



## Environmental Management Plan

2018 - 2020

*MV Flatback and MV Olive Ridley*

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## 1. SCOPE OF ENVIRONMENTAL MANAGEMENT PLAN

### Nature of Operations

Sea Darwin is a marine based tour company located in Darwin in the Northern Territory. Established in 2008, the company recognised a need for quality marine based interpretative tours on Darwin Harbour. The company has two purpose built fast vessels which seat 24 and 32 passengers. The founding years of the operation resulted in the evolution of six distinct products:

- Darwin Harbour Highlights – taking in habitat, history and intrigue, see Darwin from the sea on this one hour adventure cruise.
- Turtle Tracks – a sunset odyssey for those with a spirit of adventure, and for those who want to visit the Bare Sand Island turtles, in their world, and on their terms.
- Sunset Fish’N Chips – adventurous and affordable sunset dinner cruise on Darwin Harbour offering fresh, local, wild caught fish whilst taking in the sights of the harbour.
- Bombing of Darwin Cruise – hear the stories of that fateful day in 1942 when WWII reached Australian shores and see the remnants of the war alongside the Darwin shoreline on this one hour cruise.
- Australia’s Frontline: WWII - let’s go back in time to 19 February 1942. On this half day tour you will hear the stories, visit the land and sea sites, and remember those who lost their lives during the Bombing of Darwin.
- Bombing of Darwin Double – spend the morning on Stokes Hill Wharf, taking in the Royal Flying Doctor Service Darwin Tourist Facility Bombing of Darwin virtual reality exhibition and then jump aboard for your 11am Bombing of Darwin cruise.

In 2010 Sea Darwin added an accommodation arm to their business, offering short term stays in waterfront apartments. Darwin Waterfront Apartments now has two holiday rental properties that are owned and managed by Sea Darwin.

### Environmental Policy / Environmental Commitments

**Sea Darwin Vision:** To manage our business in an environmentally responsible manner.

**Sea Darwin Environmental Commitment and Policy:** We recognise our legal and moral duty to use resources wisely and we comply with all legislation and eco certification accreditation for Darwin Harbour, for the Northern Territory and for the tourism industry. We are committed to managing all aspects of our operations in an environmentally responsible manner at all times. We care about the environment and ask our customers to do the same.

**Sea Darwin Commitment:** To ensure environmentally responsible behaviour is demonstrably part of our operations, we specifically undertake to:

- Maintain an Environmental Management Plan in order to help systematically reduce our impacts on the environment. This plan is to be inclusive of measuring our environmental impact and detailing the introduction and implementation of operational improvements aimed at reducing our Carbon Footprint.
- Maximise energy efficiency whilst minimizing emissions
- Use bio-degradable, eco cleaning products and office supplies.
- Maintain 'Advanced Eco Tourism' accreditation.
- Comply with all relevant government environmental legislation.
- Support government initiatives in relation to recycling programs.
- Maintain active involvement in marine debris and harbour clean-up activities.
- Communicate this policy to our employees and the wider community.
- Educate our employees and contractors on their environmental responsibilities and ensure this is integrated into their work practices, training and decision making.
- Continuously strive to improve the environmental performance of the company.
- Ensure our products maintain focus on education of guests and appreciation of diverse natural environment and the way local culture has evolved to support that environment.
- Foster positive relationships with Traditional Land owners and ensure that staff and guests are respectful of heritage and culture.
- Employment of local staff and use of local suppliers and produce where possible.
- Maintain active involvement in Top End Indigenous tourism networks.

### **Aims and Objectives**

The environmental aims of this Environmental Management Plan include:

- Ensure compliance with all environmental legislation and requirements
- Identify and minimise all possible environmental risks associated with the operation of Sea Darwin
- Contribute to the conservation objectives of the marine environments of Darwin Harbour, Bynoe Harbour and Bare Sand Island.
- Ensure there is no long term environmental or cultural impact from the operation of Sea Darwin and;
- Reduce contributions to greenhouse gas emissions and improve resilience and adaptation to climate change.

### **Environmental Characteristics**

The environmental aspects and cultural sites that are relevant to Sea Darwin include:

- Sea Turtles, specifically the flatback, the olive ridley, and hawksbill,
- Marine mammals in Darwin Harbour, including the dugong and dolphins (humpback, bottlenose, snubfin)
- Mangrove estuaries of Darwin Harbour
- Bare Sand Island
- Talc Head
- Fannie Bay Sandbar

### **Legal Obligations and Requirements**

Sea Darwin is committed to complying with obligations under the following Acts or Regulations:

- Marine Act 2012
- The International Convention for the Prevention of Pollution from Ships (MARPOL)
- Marine Safety Regulations – NT Department of Transport
- NT Food Act 2012
- NT Work Health and Safety (NATIONAL UNIFORM LEGISLATION) Act 2011
- NT Liquor Act 2019
- Permit to Take or Interfere with Wildlife (Department of Natural Resources, Environment, The Arts and Sport)

- Australian Securities and Investment Commission
- NT Business Registration

## 2. ENVIRONMENTAL AND ECOLOGICAL RISKS – RESPONSE, MINIMISATION AND MITIGATION

List of Environmental and Ecological Risks associated with Operations

Activity	Environmental Risk	Level of Risk High, Medium, Low	Strategy to Minimise Risk	Responsibility
Turtle Watching Tours	Turtle disturbance	Low to medium	<ul style="list-style-type: none"> <li>- Follow national protocols for Turtle watching.</li> <li>- Ensured Turtle Guides are trained</li> <li>- Impart information about the protocols to all guests</li> </ul>	<ul style="list-style-type: none"> <li>- Guides on tour</li> <li>- Interpretative information on board <i>Flatback</i> and <i>Olive Ridley</i></li> </ul>
Marine mammal observation	Mammal disturbance	Low to Medium	<ul style="list-style-type: none"> <li>- Follow national protocols for marine mammal observation</li> </ul>	<ul style="list-style-type: none"> <li>- Guides on tour</li> <li>- Interpretative information on board <i>Flatback</i> and <i>Olive Ridley</i></li> </ul>
Beach visits and Traditional activities	Pollution and environmental disturbance	Low	<ul style="list-style-type: none"> <li>- Talk to guests prior to disembarking</li> </ul>	<ul style="list-style-type: none"> <li>- Guides on tour</li> </ul>

## **Emergency Procedures**

The following procedures are documented in the Sea Darwin Standard Operating Procedures document, which all staff are required to be familiar with prior to commencing employment:

*Medical emergency:* As per Senior First Aid training. Vessel to return to dock immediately; phone 000 if necessary. Then phone office on 89423995.

*Fire emergency:* Use fire extinguishers, shut off fuel cocks. Disembark on land or deploy liferaft if the hazard is extreme. Advise Darwin Port on VHF Channel 10 advise Sea Darwin Office as soon as practicable.

*Man Overboard:* Deploy closest life ring. If at night use bow life ring with light. Recover person over Port side transom, where the dive ladder steps are located. Render first aid as necessary.

*Vessel breakdown or stranding:* drop anchor if necessary, ring office and advise. Office will organise tow/rescue .

*Abandon Ship:*

- Don life jacket.
- Collect survival kit
- Note present position.
- Send out MAYDAY message.
- Activate EPIRB
- Launch life raft attached to ship on leeward side (see below).
- Try to enter life raft directly from the boat (if impossible, use minimal swimming effort to get on board).
- Get a safe distance from the sinking vessel.
- Keep warm by huddling bodies together. Keep dry, especially your feet.
- Stream a sea anchor.
- Arrange lookout watches.

- Use flares only on skipper's orders when there is a real chance of them being seen

*Other vessel requiring assistance:* Where possible, assistance is to be rendered as long as crew and customers safety is not compromised.

*Cyclone:* Once a cyclone warning has been issued then the vessel is to be stripped of canvas and made secure in Duckpond, Tipperary Marina or on hardstand – at the discretion of person in charge.

### Hazardous and Polluting Substances

Sea Darwin’s refuelling procedures for the vessels *Flatback* and *Olive Ridley* include a commitment to only refuel at depots which operate under the NT Work Health and Safety Act (2011) and are in accordance with MARPOL. All refuelling is conducted with a minimum of two Sea Darwin staff present, with key objectives of preventing contamination of the land and sea around the refuelling Depot, minimising risk to Sea Darwin staff, and following Depot protocols for containing and cleaning up so that no environmental harm occurs.

### 3. ENVIRONMENTAL IMPACT ASSESSMENT AND MONITORING

KEY ISSUE	POTENTIAL IMPACTS	MANAGEMENT ACTION	OBJECTIVES AND MONITORING
<b>Conservation and wildlife disturbance</b>	Disturbance to nesting turtle population, hatchlings and marine mammals	<ul style="list-style-type: none"> <li>• Identify key populations and habitats.</li> <li>• Develop and maintain relationships with local authorities and experts</li> <li>• Maintain small group tours</li> </ul>	<ul style="list-style-type: none"> <li>• Adhere to National and Territory protocols for wildlife interference</li> <li>• Ensure all guides are trained in accordance with National protocols</li> <li>• Review and respond to guest experience feedback</li> <li>• Provide wildlife</li> </ul>

			sightings to relevant authorities
<b>Energy Use and Minimisation</b>	<ul style="list-style-type: none"> <li>• Increased cost of fuel and energy supply.</li> <li>• Increased carbon footprint</li> </ul>	<ul style="list-style-type: none"> <li>• Identify energy use and options for alternative</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor fuel and energy bills.</li> <li>• Establish benchmarks for fuel and energy consumption.</li> <li>• Identify achievable goals for reduction in energy and fuel use.</li> <li>• Review and monitoring of offset initiatives</li> </ul>
<b>Sustainable Purchasing</b>	Profitability issues to purchase in remote location	Source local supply where practicable	Annual review of monitoring of suppliers
<b>Waste Effluent</b>	Potential to contaminate and pollute the environment	Maintain system to vessel survey requirements	Conducted as part of marine survey requirement
<b>Waste and recycling</b>	<ul style="list-style-type: none"> <li>• Abundance of food and supply related packaged</li> <li>• Maintenance of waste disposal systems and protocols</li> </ul>	<ul style="list-style-type: none"> <li>• Purchase of green product</li> <li>• Ensure staff training regarding waste and recycling policy</li> </ul>	Ongoing review and monitoring of systems

<b>Noise and Vessel Emissions</b>	Noise emissions from motors	Use of state of the art equipment with digital management systems	Monthly review of data;  Ongoing maintenance of equipment to manufacturer specification
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#### 4. CLIMATE CHANGE ACTION AND EMISSIONS REDUCTION

Sea Darwin has a substantial commitment to environmental sustainability and minimizing the operations environmental footprint. Our climate change action and emission reductions policy define our contribution to preserving the environment and reducing the impact of carbon dioxide gasses that contribute to climate change and global warming. This policy is the direct responsibility of the Director of Sea Darwin and includes the following commitments:

- An annual review of what Sea Darwin needs to measure and monitor in order to be carbon neutral. This review includes identifying what needs to be measured by reviewing carbon footprint data we have previously identified, setting our organisational and operational boundaries, and creating an inventory – see below.
- Identifying ways emissions can either be avoided or reduced. Implementing practical strategies that the company, staff and guests can avoid or reduce the carbon footprint.
- Reconciling and monitoring all the actions and initiatives to reduce our carbon footprint and match them up to our company objectives
- Offsetting with project and initiatives, including sponsorship of AusTurtle research and practical involvement with Darwin Harbour Clean Up. Offset initiatives are monitored and reviewed annually, with focus on the implementation of the enterprises as well as the providers behind the offset products.

<b>Inventory that contribute to Greenhouse Gas Emissions</b>	<b>Emission Reduction Actions or Strategies</b>	<b>Targets, Monitoring and Improvement</b>
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Fuel Consumption	<ul style="list-style-type: none"> <li>• Conversion to energy efficient motors</li> <li>• Digital equipment for monitoring fuel consumption</li> </ul>	<ul style="list-style-type: none"> <li>• Monitor fuel consumption</li> <li>• Reduce fuel usage by 10% annually</li> <li>• Refuel with to green fuel provider</li> <li>• Purchasing policy for energy efficient equipment</li> <li>• Keep abreast of fuel consumption improvements in the marine industry.</li> </ul>
Supplies and suppliers	<ul style="list-style-type: none"> <li>• Green purchasing policy for recycled paper</li> <li>• No print email policy</li> <li>• All supplies sourced from local businesses</li> <li>• Choose suppliers taking actions to reduce their emissions</li> </ul>	<ul style="list-style-type: none"> <li>• Target 100% recycled paper use in office</li> <li>• Develop green supply chain with local businesses</li> </ul>
Office base and equipment	<ul style="list-style-type: none"> <li>• Install and use energy saving bulbs and lights</li> <li>• Purchase energy efficient appliances</li> <li>• Switch off appliances when not in use</li> <li>• Use of fans, natural breeze rather than air-conditioning</li> </ul>	<ul style="list-style-type: none"> <li>• Use suppliers with green operational base</li> <li>• Reduce energy bill by 10% annually</li> </ul>
Staff and guests	<ul style="list-style-type: none"> <li>• Training of staff on emission reduction actions</li> <li>• Impart information to guests about emission reduction</li> </ul>	<ul style="list-style-type: none"> <li>• Incorporation of carbon footprint information in staff training, website and guest information on board</li> <li>• Annual Review and monitoring of Standard Operating Procedures</li> </ul>
Consumables	<ul style="list-style-type: none"> <li>• Recycling waste sorted on board</li> <li>• All sorted consumables to be disposed of at approved Darwin City Council outlets,</li> <li>• Food service to be provided with</li> </ul>	<ul style="list-style-type: none"> <li>• Information to prompt guests / staff to recycle all paper, cans, plastic, glass etc</li> <li>• Continued exploration of environmentally friendly supply</li> </ul>

	no disposable crockery and cutlery <ul style="list-style-type: none"> <li>• Refillable water bottles on board</li> <li>• Bulk supply of insect repellent and sunscreen</li> </ul>	of individual serve water
Marketing	<ul style="list-style-type: none"> <li>• Increase use of web based marketing and advertising</li> <li>• Market Sea Darwin emission reduction initiatives</li> <li>• Carbon Offsetting program with Austurtle</li> </ul>	<ul style="list-style-type: none"> <li>• Annual review and reduction of print based advertising</li> <li>• Annual review and monitoring of carbon offset initiatives</li> </ul>

## 5. ENVIRONMENTAL IMPROVEMENTS

The Director of Sea Darwin, Jim Smith, takes personal responsibility for environmental improvements and is the recognised environment representative for the organisation. His role includes, but is not limited to, the annual review and monitoring of the Environmental Management Plan, and to oversee the collation and forwarding of all turtle and mammal data to AusTurtle and to the Coastal Dolphin Research Project, and all marine debris data to Tangaroa Blue.

Sea Darwin has the latest available outboard engine technology on its vessels, which includes digital management of fuel and emissions. This technology will be maintained to manufacturer specification, with data reviewed and monitored to ensure best practice is maintained.

## 6. ADMINISTRATION AND REPORTING

The Environmental Management Plan shall be maintained on site and include the following information:

- identified environmental risks (aspects) and their controls
- responsibility for actioning
- records of actions having been taken
- an accessible and visible incident report form for staff members to complete should an incident occur

Incident Reporting is to be completed on the Sea Darwin Incident Report form located on the vessel *Flatback* and *Olive Ridley*. This form is to be completed at the first

opportunity post incident, and signed off by the relevant staff member and any other staff member who was involved or witness to the incident. All forms will be reviewed by the Company Director within 12 hours, with determinative action taken at the time. Forms will be recorded and filed within the Sea Darwin office. Non Conformance and Corrective Actions are at the discretion of the Company Director, and will be determined in accordance with company policy and relevant legislation.

Staff Training and Development will be ongoing and at least annually and will include information and exposure to the Environmental Management Plan. All subcontractors will be trained and inducted to the same level as company employees and will be informed of their responsibility for ensuring compliance with all policies and procedures.

Customers and guests on board *Flatback* and *Olive Ridley* will be made aware of the Environmental Management Plan through information and signage on a vessel wall. Included within the Sea Darwin interpretative document on board will be information about the measures taken to protect and enhance the environment. Customer awareness continues through verbal interpretation of potential climate change impacts and steps that can be taken to reduce carbon emissions and promote environmentally responsible lifestyles.