# Australian Marine Debris Initiative

## Why run a beach clean up?

18,000 individual pieces of plastic are estimated to float in every square kilometre of ocean. Six million tonnes of rubbish finds its way into the world's oceans every year. Three times as much rubbish is dumped into the world's oceans annually as the weight of fish caught.

Most people agree that this horrifying amount of marine debris is unsightly, but not everyone is aware of the huge impact that it has on our marine life and seabirds.

77 Australian marine species have been shown to be impacted by marine life, many of which are killed by this floating rubbish. This includes over twenty Australian endangered species including the humpback and blue whales, Tristan albatross and all species of turtles.

Photo: Troy Mayne

Marine debris can cause entanglement, getting caught around necks, flukes, flippers and fins. The plastics and ropes cannot stretch as the animal or bird grows which can cause painful infections, amputations, strangulation and ultimately death.

Even the smallest pieces of plastic and cigarette butts can have fatal results. Seabirds such as albatrosses can pick up these pieces, thinking they are food. They can then be regurgitated to feed their young chicks who cannot digest plastic. Turtles and other marine life may eat plastic bags thinking they are jellyfish. The ingestion of plastics can physically block the digestive system, causing pain, internal injuries, suppression of the immune and reproductive systems and death.

Once discarded into the ocean, plastics can take hundreds of years to breakdown into a fine plastic powder, but will always remain in the marine environment. Plastic bottles can take up to 450 years and monofilament fishing line up to 600 years, the cigarette butt, up to 10 years. This gives the marine debris an opportunity to kill time and time again as it remains in the food chain.

This guide is intended for use by community groups wishing to address marine debris in their local area by undertaking a clean up event. It includes:

1. How to Run a Beach Clean Up Event Planning Guide;
2. Data Collection Sheet;
3. Marine Debris Identification Manual – A broad and detailed guide to the types of marine debris commonly encountered on Australian beaches.

## What happens to the data we record?

Once a clean up event is complete, the coordinator returns the data sheet to the office of Tangaroa Blue by email or post. The data is entered into the Australian Marine Debris Database which is used by local, state and national government as well as industry and communities to identify the types and amounts of marine debris impacting each site, and then to find practical ways of preventing those items from ending up in the ocean in the first place. The data can also be used to gauge levels of improvement or worsening of our marine pollution problem.

## How to run a beach clean up event

1. Pick your beach clean up site and run a risk assessment to make sure there are no hidden hazards to your volunteers. (Please see page 3).
2. Promote your event with local media and other partners. Think about organising a BBQ/picnic etc for after the clean up to thank your volunteers.
3. The day before the event, run another risk assessment to make sure no new hazards are at the site. Ensure that you have an appropriate first aid kit and mobile phone available.
4. We recommend having someone trained in first aid available during the clean up.
5. Hold a safety briefing (please see page 4) for all volunteers. Ensure that volunteer insurance is organised and appropriate paperwork has been completed. Volunteers under the age of 18 should be accompanied by an adult.
6. Delegate clean up areas to the volunteers informing them of any hazards, time frames or other additional information. Distribute clean up materials to volunteers. Ensure that volunteers work in pairs or groups, but not alone.
7. Ensure that all volunteers have appropriate safety equipment including gloves, shoes, sunscreen, drinking water, sunglasses and eye protection and appropriate clothing etc. Ensure there is hand washing facilities or antiseptic hand wipes available for volunteers.
8. Ensure that there is at least one volunteer who knows how to handle syringes (see page 4).
9. If you find abandoned cars, weapons or suspicious items, contact the local police immediately.
10. Let volunteers know what to collect i.e. all man-made materials during their clean up.
11. At the end of the clean up, empty the bags onto a tarp and sort into the item groups (see the Data Collection Sheet attached). Separate materials that can be recycled and dispose of appropriately.
12. Fill in the Data Collection Sheet and return to info@tangaroablue.org or post to PO Box 757, Port Douglas, QLD 4877 for inclusion in the Australian Marine Debris Database along with any photos, reports and media coverage.
13. Any unlisted items can be written under the “Additional Items” section of the Data Collection Sheet and any item that can’t be identified can be photographed and also submitted.
14. Make sure you have a plan on how to get rid of the rubbish, contact the local council. If you need assistance contact Tangaroa Blue Foundation.
15. Please be environmentally sensitive – some clean up sites may include nesting areas for endangered birds or have aboriginal historical sites – please keep clear of these areas. Contact the local Department of Indigenous Affairs and Department of Environment for further information.
16. Please contact your local council or Tangaroa Blue Foundation if you have any questions.

## Site Safety Inspection

When planning your site you should take reasonable steps to avoid or minimise any potential risks – carry out a site inspection before your clean up event.

To ensure the safety of all participants, here is an example of a safety check: Are there any areas that are rough, slippery, steep or sloping? RISK CONTROL e.g. wherever possible, work up the slope

| POTENTIAL RISK | YES / NO |
|---|---|
| Are there holes, fallen branches or other trip hazards? | |
| Are there overhanging dead branches that could be dislodged by wind? | |
| Is the area thickly vegetated; could volunteers become lost? | |
| Are there likely to be snakes, spiders, bees, wasps, ticks, bull ants or crocodiles? | |
| Is there a bushfire risk? | |
| Is there deep, murky or moving water nearby? | |
| Will the site be affected by tidal water? | |
| Could volunteers be exposed to contaminated substances / sewage? | |
| Are there likely to be discarded syringes at the site? | |
| Will vehicles be passing in close proximity? | |
| Could asthmatics be exposed to dust or pollen? | |
| Could volunteers be exposed to asbestos in old buildings or building material? | |
| Is the site isolated or remote from emergency assistance? | |
| Will volunteers be working in direct sun? | |
| Could volunteers experience temperatures that could cause heat stress? | |
| Will volunteers be exposed to frost, cold winds or rains? | |
| Is there a chance that electrical storms (thunder/lightning) could occur? | |
| Will there be a large number of children volunteering? | |
| Will there be several volunteers that are physically or intellectually disabled? | |
| Will there be several volunteers who do not speak English? | |
| Will there be several volunteers with challenging behaviours? | |
| Will members of the public who are not clean up participants visit or pass through the site while work is occurring? | |
| Will members of the public visit the site after the participants leave but before the rubbish is removed? | |

If you have answered 'Yes' to any of the above questions ensure that you also identify risk controls and incorporate these into your site briefing. You can approach your local council in planning to control these risks. You will also need to conduct another survey the day before the clean up to ensure there have been no changes to the site conditions.

## Volunteer Safety Briefing

Thank you for volunteering to participate in this clean up and helping to protect our oceans!
For your own and other volunteers' safety please read the following information.

- If you have any questions or concerns please alert your coordinator before participating in the clean up event. Advice, equipment and assistance are available from your coordinator.
- You must complete the Volunteer Registration Form and hand to your coordinator. Be aware of any pre-existing medical conditions as requested on the volunteer registration form. Discuss limitations with the coordinator to ensure your activities are appropriate.
- No person is permitted to participate unless registered.
- All children under 18 years of age must be accompanied by an adult at all times.
- Some items to be cleaned up may be hazardous (e.g. building materials, asbestos, chemicals). DO NOT handle these or any items that you are unsure of – inform your coordinator.
- Do not handle syringes. If you find a syringe, inform your coordinator.
- Some clean up areas may be potentially dangerous (e.g. beaches, roadsides, cliff edges & river banks) or contain hidden dangers (e.g. big surf, strong water movement, rogue waves or venomous snakes & spiders). Please act with due caution & avoid these areas where possible.
- Sturdy enclosed footwear, gloves and protective equipment must be worn (i.e. hat, sunglasses, eye protection, sunscreen and long sleeves).
- Please ensure that you keep yourself well hydrated during the activity.
- Wash hands after the activity and before eating.

## Syringes and Sharp Objects

Used syringes are potentially dangerous and it is important to prepare for their removal. Syringes and other potentially harmful objects should only be removed and handled by trained volunteers/coordinators.

1. Syringes must be collected in Sharps Containers, not in bags or buckets.
2. Bring the Sharps Container to the syringe location.
3. Wearing gloves carefully pick up the object using tongs and place the sharp end point-first into the container.
4. Replace the lid securely on the container – before moving.
5. Wash hands with soap and water on completion or use an antiseptic hand wipe.
6. At the conclusion of the event, take the Sharps Container to your local hospital, council or health care centre.

At no time should needles or syringes be touched directly with bare hands and no attempt should be made to cover, break or bend the needle.

**In the Event of a Needle Stick Injury**

1. Stay calm. The risk of infection by HIV or hepatitis from a needle stick sustained in the environment (as opposed to a medical setting) is extremely low.
2. Wash the area with soap and running water (if not available use an alcohol-based hand rinse).
3. Apply antiseptic and a band-aid.
4. Seek medical assistance as soon as possible from your local doctor or hospital.