This is the Safety Management System for:

Vessel Name	
I.D. Mark:	

Version 9.1 Last Updated 11th May 2016

Disclaimer

This document was prepared by the Abalone Industry Committee of Victoria as an example only of a Safety Management System for a Class 3C Commercial Fishing (Abalone) vessel operating in Victorian coastal waters.

Importantly, any risk assessment must be personalised to the vessel, its equipment and unique operation.

It is the responsibility of vessel Owners to implement and maintain a Safety Management System that ensures that the vessel and the operations of the vessel are, so far as is reasonable practicable, safe.

Masters have a duty to implement and comply with a Safety Management System for the vessel and operations of the vessel.

AMSA would like to see the Industry take a lead role in recommending the use of inflatable life jackets and PLBs, particularly in coastal waters. To be honest it would be hard to not justify their use in terms of the requirements in the national law i.e. manage risk to a level as low as reasonable practicable.

This document was written to assist abalone divers with developing a SMS that will meet the requirements of the Marine Safety (Domestic Commercial Vessel) National Law Act 2012 and The National Standards for Commercial Vessels Part E Operations.

Contents

References

- Industry Standard for Abalone Diving Victoria V1.2 2014
- PrimeSafe Food Safety Plan (Vessel Operations and Food Safety For Abalone Harvesting)
- Harvesting Code of Practice (Abalone Industry Association)
- Processor Supply Agreement
- ACA QA Program
- Material Safety Data Sheets

INTRODUCTION

This document was written to assist abalone divers with developing and implementing a safety management system (SMS) that will meet the requirements of the Marine Safety (Domestic Commercial Vessel) National Law Act 2012 and The National Standards for Commercial Vessels Part E Operations.

Tailor your SMS to reflect what YOU do in YOUR operation on YOUR vessel. Involve the crew, particularly when identifying your risks and developing your procedures.

1. VESSEL DETAILS

Vessel Name:	
Unique Identifier No (ID mark)	
Type of Vessel	
NSCV Service Category (Class Code)	
NSCV Operational Area (Limits)	
Length	
Breadth	
Engines	
Max Compliment	

2. OWNER DETAILS, DESIGNATED PERSONS & MASTERS RESPONSIBILITY AND AUTHORITY STATEMENT

Owner Details	The person with overall general control and management of the vessel. This may be the operator of the vessel and not the company or other person that owns the vessel.
Duties:	• Determining the appropriate crew for each type of operation. • Ensuring that scheduled and routine maintenance is carried out. • Conducting the Annual Review of this SMS, all documents and records.
Name:	
Address:	
Phone number:	
Email address:	
Signature:	

Designated Person	The Owner must designate a person with direct access to the owner to be responsible for monitoring the safety and pollution prevention of the vessel and ensuring appropriate resources and shore support are provided to the vessel. The Owner may appoint him or herself as the Designated Person.
Duties:	• Monitoring the safety and pollution prevention of the vessel, • Ensuring appropriate resources and shore support are provided.
Name:	
Address:	
Phone number:	
Email address:	
Signature:	

Master	The person usually in command of the vessel. The Owner may appoint him / herself as both the Designated Person and the Master.
Duties:	• Command of the vessel and its safe operation, • Implementing and complying with the SMS including: • Carrying out Pre-Tow, Pre-Trip & Pre-Dive inspections. • Assessment of weather, sea and area of operation to determine safe operation of the vessel and the requirement to Don PFDs & PLBs. • Delivery of crew training and induction, • Taking timely and reasonable measures to eliminate or effectively control any risk that is identified. • Maintain the vessel's logbook, • Reporting of any incidents, faults and near misses. • Participating in the Annual review of the SMS. • Conducting Periodic Reviews of the SMS as required.
Name:	
Address:	
Phone number:	
Email address:	
Signature:	

3. POLICIES & LEGISLATION

3.1 Legislation

All Vessel Operations shall be conducted in accordance with the following:

- Marine Safety (Domestic Commercial Vessel) National Law Act 2012,
- The National Standard for Commercial Vessels Part E – Operations,
- Vessel Operating and Zoning Rules for Victorian Waters 2011,
- Environment Protection Act 1981
- AMSA Certificate of Survey and Certificate of Operation requirements & limits.
- The Victorian Occupational Health and Safety Act 2004

3.2 Policies

PFDs (Personal Floatation Devices) & PLBs (Personal Locator Beacons)

An inflatable PFD and a PLB shall be issued to each crew member prior to commencing duties for the first time.

A PFD and PLB shall be worn by each crew member in the following circumstances:

1. In the event of the following Emergencies; Abandon Ship, Severe Weather or Flooding.
2. At times of heightened risk as defined below:
   - Crossing or attempting to cross an ocean bar or operating within a designated hazardous area.
   - When the vessel is being operated during a period of restricted visibility.
   - When working close to reefs where there is a medium or high risk of grounding.
   - When working close to breaking waves where there is a medium or high risk of capsize or flooding.
   - When working in rough conditions where there is a medium or high risk of entering the water unexpectedly (P.O.B.).
3. If conditions have changed and the crew deems it prudent to don a PFD & PLB.
4. At any time when instructed by the Master to do so

Communications

- All persons on board are always under the authority of the Master and must adhere to the Masters directions.
- The Master must communicate with Crew in a clear and concise manner.

Fatigue Management

- Maximum shift length including travel shall be 12 hours with regular breaks as required.
- Crew must present “Fit for work” meaning well rested and free of the influence of drugs & alcohol.
- Diving exposure to be kept as low as reasonably achievable.

Alcohol & Drugs
• No Alcohol is permitted to be consumed or brought on board the vessel on a work day. • No Alcohol is to be consumed by the Diver within 8 hours before diving or 2 hours after diving (Industry Standard for Abalone Diving Victoria V1.2 2014). • The abuse of illicit and medicated drugs or being in possession of illicit drugs whilst working is strictly prohibited. • Persons under the influence of alcohol or drugs shall be considered unfit for work and must be immediately returned to shore and removed from the worksite. • Smoking is only permitted during breaks in an area away from the compressor air intake and away from any fuel and oil containers. • All butts will be placed in a wet metal bucket or tin, and then disposed in the garbage bin provided.
Behaviour & Conduct
• All crew members must conduct themselves in a professional, responsible and safe manner at all times. Irresponsible behaviour must be discouraged. Showing off, acts of bravado or anything else involving risk taking contrary to safety standards should be stopped immediately and the potential danger of the actions explained.
Environment
• All plastics and rubbish shall be retained on board, placed in a garbage bin or bag and disposed of properly on return to port. • Re-fuelling of the Vessel shall only take place on shore. • Any major release of oil or fuel on land or water shall be reported immediately to: EPA phone: 1300 372 842

4. RISK ASSESSMENT

The Owner, Master and Designated Person have conducted an assessment of risks associated with the vessels and fishing operations.

All risks have been recorded in the Risk Register and have been individually assessed and controlled and this process has been documented.

The Risk Assessment has been informed by the Critical Risk Assessment Workshop findings (Risk Assessment and risk reduction strategies document – CRAW). This workshop was conducted over two separate days, and accurately reflects best practice input from contemporary industry leaders. The workshop identified a broad range of risks and then workshopped realistic and workable treatments to bring the risks within a reasonable control capacity which is workable and achievable.

The Owner has used the provisions of AS/NZA ISO 31000:2009 as a guidance to establish the following tables to assist with the identification, assessment and control of risks associated with the vessel and its commercial operations.

4.1 Risk Tables

Likelihood of occurrence

OCCURRENCE	IMPACT	FREQUENCY
5	Almost Certain	It is expected to occur
4	Likely	Will occur from time to time
3	Possible	May occur from time to time
2	Unlikely	Uncommon, but has been known to occur
1	Rare	May occur in exceptional circumstances

Consequence

SEVERITY NUMBER	SEVERITY	
5	Catastrophic	Fatality, Ganglionuritis virus release, huge financial loss.
4	Major	Medical Emergency, Loss of production, off-site release contained: Prime fishery loss of reputation
3	Moderate	Disabling injuy requiring medical treatment, fuel spill release contained with outside assistance, high financial loss.
2	Minor	First Aid treatment – minor cuts & bruises, fuel spill easily contained, notable financial loss
1	Negligible	No Injuries, negligible financial or environmental impact

Risk Rating Matrix

Consequence / Likelihood	5	4	3	2	1
5	25	20	15	10	5
4	20	16	12	8	4
3	15	12	9	6	3
2	10	8	6	4	2
1	5	4	3	2	1

Risk Treatment / Control Rating

The Owner has applied the following methodology to assist with determining if controls are needed and if so whether they have sufficiently reduced the risks.

Risk Level	Acceptability of Risk
Very Low 1-3	Acceptable
Low 4-6	Moderately Acceptable
Medium 7-9	Acceptable with controls
High 10-16	Should be mitigated and or administrative controls
Extreme 17-25	Not Acceptable

Acceptable Risk

Reasonably practicable measures must be taken to maintain the risk level within the acceptable range.

Determining which control methods to uses may take into consideration the relative risk levels of the different hazards and the cost and benefit of the controls. The residual risk after the implementation of the controls should also be evaluated.

Risk Control Methods

Priority

1	Risk avoidance – Eliminate the hazard or risk	Most Effective
2	Isolate hazard / risk or apply re-engineer or re-design solution	Adequate
3	Administrative solution, Staff Training, PPE, Signage	Least Effective
4	Risk acceptance	tolerate, accept the risk

The risk assessment shall be reviewed annually (see Verification, Review and Evaluation) or periodically as a result of any incident reports, changes to the nature of operations or other amendments. Any changes to the SMS shall be recorded on the **Revisions & Annual Review Page (Appendix 6).**

4.2 Risk Register Activity / Hazard

	Risk (What could go wrong)	Likelihood (without controls)	Consequence (without controls)	Risk Rating	Controls	Likelihood	Consequences	Risk Ratings
PRE - FISHING								
Crew Selection	Inappropriate or unqualified personnel	Possible 3	Major 4	High 12	• Approved Crew List – only use crew from the Approve Crew List whom qualifications are current. • Select Core Complement or Appropriate Crew according to the Vessel, Area of Operation & Type of Activity. • Crew Training and Induction	Unlikely 2		
Crew Training & experience	Personal injury, Disruption to operations	Possible 3	Moderate 3	Medium 9	• Initial Safety Training • Operational Training • Emergency Procedure Drills	Unlikely 2	Moderate 3	Low 6
Trailer Hook Up	Injury / Damage	Possible 3	Major 4	High 12	• SOP – Trailer Hook Up	Unlikely 2	Major 4	Medium 8
Towing	Trailer separation, boat separation, collision with other vehicles.	Possible 3	Catastrophic 5	High 15	• SOP - Pre-Tow checks completed and marked off on the Vessel Log. • Ensure Driver is fit for work • Stay alert and drive to the conditions	Unlikely 2	Major 4	Medium 8
Vessel Preparedness	Insufficient fuel / oil, Missing / damaged equipment, mechanical failure, Vessel Suitability	Possible 3	Major 4	High 12	• SOP - Pre-Trip Checks completed and marked off on the Vessel Log • Routine Maintenance. • Programmed Inspection & Maint.	Unlikely 2	Major 4	Medium 8
Launching / Recovery	Collision with person or objects, slip on ramp, premature boat release, damage injury	Possible 3	Moderate 3	Medium 9	• SOP – Launching & Recovery	Unlikely 2	Moderate 3	Low 6
Embarking / Disembarking	Vessel moving against wharf / Jetty: Slips, falls & crush injuries	Possible 3	Moderate 3	Medium 9	• SOP – Embarking / Disembarking	Unlikely 2	Moderate 3	Low 6
Loading / Unloading	Manual handling injuries	Possible 3	Moderate 3	Medium 9	• SOP Loading / Unloading	Unlikely 2	Moderate 3	Low 6

	Risk (What could go wrong)	Likelihood (without controls)	Consequence (without controls)	Risk Rating	Controls	Likelihood	Consequences	Risk Ratings
Vessel Operations								
Weather Monitoring	Get caught in severe weather and/or ocean conditions.	Possible 3	Catastrophic 5	High 15	• SOP Weather Monitoring • SOP Crew Briefing	Possible 3	Moderate 3	Medium 9
Navigation	Collision: other vessels, underwater obstacles, grounding	Possible 3	Moderate 3	Medium 9	• Approved & qualified crew • Keep a look out • Use GPS and Depth Sounder to assist	Unlikely 2	Major 4	Low 6
Anchoring	Personal injury, dragging.	Possible 3	Moderate 3	Medium 9	• SOP Anchoring • Emergency Procedures (Diving)	Unlikely 2	Moderate 3	Low 6
Working Close to Reefs	Damage to Vessel, Grounding	Likely 4	Moderate 3	High 12	• SOP Working Close to reefs • Policy PFDs & PLBs • Emergency Procedures (Grounding) • Approved & qualified crew, • Operational Training.	Possible 3	Moderate 3	Medium 9
Breaking Waves	Injury, loss of life, damage to vessel	Possible 3	Catastrophic 5	High 15	• SOP Breaking Waves • Policy PFDs & PLBs • Approved & qualified crew	Unlikely 2	Moderate 3	Low 6
Capsizing	Injury, loss of life, Severe Damage,	Possible 3	Catastrophic 5	High 15	• SOP Capsizing • SOP Breaking Waves • Policy PFDs & PLBs	Unlikely 2	Moderate 3	Low 6
Worker Fatigue	Impaired performance, injury, reduced productivity	Possible 3	Major 4	High 12	• Fatigue Management Policy	Unlikely 2	Major 4	Medium 8
Alcohol & Drugs	Impaired judgement, personal injury.	Possible 3	Moderate 3	Medium 9	• Alcohol & Drugs Policy	Unlikely 2	Moderate 3	Low 6
Working in Hot Environments	Sunburn, dehydration, heat stress	Likely 4	Moderate 3	High 12	• Pre-Trip check (Water, PPE on board) • Stay in shade as much as possible • Awareness of signs & symptoms of dehydration.	Possible 3	Minor 2	Low 6
Working in Cold Environments	Hypothermia through exposure	Likely 4	Moderate 3	High 12	• PPE including wet weather gear. • Stop if conditions are unsafe	Possible 3	Minor 2	Low 6
Electrical	Electric shock from generators	Possible 3	Moderate 3	Medium 9	• All leads to be tagged and tested. Leads to be kept off the ground and dry	Possible 3	Minor 2	Low 6

	Risk (What could go wrong)	Likelihood (without controls)	Consequence (without controls)	Risk Rating	Controls	Likelihood	Consequences	Risk Ratings
Interaction with local community (Public)	Anti-social behaviour	Possible 3	Moderate 3	Medium 9	• Beach weighing to occur in full public view • Show consideration for other users of public facilities. • Be polite when interacting with members of the public.	Rare 1	Moderate 3	Very Low 3
Environmental impact	Littering, oil spills, pollution.	Likely 4	Minor 2	Medium 8	• Environmental Policy	Rare 1	Minor 2	Very Low 2
Mechanical Failure	Mechanical breakdown	Almost Certain 5	Moderate 3	High 15	• Scheduled servicing is conducted by qualified service agents, records kept by the service agent and also noted in the maintenance register. • Daily inspection and maintenance is carried out by the Master and recorded on the Vessel Log.	Possible 3	Moderate 3	Medium 9
Hazards Material & Liquids	Wrong oil use in compressor or air pump, ingestion – poisioning.	Possible 3	Catastrophic 5	High 15	• Correct storage of liquids. • Decanted oils /liquids MUST be properly labelled. • Material Safety Data Sheets to be attached to this SMP • Emergency Procedures (Medical)	Rare 1	Major 4	Low 4
Emergencies	Fire Person Overboard Medical Emergency Collision Grounding Flooding Severe Weather Diving emergencies	Possible 3	Major	High 12	• Emergency Preparedness Plan • Policy PFDs & PLBs • Training – Emergency Drills • Vessel Survey Equipment • Maintain proper look out	Possible 3	Moderate 3	Medium 9
Re-fuelling	Fire, explosion or spills	Possible 3	Catastrophic 5	High 15	• SOP Re-fuelling.	Rare 1	Major 4	Low 4

	Risk (What could go wrong)	Likelihood (without controls)	Consequence (without controls)	Risk Rating	Controls	Likelihood	Consequences	Risk Ratings
Fishing Operations								
Abalone Diving	Decompression Illness, Hypothermia, Gas poisoning, Entrapment, Fouled Umbilical, Bites & Stings,	Possible 3	Catastrophic 5	High 15	• Industry Standard for Abalone Diving Victoria V1.2 2014 • SOP Pre-Dive Checks • Dive Plan recorded on the Vessel Log • Emergency Procedures (Medical, Diving)	Unlikely 2	Moderate 3	Low 6
Winch / Davit	Injury from winch handle, swinging load	Likely 4	Moderate 3	High 12	• SOP Winch / Davit • Training of crew	Unlikely 2	Moderate 3	Low 6
Compressor	Burns, amputation, mechanical failure	Possible 3	Moderate 3	Medium 9	• SOP Compressor • Belt guard in place • Exhaust heat wrap in place • Training of crew • Emergency Procedures (Diving)	Unlikely 2	Moderate 3	Low 6
Catch handling	Injury from sharp knives, chippers, spines, stings.	Likely 4	Minor 2	Medium 8	• SOP Catch handling • PPE on board • Training of crew	Unlikely 2	Minor 2	Low 4
Other Vessels	Diver could get run over.	Likely 4	Catastrophic 5	Extreme 20	• SOP Other Vessels • Dive flag erected	Rare 1	Catastrophic 5	Low 5
Working Live	Diver could get run over, Airline cut.	Possible 3	Catastrophic 5	High 15	• SOP Working Live • Operational Training • Policy PFDs & PLBs • Approved crew • Emergency Procedures (Diving Emergency)	Rare 1	Catastrophic 5	Low 5
Shark or Marine Mammal Attention / snakes	Animal bite or entanglement	Possible 3	Catastrophic 5	High 15	• SOP Sharks • Keep clear of snakes, do not attempt to catch or kill, call Parks Victoria. • Emergency procedures (Diving Emergency)	Rare 1	Catastrophic 5	Low 5

	Risk (What could go wrong)	Likelihood (without controls)	Consequence (without controls)	Risk Rating	Controls	Likelihood	Consequences	Risk Ratings
External Agencies								
Fisheries Victoria	Non compliance, Prosecution	Possible 3	Moderate 3	Medium 9	• Comply with Fisheries Regulations • Access Licence is on board • Maintain accurate records • Record Post Landing confirmation number on the Vessel Log	Unlikely 2	Moderate 3	Low 6
PrimeSafe / Food Safety	Non compliance, Prosecution, Disruption to operations, Food contamination, Bio-Security breach.	Unlikely 2	Catastrophic 5	High 10	• Ensure PrimeSafe Wildcatch Licence is current & on board the vessel. • Comply with PrimeSafe Licence conditions. • Follow PrimeSafe Food Safety Plan (Reference B) • Follow Bio-Security Procedures – Appendix D • Record compliance on Vessel Log	Rare 1	Catastrophic 5	Low 5
AMSA	Non compliance, Prosecution, Disruption to operations	Possible 3	Moderate 3	Medium 9	• Certificate of Survey on board current & on board. • Certificate of Operation, current and on board. • Vessel SMS records kept up to date .	Unlikely 2	Minor 2	Low 4
Processor – Supply Agreements	Non compliance, Penalties, Loss of customer	Possible 3	Moderate 3	Medium 9	• Comply with supply agreements	Unlikely 2	Minor 2	Low 4
AAC Quality Assurance Program	Non Compliance, Loss of markets.	Possible 3	Major 4	High 12	• Comply with relevant Harvesting Codes of Practice . • Comply with ACC Quality Assurance Program. • Record compliance on Vessel Log	Unlikely 2	Major 4	Medium 8

5. STANDARD OPERATING PROCEDURES

Pre Fishing

5.1 Trailer Hook Up

- Use a crew member to assist with hook – up.
- Driver to maintain visual contact with the assisting crew member.
- Keep other people well clear.

5.2 Pre-Tow Checks

- Trailer Coupling - seated on the tow ball correctly, the coupling handle is down and latch secured.
- Safety Chain(s) – attached to the vehicle using correctly rated shackles.
- Break A-Way Cable – attached to vehicle.
- Trailer Lights – connected and working.
- Winch Cable – connected and secure.
- Vessel Safety Chain – connected.
- Tie Down Straps – The Vessel stern is secured to the trailer with tie down straps.
- Warning Flags – attached to Outboard motor propellers.

5.3 Pre-Trip Checks

- Hull Inspection – the Vessel has no obvious damage
- Bung(s) – are in and sufficiently tightened.
- Radio Aerial – Up
- Battery(s) – turned on
- Vessel Fuel & Oil – levels are sufficient for the day's operations and contingencies.
- Compressor Fuel & Oil – levels are sufficient for the day's operations and contingencies.
- Safety Equipment – on board the vessel
- Dive Equipment – on board the vessel.
- Fishing equipment (Bins, Tags, etc)
- Documents (Docket books, Licences, Vessel Log) – is on board
- Radio – is working
- Engine & Controls – secure, operating correctly.
- Gauges – working and within acceptable operating range.
- Davit – ratchet, pulley & rope in good working order.
- Bilge Pump / scuppers – not blocked, working.
- Sufficient food and drinking water - on board the vessel.
- PPE (Hats, protective glasses, protective gloves, sunscreen, wet weather gear) – on board the vessel.
- Securely stow all equipment for safe travel.
- Conduct **5.4 Crew Briefing**

5.4 Crew Briefing

- Discuss the weather forecast, ocean conditions, planned fishing location and operations with all crew members.
- Assess any **Heighten Risks**, the need to don PFDs & PLBs and record on the Vessel Log.
- If there is an **Extreme** Risk of getting caught in severe weather, grounding, capsizing, flooding or P.O.B.; cease fishing operation immediately and take appropriate action.

5.5 Launching & Recovery

- Ramp - Inspect the ramp, water and turning space for people & obstacles before launch or retrieve.
- Look Out - Use a crew member to assist & supervise.
- Keep all people well clear of the back of the vessel and vehicle.
- No person is to place any part of their body between any fixed or moving components.
- Safety Chain – disconnect (when launching) or reconnect (when retrieving) only when the vessel in on the ramp.
- Be aware of slippery surfaces and take precautions.

5.6 Embarking / Disembarking

- Ensure Vessel engine is in neutral and not moving excessively.
- Use appropriate grab rails or grab points.
- Apply the “three points of contact” rule.
- Keep hands and feet clear of the gunwale & jetty or wharf.

5.7 Loading / Unloading

- Use correct manual handling techniques.
- 2 person lift for heavy loads.
- Slide bins around the deck in preference to lifting.

Vessel Operations

5.8 Weather Monitoring

- Check weather forecast and sea conditions prior to launch.
- Constantly monitor changes in weather and ocean conditions through observation.
- Select appropriate fishing location based on prevailing conditions and forecasts.
- If conditions deteriorate significantly, conduct **5.4 Crew Briefing**

5.9 Working Close to Reefs

- Maintain a proper look out at all times
- Visual observation and Depth Soundings are to be monitored
- If the Anchor is deployed, check holding status regularly.
- Wave, wind and tidal changes are to be monitored.
- PFD’s & PLBs must be worn by all crew when working where there is a medium or high risk of grounding on a reef

5.10 Breaking Waves

- Whenever possible AVOID locations near breaking waves.
- PFD's & PLBs must be worn by all crew when working where there is a medium or high risk of capsize or flooding due to breaking waves.

5.11 Capsizing

- Keep scuppers free from obstruction (self draining deck).
- Operate bilge pump regularly to prevent build up of water on the deck.
- Stow the load (catch, bins & equipment) so that it does not compromise stability nor shift greatly during travel.
- Do not exceed load limits of the vessel.
- Ensure that EPIRB and life rings are able to be deployed in the event of a capsize.
- PFD's & PLBs must be worn by all crew when working where there is a medium or high risk of capsize.

5.12 Re-fuelling

- Only re-fuel the Vessel on shore.
- Minimise the number of crew on board during re-fuelling.
- Follow standard safety precautions as prescribed by the filling station.

5.13 Anchoring

- The vessel is fitted with a sand & reef combination Anchor.
- The anchor is deployed & retrieved from the starboard side of the vessel and secured to the bow line.
- Anchor, chain & rope is stored and fed from the anchor bin or gunwale pocket.
- Deploy sufficient anchor rope to ensure that the anchor will hold, considering the substrate and wind strength.
- Care is taken to ensure the anchor line does not become entangled when being deployed.
- If the anchor gets stuck, the anchor line may be tied off on a cleat and the movement of the vessel used to dislodge the anchor.
- Keep hands well clear of the anchor line and the tie off point.

Fishing Operations

5.14 Pre-Dive Checks

- Inspect the dive site for obstacles and hazards
- Re-conduct **5.4 Crew Briefing**
- Raise the "Diver Below Flag"
- Position and integrity of compressor exhaust and air intake.
- All hose fittings are securely fastened.
- Compressor has sufficient fuel and air delivery system is functioning correctly.
- Regulator is delivering air and not leaking water
- Content of all breathing gas bottles are checked.
- Wetsuit, mask, fins, weight belt, depth gauge all in good condition and working order.
- Dive plan is considered and discussed with the crew.

5.15 Winch / Davit

- Ensure ratchet is in place before hooking on bag.
- Prevent bag from swinging on the Davit.
- Avoid vessel beam on to swell when raising bag.
- Avoid exceeding the rated lifting capacity.

5.16 Compressor

- Ensure belt guard is in place.
- Ensure Hot covers are in place.
- Set bi-pass valve to correct position if required.
- Start compressor and pressurise the air delivery system.
- Check Pressure relief valve is working.
- Drain any moisture from, moisture dump, Air reserve tank & filters as required.
- Monitor Air Pressure Gauge to ensure diver is receiving adequate air supply for the given depth.
- Avoid re-fuelling at sea, however if necessary: Remove diver from the water or turn on HP reserve, turn off compressor and allow to cool, use flexible nozzle and guard against spills.
- Conduct maintenance as per the Maintenance Schedule and log.

5.17 Catch Handling

- PPE – hand and eye protection MUST be worn
- Be aware of poison species may be present in or on catch bags, dive hoses or dive equipment.
- Use proper lifting techniques.
- Avoid the need to lift bins around the deck, prefer instead to slide.
- Comply with PrimeSafe, Supplier agreements & ACA Q.A. program.

5.18 Other Vessels

- "Diver Below" Flag (International code flag 'A') to be erected before diver enters the water.
- Do NOT allow other vessels to approach within 100 metres of the Diver below Flag, without express permission.
- Remove Diver from the water (if it is safe to do so), before allowing other vessels to approach within 100 metres of the Diver below Flag.

5.19 Working Live

- Appropriate fishing location and prevailing weather conditions are to be taken into account when deciding if it is safe to work live (not anchored).
- Don a PFD & PLB if working in a "**heightened risk**" situation or if directed by the Master.
- The Vessel must be kept in an appropriate position in relation to the diver to avoid being blown over the hose line or diver.
- The Diver MUST have a clear vertical line to the surface at all times.
- The motors MUST NOT be operated when the diver is in the immediate vicinity of the vessel.
- The umbilical is held firm at the bow away from the stern.
- A boat hook of sufficient length is kept in easy access to enable pushing of the lines away from the vessel and motors
- The position of the Diver and Lines MUST be known prior to operating the motors or moving the vessel.

5.20 Shark Attention

- Use a Shark Shield
- Maintain situational awareness
- If aware of shark presence – leave the water (see Emergency Procedure – Shark Attention)

6. RESOURCES AND PERSONNEL

6.1 Crew Selection

Approved Crew List (see Appendix 2)

Only select crew from the Approved Crew List whom qualifications are current.

Applicable Qualifications

First Aid	A Vessel may only operate if there is at least one person who is available at all times to provide first aid and holds a current first aid qualification.
Radio	At least one crew member must have the appropriate qualification to operate the type of radio that the Vessel carries.
General Purpose Hand NC	Deck duties only.
AMSA Exemption 38	low complexity duties: Provided that a crew member has completed the **Initial Safety Training** and **Operational Training**. This qualification may be approved by AMSA as being sufficient to be in command of an abalone vessel whilst at the dive site with the diver submerged.
Coxswain Grade 2NC	Command vessel <12m, no passengers, sheltered waters or < 5nm from point of departure.
Coxswain Grade 1NC	Command vessel <12m, passengers, Inshore Waters (within 15nm of the coast).

Core Compliment and Appropriate Crew

Core Compliment

"Core Compliment" is the base level of crew required for basic navigation and handling of the vessel. A Vessel may only operate with its core complement if it has no passengers on board and on a voyage that is within smooth waters, of less than 12 hours duration and does not carry out normal business activities (commercial fishing).

Appropriate Crew

"Appropriate Crew" is the level of crew required for carrying out normal fishing operations.

After consideration of the design characteristics of the vessel, safety equipment on board, the Emergency Preparedness Plan, Risk Assessment, Area of Operation and Type of Activity; the Owner and Master have agreed on the appropriate crew to safely run the operation as set out in the table below.

Area of Operation	Type of Activity	Core Complement & Qualifications	Appropriate Crew & Qualifications
Victorian Coastal (Inshore) Waters	Abalone Harvesting	• Master (Skipper) Coxswain grade 1NC SROCP (MROVCP) First Aid (HLTAID003)	• Master (Skipper) Coxswain grade 1NC SROCP (MROVCP) First Aid (HLTAID003) • 1 x Crew AMSA Exemption 38, or Coxswain grade 1NC First Aid (HLTAID003) SROCP (MROVCP)

6.2 Training

The Owner of the Vessel shall ensure that each crew member receives the following training. The training must be given by the Master or by a crew member who the Master considers has the skills and knowledge to provide the training. All training shall be recorded in the **Training Record (see Appendix 3).**

Initial Safety Training
Upon joining the Vessel and prior to commencing duties for the first time, a crew member MUST complete the **Initial Safety Training**.

Operational Training
A crew member whom is a new participant in the Victorian Abalone Industry, upon joining the vessel and before carrying out duties solo, MUST complete the following training:

- A minimum of three days practical instruction and supervision by the Master or experienced coxswain in the **Key onboard operations of the vessel**.
- A working knowledge of the Industry Standard for Abalone Diving Victoria V1.2 2014
- A working knowledge of statutory regulations & guidelines.
- Communication signals in use.
- Dive Planning & Decompression procedures.

Emergency Drills
All crew shall receive training in Emergency Drills as soon as practical after joining the vessel and in accordance with the schedule below.

Emergency Drill	Frequency
DIVING EMERGENCY	Annually
FIRE	Annually
PERSON OVERBOARD	Annually
ABANDON SHIP	Annually
FLOODING	Annually
GROUNDING	Annually
COLLISION	Annually
SEVERE WEATHER	Annually
MEDICAL EMERGENCY	Annually

7. MAINTENANCE

7.1 Responsibility

The Owner of the Vessel is responsible for ensuring that Routine and Programmed Inspection & Maintenance is being carried out.

7.2 Routine Maintenance

Running repairs, minor servicing, correction of faults and replacement of equipment shall be carried out by the Master, appointed crew or qualified service agent at the end of each days fishing operation. Routine Maintenance shall be recorded on the **Vessel Log (Appendix 4).**

7.3 Programmed Inspection & Maintenance

Programmed Inspection and Maintenance shall be carried out in accordance with the **Maintenance Schedule (Appendix 5) and recorded in the Maintenance Log (Appendix 6).** Details of work performed by qualified service agents are recorded on the job sheet retained by the service agent.

8. DOCUMENTATION

8.1 Vessel Log

- The Master shall record detail of each work day in the **Vessel Log (Appendix 4).**
- Entries in the Vessel Log must be legible and provide a true and accurate record.
- The Vessel Log must be kept for at least five years.
- The Vessel Log may be kept on the Vessel or on land.
- The Vessel Log must be made available for inspection upon request by a relevant agency.

8.2 Training

- The Master shall conduct and record all training in the **Training Record (Appendix 3).**
- The Master shall conduct all Drills and record in the **Training Record (Appendix 3)**.

8.3 Maintenance

- The Master shall record routine maintenance in the **Vessel Log (Appendix 4).**
- The Owner shall record Programmed Inspection & Maintenance in the **Maintenance Log (Appendix 6) and update the Maintenance Schedule (Appendix 5) as required.**

8.4 Crew Documents

- The Designated Person shall maintain an up to date **Approved Crew List (Appendix 2).**
- Copies of crew qualifications shall be kept on board the vessel. Original qualifications shall be retained by the crew.

9. VERIFICATION, REVIEW AND EVALUATION.

9.1 Annual Review

- The Owner and Master shall review this SMS including the Risk Assessment, Standard Operating Procedures, Vessel Log, Training Record, Maintenance Log and Approved Crew List and at the end of each fishing season.
- If an increased risk is identified by a review of the Risk Assessment, a change to Standard Operating Procedures and / or the Emergency Preparedness Plan may be required to reduce the risk to as low as reasonably practical.
- Any recurring issues or short comings of this document shall be rectified and / or procedures updated.
- Each review and its outcome must be documented and any actions or changes to procedures recorded on the **Revisions & Annual Review page (Appendix 7).**
- All crew members shall be notified of any changes to the SMS.

9.2 Periodic Review

- If at any stage the Owner or Master deems this SMS requires change for any reason, the Annual Review process is to be conducted and changes made as required.
- The Risk Assessment must be reviewed if the vessel undertakes an operation that differs from that normally undertaken or if the risk to the safe operation of the vessel has increased or decreased.

Appendix 1. Emergency Preparedness Plan

ORGANISTION	DETAILS	CONTACT
AMSA	24hr Emergency Help Line	1800 641 792
Coast Guard	Mallacoota Melbourne Western Port Portland	0476 591 400 03 9598 7003 03 5979 3322 03 5523 6111
Water Police	Gippsland Melbourne	0409 567 462 03 9399 7500
EPA **Marine Pollution**	EPA Marine Pollution Hotline	1300 372 842 03 9883 5331
Ports Controller	Gippsland Portland Geelong Melbourne	03 5155 6900 03 5525 0900 03 5247 0300 03 9644 9789
Work Safe		13 23 60
Transport Safety Vic		03 9883 5330
Parks Vic (Shark Reporting Line)		0408 368 164
Emergency Services		000 OR VHF 16 / 67 / 81 OR 27meg 88
Alfred Hospital or DES		03 9076 2000 1800 088 200

EMERGENCY ASSEMBLY STATION

- The Emergency Assembly Station for the vessel is the **cockpit.** In the event of danger in or near the cockpit, the alternate assembly station **is** the stern.
- Crew are to muster at Emergency Assembly Station in the event of an Emergency.
- Master or delegated person must account for all persons and conduct a search of vessel if persons are not visible or accounted for.
- Follow any instruction given by the Master or delegated person and provide assistance as required.
- Whenever the Vessel is in operation, all persons on board must be listed in the Vessel Log. The Vessel Log must be kept in an easily accessible location on board the Vessel.

MEDICAL EMERGENCY

D ANGER	Assess the situation, Ensure the safety of yourself, others & the patient. Remove the patient carefully from the water if required
R ESPONSE	Check for response (ask name, squeeze shoulders), Response Make comfortable, monitor & treat secondary first aid issues No Response
S END FOR HELP	CALL 000 OR VHF 16/81 OR 27Mg 88 Contact any vessels nearby.
A IRWAY	Open mouth, if foreign material present place in recovery position and clear the airway.
B REATHING	Check for breathing (Look, Listen, Feel) Normal breathing Recovery position & monitor. NOT breathing normal
C PR	Start CPR (30 Compressions : 2 Breaths) Continue until help arrives or patient recovers.
D EFRIBULATION	**NEVER** use Defrib machine on the vessel. Apply as soon as possible once on dry land
	Secure patient and transport back to port if required, in consultation with medical professionals. Record observations, injury and treatment details on the "Vessel Log", and provide to medical professionals

PERSONAL INJURY/DIVING INJURY

DIVING INJURIES (Suspected DCI, or Baratrauma)

Symptoms

- Pain (often around joints
- Numbness & Tingling
- Weakness / Paralysis
- Altered Responsiveness
- Breathing, Vision or Speech Difficulty

Treatment

- Lay the Diver Down Flat
- Provide Basic Life Support (see Medical Emergency)
- Provide as Near to 100% Oxygen as Possible
- Call Emergency Services (ph 000 or DES or VHF 16/81)

Fish Bites, Stings, Cuts, Burns, Abrasions, Breaks

- Render appropriate first aid in accordance with the first aid manual in the first aid kit.
- Escalate to Medical Emergency if required.
- Seek further medical advice and treatment once back at Port.

DIVING EMERGENCY

Shark Attention

- Diver to seek cover on the reef.
- Attempt to establish communication signals between diver and crew.
- Endeavour to have the boat directly above the diver.
- Diver to surface when safe to do so.
- Deckhand to assist Diver into the boat.

Out of Air (Airline cut, Compressor failure, other urgent)

- Deckhand turns on air reserve if available (for compressor failure).
- Deckhand signal diver to surface immediately.
- Deckhand to assist Diver into the vessel.
- Assess the situation and take appropriate action.

Anchor Drag, Severe weather approaching, other non urgent)

- Deckhand signal diver to surface as soon as practical.
- Diver to surface when ready.
- Deckhand to assist Diver into the vessel.
- Assess the situation and take appropriate action

Note: The best response to the diving emergencies above is often determined by the specific circumstances. Diver and Deckhand MUST make use of their experience and personal judgement to determine the safest course of action.

FIRE

- Yell FIRE, FIRE, FIRE.
- Master or delegated person to assess the situation and take action.
- Turn Vessel into the wind to minimize spread of fire (if possible).
- Shut Down Engines (except compressor if Diver is submerged).
- Turn Off Fuel supply (if possible) to main engines by closing all fuel shut off valves.
- Turn off Battery switches (if possible).
- Use Fire Extinguisher and attempt to put out fire.
- Signal Diver to surface (if submerged) and assist back to the Vessel.
- Issue PAN PAN on VHF.
- Monitor Fire
- Assess the damage, call for assistance or return to safe haven.
- If vessel is in danger if being engulfed prepare to ABANDON SHIP.

ABANDON SHIP

In extreme situations it may be necessary to abandon the vessel for the safety of all personnel on board.

- The Master shall give the order to Abandon Ship.
- Account for all crew.
- Don Lifejackets, PLBs and warm / protective clothing.
- Switch off engines.
- Secure emergency equipment (EPIRB, flares, portable radio, knife, rescue mirror, sea dye marker, compass, portable GPS, water, food, first aid).
- Radio “MAY DAY” (Vessel Name, Position, Number of persons, Problem)
- Throw Life Ring.
- Abandon Ship to Life Ring.
- Secure and activate EPIRB/PLB.

SEVERE WEATHER

- The Master shall give directions.
- Signal Diver to surface (if submerged) and assist back to the Vessel.
- Recover and secure dive hoses and gear.
- Secure the load in a manner that will give the best vessel stability for the prevailing conditions.
- Don Lifejackets, PLBs and warm / protective clothing.
- Ready Life Ring & emergency equipment.
- Plot appropriate course to shelter / safest route.
- Consider use of a sea anchor.
- Radio Coast Guard to update current location and course details.

PERSON OVERBOARD

- Whoever sees the incident shouts “Overboard, overboard, overboard”.
- This person then maintains a visual watch of the person and keeps one arm pointing at the person or where the person was seen to go over. Use a flash light in poor visibility.
- Throw a buoyant object (life ring, life jacket, esky) to help mark the spot and assist the person in the water.
- Master pushes “MOB” button on GPS plotter to mark position.
- Turn the vessel and approach from downwind of the person in the water.
- Once close enough, shift to neutral and turn off engines.
- Recover the person from the water.
- Render first aid or commence Medical Emergency Procedure if required.

Note: They may have injured themselves in the fall when hitting the water and may have abdominal/chest injuries that may make breathing extremely painful. Caution should be exercised in their retrieval.

They may have drowned and have water in their lungs. They could also have vomited and choked in the process. Unconscious people rescued out of the water should be handled with a minimum of manipulation, have their airways cleared and respiration checked. If a pulse it is not present or detected and it is safe for participants, CPR should be commenced.

GROUNDING

- The Master shall give directions.
- Account for Crew.
- Provide First Aid as required.
- Check for damage, flooding.
- Activate bilge pump if required.
- Determine appropriate action: keep working, return to safe haven or call for assistance.
- Issue PAN PAN call if appropriate.
- Escalate as appropriate.

COLLISION

- The Master shall give directions.
- Account for all crew.
- Check on the other vessel and crew.
- Check for injuries, render first aid or initiate the Medical Emergency Procedure if required.
- Assess and survey the damage.
- Decide on course of action i.e. continue with fishing operations, cease operation and return to port or contact emergency services.
- Activate bilge pump if required.
- Issue PAN PAN call if necessary.
- Escalate to Abandon Ship if necessary.

FLOODING

- Raise the Alarm
- The Master shall give directions.
- Don Lifejackets, PLBs & ready emergency grab bag (safety equipment).
- Activate bilge pumps and / or manual pumps / bailers.
- Attempt to stop the leak or reduce the flow.
- Navigate to a safe location if possible.
- Issue PAN PAN / call for assistance as required.
- Escalate to Abandon Ship if necessary.

Marine radio procedures

Radio silence period

Before using a radio, the operator should always consult a watch or clock to see if it is an official radio silence period. These are for three minutes beginning every hour and half hour.

Routine message

In making a normal call to another vessel or coast station the most important points to remember are:

› SAY – '(the other vessel's name)' THREE TIMES.

› SAY – 'THIS IS (your vessel's name)' THREE TIMES.

› SAY – 'OVER'.

› when he/she answers, agree on a working frequency.

› after each transmission SAY – 'OVER'.

› on completion of conversation SAY – 'OUT'.

Safety message

This message is preceded by the word 'SECURITE' and is used to broadcast navigational warnings, weather warnings and weather forecasts – initiated by ship and shore stations.

Urgency message

An urgency message indicates that the station sending it has a very urgent message to transmit concerning the safety of a vessel or aircraft, or the safety of a person. Urgency messages are sent on all distress frequencies and are identified by the words and sequence:

› 'PAN PAN' THREE TIMES.

› 'HELLO ALL STATIONS' THREE TIMES.

› 'THIS IS... (name of the vessel)' THREE TIMES.

› 'Urgency message' ONCE.

› 'OUT'.

Distress message

Distress messages are only sent when a vessel is in grave or imminent danger. Distress messages take priority over all other calls, so if you hear anything that sounds even remotely like a distress message you should suspend your own calls immediately.

In an emergency, the vessel in distress has full control over all other calls, not the coast station or other vessels which may be involved, unless control is delegated.

To send a distress message:

› SAY – 'MAYDAY' THREE TIMES.

› SAY – 'THIS IS... (name of the vessel)' THREE TIMES.

› SAY – 'MAYDAY – THIS IS... (name of the vessel)' ONCE.

› state the position as accurately as you can.

› describe the problem.

› state how many people are on board and estimated time remaining afloat.

Raising the alarm in an emergency

Marine Radio	27 MHz VHF HF	Ch 88 Ch 16 4125 kHz 6215 kHz 8291 kHz
Phone	000	
EPIRB	Activate your distress beacon.	

Other safety equipment

Emergency position indicating radio beacon (EPIRB)

An EPIRB is a small, floating, battery-operated radio transmitter which is turned on as a last resort in a lifethreatening situation to transmit your location and activate search and rescue efforts. If you are operating more than two nautical miles offshore, you must have a 406 MHz EPIRB on your vessel.

Note: Only digital 406 MHz EPIRBs are detected by satellite. Analogue 121.5 MHz is no longer received.

Satellite phone

Another communication option is a satellite phone. With this on board and the right weather conditions, communications availability is worldwide.

Appendix 2. Approved Crew List

Position (Master / Crew):		Qualification	Date / Expiry
Name:		Coxswain grade 1NC	
Address:		AMSA Exemption 38	
Phone:		SROCP (MROCP)	
Email:		First aid HLTAID003	
Next of KIN (Name):		Other	
Next of KIN (Address)		Joined Vessel	
Next of KIN (Phone)		Left Vessel	

Position (Master / Crew):		Qualification	Date / Expiry
Name:		Coxswain grade 1NC	
Address:		AMSA Exemption 38	
Phone:		SROCP (MROCP)	
Email:		First aid HLTAID003	
Next of KIN (Name):		Other	
Next of KIN (Address)		Joined Vessel	
Next of KIN (Phone)		Left Vessel	

Position (Master / Crew):		Qualification	Date / Expiry
Name:		Coxswain grade 1NC	
Address:		AMSA Exemption 38	
Phone:		SROCP (MROCP)	
Email:		First aid HLTAID003	
Next of KIN (Name):		Other	
Next of KIN (Address)		Joined Vessel	
Next of KIN (Phone)		Left Vessel	

Position (Master / Crew):		Qualification	Date / Expiry
Name:		Coxswain grade 1NC	
Address:		AMSA Exemption 38	
Phone:		SROCP (MROCP)	
Email:		First aid HLTAID003	
Next of KIN (Name):		Other	
Next of KIN (Address)		Joined Vessel	
Next of KIN (Phone)		Left Vessel	

Appendix 3. Training Record Crew Name:_____

Initial Safety Training: Upon joining vessel and prior to commencing duties for the first time.	Date Completed	Location of the Training	Participants Signature	Master's Signature
Bung – location and correct fitting				
Entry & Exit Points & Grab Rails				
Battery switches, location & operation				
Fuel Shut off Valve, location & operation				
Bilge Pump, switch location				
Three points of contact rule				
Life Jackets – location & operation				
Fire Extinguisher – loc & operation				
EPIRB – location & operation				
Radio – location & operation				
Flares – location & operation				
Life Ring – Location & operation				
First Aid Kit - Location				
Inflatable PFD & PLB issued				
PPE (Hat, Sunglasses, Sunscreen, gloves) issued				

Operational Training: New participant to the Victorian Abalone Industry, three days supervised training.	Date Completed	Location of the Training	Participants Signature	Master's Signature
Key Onboard Operations				
SOP Trailer Hook Up				
SOP Pre-Tow checks				
SOP Pre-Trip checks				
SOP Launching & Recovery				
SOP Loading / Unloading				
SOP Weather monitoring				
SOP Working close to reefs				
SOP Breaking waves				
SOP Capsizing				
SOP Refuelling				
SOP Anchoring				
SOP Pre-Dive checks				
SOP Davit operation				
SOP Compressor operation				
SOP Catch Handling				
SOP Other Vessels				
SOP Working Live				
SOP Shark Attention				
Other training requirements: All crew to have a working knowledge of:				
Industry Standard for Abalone Diving				
Statutory regulations & guidelines				
Communication signals in use				
Dive Planning & Deco. Procedures.				

Emergency Drills: All crew, Annually.		Date Completed	Location of the Training	Participants Signature	Master's Signature
DIVING EMERGENCY					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
FIRE					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
PERSON OVERBOARD					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
ABANDON SHIP					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
FLOODING					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
GROUNDING					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
COLLISION					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					
MEDICAL EMERGENCY					
Crew Name:					
Crew Name:					
Crew Name:					
Crew Name:					

Appendix 4. Vessel Log

VESSEL LOG	Details (or ref: Ab Docket)	Weather / Sea (Optional)	Engine Hours (Optional)
Date:			
Vessel I.D.:			
Master / Diver:			
Crew 1, Dive Supervisor:			
Crew 2:			
Activity:	Abalone		

PRE – FISHING CHECKS	YES	NO	CORRECTIVE ACTION
Pre-Tow Checks completed?			
Pre-Trip Checks completed?			
Pre-Dive Checks completed?			
Vessel & equipment clean (PrimeSafe)?			
Any signs of Pest Activity (PrimeSafe)?			

HEIGHTEN RISK ASSESSMENT	YES	NO	COMMENTS
Bar crossing?			
Restricted Visibility?			
Is there a Medium or High risk of grounding, capsize, flooding or P.O.B.?			
DON PFDs & PLBs?			

FISHING & POST FISHING OPERATION	YES	NO	NOT Applic	CORRECTIVE ACTION
Industry Standard for Abalone Diving followed?				
Standard Operating Procedures followed?				
Abalone Harvesting Code of Practice followed?				
Wash down complete (PrimeSafe)?				
ACA Q.A. Program followed?				

DIVE LOG	DETAILS
GPS / Site Description	
Profile	
Remarks	

INJURY / INCIDENT / ASSISTANCE / EMERGENCY COMMUNICATIONS / ROUTINE MAINTENANCE
I certify that this log is true and correct: Master's Signature:
I certify that this log is true and correct: Crew's Signature:

Appendix 5 Maintenance Schedule

Vessel Name		Vessel I.D.	

Item	Service Interval	Next Due / Expiry	Next Due / Expiry	Next Due / Expiry	Next Due / Expiry
Vessel Survey					
Safe Construction Certificate / Survey Inspect					
Certificate of Operation					
Safety Equipment					
PFDs - service / lights expiry					
PLBs - registration / expiry					
Flares – Rocket x3 - expiry					
Flares – Red smoke x2 - expiry					
Flares – Orange smoke x1 - expiry					
Fire Extinguisher – service					
First Aid Kit contents - expiry					
VHF Radio – test operate					
EPIRB – expiry / registration / test operate					
Torch – test operate					
Flags, bucket, Air horn - condition					
Life Ring & Light – test operate					
Propullsion / Steering / Electrical					
Auxiliary motor – service					
Main Engine (Port) - service					
Main Engine (Starboard)- service					
Steering – check fluid, service					
Fuel Filters – Inspect for water, Drain					
Fuel shut off valve – test operate					
Batteries, cables & connections - inspect					
Bilge Pump – clear of debris, test operate					
Compressor & Air Delivery System					
Compressor engine service					
Air pump – service					
All hose fittings – Inspect, tighten					
Breathing Air Filters - Inspect					
Air Receiver - Inspect					
HP Reserve cylinder – service					
Dive Hose – test					
Air Quality – test					
Deck Equipment					
Davit: rope, pulley & ratchet - Inspect					
Tool Kit – contents					
Anchor, rope & chain - inspect					
Dive Gear					
Dive regulators – service					
Bail out cylinder – service					
Shark Shield – service					

Appendix 6. Maintenance Log

Date:		Port Engine		Hours
Vessel I.D.		Starboard/ Aux Engine		Hours
Owner's Signature:		Compressor		Hours

VESSEL HULL	n/a	Check	ACTIONS / NOTES
Significant Damage or structural defects			
AMSA Survey Inspection			
SURVEY & SAFETY EQUIPMENT			
PFDs & PLBs – Service & test operate			
Life Ring with Light – battery test			
Flares (3x rocket, 2x Red, 1x orange)			
Fire Extinguisher - Service, condition			
VHF Radio – test operate			
EPIRB – bat test, registration, Exp Date			
Air Horn – condition			
Torches – test operate			
First Aid Kit (Scale G / F) – contents,			
Flags (Dive Flag) – condition			
Bucket with lanyard – condition			
PROPULLSION / STEERING / ELECTRICAL			
Auxiliary motor – Service, test run			
Main Engine (Port) – service			
Main Engine (Starb) – service s			
Steering – check fluid, service			
Fuel Filters – inspect for water / drain			
Fuel shut off valve – test operate			
Batteries, cables & electrical connections			
Bilge Pump – clear of debris / test operate			
COMPRESSOR & AIR DELIVERY SYSTEM			
Engine Oil – Inspect / change			
Engine Air & Fuel Filters – Inspect / clean			
Engine Spark Plug – Inspect / change			
Air Pump Oil – Inspect / change			
Drive Belt – Inspect / tighten / change			
All hoses & fittings – Inspect / tighten			
Breathing Air Filters – Inspect / clean			
Air Receiver – Inspect, relief valve test			
HP Reserve Cylinder – test / contents			
Oxygen Cylinder – test / contents			
Dive Hose - test as per Industry Standard for Abalone Diving Victoria V1.2 2014			
Air Quality – test as per Industry Standard for Abalone Diving Victoria V1.2 2014			
DECK EQUIPMENT			
Davit - rope, pulley & ratchet, condition			
Tools Kit - contents			
Anchor – rope, chain – inspect			
DIVE GEAR			
Diving Regulator –condition / service			
Bail Out Bottle – test / contents / service			
Shark Shield – bat test /service by agent			
Depth Gauge, Mask, Fins, Wetsuit			

Appendix 7. Revisions & Annual Review Page

Date	Reference No:	Section being reviewed / changed	Review Outcomes / Revisions	Signature of person making the change.