hygiene Min net wt as declared	Reject any prawns at risk of contamination Hold for re-checking if underweight suspected

n.b. critical control points identified in bold and italics.

(*)Crew member responsible is identified and must complete and sign log

Prawn Dipping Procedure

ABC Prawn Trawlers dipping procedure follows. A laminated copy is kept near the dip tank on each vessel. A whiteboard marker is used to tick off each batch of prawns dipped before the solution is changed. Empty bags of metabisulphite are kept in a bin. The number of bags used is checked by the mate and recorded on the production log before disposing of the bags.

ABC Prawn Trawlers Pty Ltd			
Prawn Dipping Procedure			
			Date of Issue 01.05.00
<p>1. Ensure dip tank is clean then fill to mark (100 litres) with potable water.</p> <p>6. Remove the basket and place on draining rack, then tick off on chart.</p> <p>2. Put on face mask then open 1 bag (1kg) of sodium metabisulphite and pour slowly into the tank or open under water and swirl to dissolve. Put empty bag in the marked bin for collection by the mate.</p> <p>3. Stir using clean metal paddle until all the 'meta' has dissolved. Remove face mask and store for re-use.</p> <p>4. Check that the minute timer is reset. Rub off ticks from chart below.</p> <p>5. Dip each basket (approx 20 kg) of prawns for 1 minute using the timer. Lift the basket up and down a few times to help circulation of the solution.</p> <p>7. When the chart is full (12 ticks), drain tank, flush with clean water, then repeat from step 1.</p> <p>8. If the prawns are muddy, wash the prawns first but the solution may need to be changed more regularly. Seek advice from the mate/leading deck hand</p>			
1	2	3	4
5	6	7	8
9	10	11	12

Prawn Cooking Procedure

All ABC Prawn Trawlers' vessels have the same cookers and use the same method. The procedure below is laminated and kept near the cooker for reference and training.

ABC Prawn Trawlers Pty Ltd

Prawn Cooking Procedure

Date of Issue 01.05.00

1. Check that the cooker and baskets are clean then fill to the mark (approx half full) with clean sea water.
2. Turn the cooker full on. It should take about 5 - 10 minutes for the water to boil. If it takes longer advise the mate/leading deck hand to check the unit.
3. When water is vigorously boiling add a maximum 20kg graded prawns (medium basket) and bring the water back to the boil.
4. When the water is boiling again set the timer for 2 minutes. After 2 minutes remove a large prawn with the scoop and check that the shell is starting to come away from the body. If not, continue cooking and then recheck. If overcooked advise mate for quality check.
5. Transfer cooked prawn basket to a clean tank half full of clean sea water. Hose prawns continuously with clean sea water for at least 3 minutes to stop the cook and cool to sea water temperature.
6. Lift basket and drain on angled rack for 2 minutes.
7. Check the packing table has been cleaned. Prepare carton with new liner. Tip in carefully cooked, drained prawns. Pack, weigh, seal and mark cartons as usual. N.B. Only handle cooked prawns wearing clean gloves.
8. Transfer immediately to blast freezer.
9. Record details of product cooked on production log.

ABC Prawn Trawlers Pty Ltd 5. Production Records	Date: 01.11.00
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Each vessel in the fleet maintains its own records.

The production records comprise:

1. Skippers Log

This is maintained according to Fisheries regulations and contains details required for Fisheries compliance. It also contains records of catch location and trawl time for each shot. Daily catch quantities are transferred to the skippers log from the packing records.

2. Production Log

This contains details of product and assessments of grade accuracy, defects etc. It also records metabisulphite usage and weight checks. This also includes cooked prawns.

3. Packing Log

The total quantity of product packed by grade from each day's production is recorded on the packing log. Batch numbers for product trace are also recorded.

Note, where quantities of graded prawn at the end of the day's processing are less than a complete carton they are frozen in a part carton then packed with the next day's catch.

4. Sales Records

A blank form is not included with this disc as the type of record kept will vary markedly. In some cases the only sales record is an export transfer certificate. Provided this can be reconciled with the production records for product trace purposes no other record needs to be maintained.

ABC Premium		Production Log			Date of Issue 01.05.00								
Catch Date	Shot No	Qty Prawns approx	Qty S&B approx	Meta bags used / baskets cooked	Weight and Grade Check (random checks by mate during or after packing)								Signed
					Species	Decl. wt	Act. Net	Decl. grade	Count/lb (2)	wt small / large	% in grade	% defects-#	
8 May 00	1	240 kg	20 kg		T	10.0 kg	10.1 kg	u/10	8, 9	44g, 46g, 84g	95	Nil	BJ
	2	100 kg	10 kg		E	10.0 kg	10.2 kg	u/15	14, 14	30g, 30g 34g 64g	94*	Nil	BJ
	3	200 kg	5 kg	2 total	T	10.0 kg	9.9 kg	10/20	16, 15	24g, 22g 40g, 38g	100	1	BJ
				2 cooks	T	10.0 kg	10.1kg						jm
9 May 00													
Comments * u/15 grading tending small, crew told – to be rechecked next day													

(#) Record types of defects in comments section and advise crew of any recurring problems

Note: if scales capable of weighing 2gm are not available, ensure checks of counts per lb are carried out regularly and check that all prawns are similar in size

[illegible]

ABC Prawn Trawlers Pty Ltd	Date:
6. Feedback	01.11.00

ABC Prawn Trawlers Pty Ltd maintains a file for each vessel in which are kept results of any external audits (e.g AQIS), copies of any correspondence from customers, suppliers or any other persons regarding quality of prawns or operation of the business.

At the front of each file is a "Customer/Audit Feedback Log" which summarises the contents of the file and action taken. Often comments are received by phone and there may be no need for a formal response. In such instances the comments and subsequent action are simply noted in the log

ABC Premium Customer/Audit Feedback Log Date of Issue 01.05.00		
Date	Details	Action Taken Date & Signature
17.5.2000	10 ctns u/15 Tiger reported with slight black spot by B.B. Prawn Processors. Packed 10.3.2000	Records checked, 400 kg dipped without changing meta, solution probably too weak. Procedure tightened. 20.5.2000 – BJ
28/6/2000	AQIS audit – no problems found	N/A
11.7.2000	100 ctns Kings reported by CC Wholesalers contained up to 5% soft shell prawns. Date code 10.5.2000	No obvious reason, records indicate 10% soft & broken rejects on that day. Reported to crew for extra vigilance. 18.7.2000 – BJ

ABC Prawn Trawlers Pty Ltd	Date:
7. System Check List	01.11.00

The Company plans to introduce all the requirements of the Prawn Industry Quality Standard over 12 months. During this period product will be assessed on land for compliance with the quality standards and audits carried out on the parts of the system completed. The following table is a check list of requirements, together with the expected and actual completion dates.

System Check List		
ABC Premium	Date of Issue 01.05.00	
Task	Expected completion	Actual completion
1. Crew receive verbal instructions on vessel safety requirements, personal hygiene and cleaning	01.06.00	18.05.00
2. Crew trained in sorting, grading and defect identification	01.06.00	25.05.00
3. Dipping methods, times, etc. determined and written down	01.07.00	11.07.00
4. Cooking procedures, times, etc. determined and written down	01.08.00	
5. On board checks for grade/defects introduced	01.09.00	
6. Training records prepared	01.10.00	
7. Personal Hygiene and Cleaning Program written	01.11.00	
8. Methods checked by SO ₂ laboratory tests/micro. check on cooking	01.12.00	
9. Production and Packing Logs prepared and completed	01.01.01	
10. Food Safety Plan prepared – ensures that all necessary checks are in place	01.03.01	
11. Customer/Audit Feedback recording form in use	01.04.01	
12. Authorisations formalised, Manual completed and signed	01.05.01	

Appendix Forms

Appended are blank forms that may be modified for use by each company or operation.

There is no need to use these particular forms, they are simply provided to indicate the type of records and information required by the Prawn Industry Quality Standard

Suggestions of better ways to meet the requirements of the standard are always welcome. Please send photocopies to APPA for inclusion in later versions of this guide.

[illegible][illegible][illegible]

Cleaning Schedule

<u>Cleaning Schedule</u>		
		Date of Issue
Task/Method	Frequency	Responsibility

Personal Hygiene Standards

Date of issue _____

Process Flow -	
Date of Issue -----	
<u>Process Step</u>	<u>Potential Hazard</u>

Hazard Analysis Table –				Date of Issue	
<u>Process Step</u>	<u>Potential Hazard</u>	<u>(Critical) Control Point</u>	<u>Monitoring Procedure & Recording</u>	<u>Target & Tolerance</u>	<u>Corrective Action</u>

n.b. critical control points identified in bold and italics

[illegible]

(#) Record types of defects in comments section and advise crew of any recurring problems

Customer/Audit Feedback Log		
		Date of Issue _____
Date	Details	Action Taken Date & Signature

System Check List		
	Date of Issue -----	
Task	Expected completion	Actual completion