



Australian Government
Department of the Environment and Energy
Australian Antarctic Division



**AUSTRALIAN
ANTARCTIC
PROGRAM**

ENVIRONMENTAL CODE FOR PARTICIPANTS IN THE AUSTRALIAN ANTARCTIC PROGRAM

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V1 REVISION HISTORY

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1. Introduction

Antarctica is a special place. Its environment is highly susceptible to the effects of human activities and its ability to recover from disturbance or damage is lower than in other environments because chemical and biological processes are much slower in the cold. Australia has an obligation under the Antarctic Treaty System, several international agreements and national legislation to protect the Antarctic environment.

The actions of individuals can contribute significantly to protecting Antarctica.

The AAD also has a responsibility to Tasmanian government legislation and agreements to ensure protection of the environment when undertaking activities at Tasmania's sub-Antarctic Macquarie Island.

This *Environmental Code* provides guidelines to help you minimise your environmental impacts when in Antarctica and the sub-Antarctic. It cannot cover every situation, and you may not be able to apply it in the event of an emergency. If you are unsure you should always seek the advice of Voyage, Field or Station Leaders to ensure you have the information and tools you need to minimize the environmental impact of your visit.

2. Environmental Impact Assessment and Permits

Activities may only be undertaken Antarctic and sub-Antarctic after an environmental impact assessment has been undertaken, some activities will require a permit, or may be prohibited outright.

This Code supplements your obligations under legislation applying in Antarctica, the Southern Ocean and on Macquarie Island. You should always check the requirements at <http://www.antarctica.gov.au/environment/environmental-impact-assessment-approvals-and-permits>, or with the AAD's Territories, Environment and Treaties Section staff (eia@aad.gov.au).

Project proponents and chief investigators are required to ensure all persons undertaking activities are aware of the conditions of environmental authorisations and permits and understand that they are legally bound by them.

If it is proposed to change the activity, or an activity changes, the proponent or permit-holder must seek a variation to their environmental authorisation and/or permit. A 'change' refers to any variation to the program's duration, location, frequency, equipment used, physical consequences, environmental impacts and their risk, or ability to remediate or monitor impacts, etc.

3. Before Departure

Protecting Antarctica begins at home. This *Code* can help you plan how to minimise your impact before you depart for the Antarctic or sub-Antarctic. You can also read about the area that you are visiting and its environment on the AAD website: www.antarctica.gov.au.

Complete all the necessary online training courses, as detailed in your transport package, well before departure. Attend any technical and/or professional Australian Antarctic program training or briefing, as applicable. Attend the pre-departure training sessions held at AAD head office Kingston, Tasmania.

Biosecurity is about protecting the Antarctic and sub-Antarctic environments from the risk of introducing invasive, non-native species. Everyone has a responsibility to ensure that all of their personal effects, including cargo, equipment, clothing, footwear and any other gear carried and consigned as cargo is absolutely clean or new. Thoroughly inspect clothing and equipment for traces of plants, seeds, soil, insect eggs and any other propagules. Hot wash and dry any clothing, running shoes and footwear, bags or gear that you used in field training or have worn elsewhere. Personal baggage and gear may be inspected prior to departure.

4. Prohibited and Restricted Items

Under no circumstances should you take into the Antarctic any:

- polystyrene beads, chips or similar packaging as it is a real threat due to wildlife ingestion
- non-native species
- non-sterile soil
- polychlorinated biphenyls
- pesticide (unless approved for scientific, medical or hygienic purposes)
- any organism that is not indigenous to the Antarctic (unless authorised in a permit, or approved to be used as food).

Antarctica and the sub-Antarctic is under threat from introduced alien species of plants, animals and micro-organisms. You must ensure that all personal equipment to be taken south and between Antarctic and sub-Antarctic regions is meticulously checked and cleaned (e.g. scrub and bleach boots, pick velcro, vacuum pockets, clean camera tripods and bags, tents, scientific equipment). Where possible take new clothing and equipment.

Avoid taking the following into the Antarctic and sub-Antarctic:

- aerosol cans
- personal products containing microbeads (avoid ingredients such as PE, PP, PET, PMMA and PA)
- molded polystyrene packaging
- excess plastic and packaging.

5. On Ships and Aircraft

- Remember, the marine environment is part of Antarctica and the sub-Antarctic – keep it clean and throw nothing overboard e.g. food scraps, plastics, cigarette butts.
- Close the window blind at night on your ship cabin when near land to minimise bird strikes.
- Do not take any fresh produce ashore of off aircraft.
- Do not request aircraft pilots to take any diversions – they use approved routes for safety and to minimise wildlife disturbance. It is also prohibited to overfly certain areas.

6. At the Station

- Conserve fuel and energy – minimise vehicle use, minimise water use, shut doors and turn off unnecessary lights and appliances.
- Abide by the waste sorting protocols on Station. Follow the instructions of station leaders, environment officers and field training officers about environmental protection.
- DO NOT flush wipes or other personal hygiene products down the toilets.
- Keep the station tidy and pack material and equipment away (out of the elements) when not in use.

7. In the Field

- In Antarctica and the sub-Antarctic the goal is to remove all human wastes (including faeces, urine and washing water) from the field and return it to station and/or ship for management.
- Minimise what you take into the field. Remove all excess packaging before you leave station.
- Always secure equipment, stores and wastes to prevent foraging by wildlife and scattering by high winds. Unsecured items can also be a safety hazard.
- Any activities to be carried out in Antarctic Specially Protected Areas (ASPA) and Antarctic Specially Managed Areas (ASMA) must be consistent with the relevant management plan available from https://www.ats.aq/e/ep_protected.htm. Entry to an ASPA also requires prior approval in the form of a permit.
- Restrictions apply to grey water and urine disposal. Check with your field or station leader to determine the approved method and location.
- In the field on Macquarie Island human waste may only be deposited in the ocean where it can be rapidly dispersed.
- When driving in Antarctica, travel only on ice or snow-covered ground. Stay away from ice-free ground. Travel only on approved routes.
- When walking, use established tracks – otherwise take the most direct route and avoid fragile terrain and plant and animal communities, remember to look down.
- If you are moving between wildlife colonies in different parts of the Antarctic or sub-Antarctic make sure your gear is cleaned to prevent any spread of disease.
- Do not take poultry or poultry products into the field.
- On Macquarie Island, members of the Brassica family (cabbages, broccoli and cauliflower) may not be taken into the field due to possible disease transmission to local plants. Dried mushrooms may not be taken into the field due to the risk of propagation.
- Manage fuel and hazardous chemicals to prevent leaks or spillage. Use only fit for purpose containers, as detailed on the product safety data sheet and routinely inspect for damage or leaks. Follow all AAD approved SOPs when refueling and handling fuel.
- Avoid refueling or changing oil in windy conditions or in areas that might direct accidental spillage into sensitive areas e.g. lakes, vegetation, bird or seal colonies. Use funnels and a spill pad or drip tray and have spill equipment available.
- If a spill occurs, all reasonable steps must be taken to contain the spill and to minimise environmental damage. All spills must be reported, regardless of size.
- Do not swim or wash yourself or your equipment in lakes. These activities contaminate the water body and disturb the water column, delicate microbial communities and sediments.

8. Equipment and Accommodation

- Use existing field huts and camps to concentrate impact to fewer areas. Otherwise campsites should be located away from lakeshores, streambeds, vegetated areas and wildlife to avoid contamination and disturbance.
- Where available, use solar and wind power units to minimise fuel usage.

- Do not interfere with any buildings, equipment, supplies, study sites or markers.
- Unless authorised, do not interfere with buildings or artefacts likely pre-dating the 1960s.
- Items discovered in the field should be photographed and left in place unless they are in imminent danger of damage or loss. Report the discovery to the station leader and log the details in the AAD incident reporting system available on the AAD intranet homepage.

9. Minimise Disturbance to Wildlife and Vegetation

- Unless authorised in a permit, it is an offence to interfere with or disturb wildlife, or to modify their habitat. Regardless of whether you have a permit to disturb, you should always try to minimise your disturbance.
- Take care around wildlife and vegetation. Think about your choice of route and select a path to minimise your impact e.g. avoid wildlife colonies, burrows, unstable ground and soft vegetation. Tread lightly, as some plant communities and geological formations are especially fragile, even when concealed by snow.
- The sensitivity of an animal depends on the species, its location and the stage of its life cycle. Animals are most sensitive to disturbance when they are breeding or moulting.
- Be alert to changes in wildlife behaviour especially changes in posture or vocalisation. If you detect signs of disturbance, move away slowly and quietly. In some situations it may be difficult to maintain your distance.
- If you are sitting or lying down, wildlife may approach you of its own accord. If this occurs, remain as still and as quiet as possible until it moves away.
- To minimise the likelihood of disturbance when on foot, use the following minimum approach distances as a guide:
 - 100 m – giant petrel and albatross
 - 50 m – breeding/moulting emperor penguin
 - 15 m – all other breeding animals and birds
 - 5 m – non-breeding seal or bird.
- Try to remain together as a group when viewing wildlife. Do not surround individuals or groups of seabirds or seals. Always give animals the right of way and do not block their access routes.
- Minimise vehicle use to lessen disturbance and stay well clear of all wildlife, as far as practicable. If you are likely to approach wildlife in a vehicle within the following distances, you will require a permit:
 - 200 m – all vehicles
 - 750 m – single engine aircraft.
- To minimise disturbance to wildlife concentrations or cetaceans when travelling in a watercraft or aircraft, refer to the *Australian Antarctic Division Small Boats Operations Manual* or *Flight Paths to Avoid Wildlife in East Antarctica*. Projects that plan to travel closer than these distances must have a permit.
- Never feed wildlife and do not leave food or scraps lying around.
- A permit from the Tasmanian Director of National Parks and Wildlife is required to enter Macquarie

Island Nature Reserve. Some areas of the island are further restricted during times of the year to protect breeding wildlife, particularly albatrosses and giant petrels and these times may change from year to year. Check with Tasmanian Parks and Wildlife Service rangers on the island before going out in the field.

10. Scientific Work

- Ensure you are familiar with the environmental management measures applying to your field work, and that you have been supplied with and understand the all associated environmental authorisations and permits, where applicable.
- It is an offence to contravene a condition attached to an environmental authorisation or permit issued under the *Antarctic Treaty (Environment Protection) Act 1980*. If you need to vary any activity you must apply for a variation and have this approved before you commence the activity, contact the AAD's Territories, Environment and Treaties Section staff (eia@aad.gov.au).

11. Incident Reporting

- Report all environmental incidents, hazards and suggested improvements to your field, station or voyage leader (e.g. presence of exotic species, fuel or chemical spills, entanglement of wildlife). These must be logged on the AAD incident reporting system on the AAD intranet homepage for action.
- If you observe any practices that you believe may be in breach of this code, speak to your Voyage, Field or Station Leader or manager in the first instance.

12. When You Leave

- Unless authorised by a permit, it is an offence to collect meteorites, rocks, shells, artefacts and plant and animal matter (feathers, bones and the like).
- Remove everything you take into the field, particularly rubbish. Unless authorised, all scientific and field equipment including markers must be removed when you leave a site.

13. Further Information

For further information contact the Environmental Management Unit helpdesk at AADEnvironment@aad.gov.au.