

Guidelines for Cleaning Vehicles

Based on UK procedures for vehicle cleaning to prevent transfer of non-native species into and around Antarctica

Non-native species can represent a major threat to biodiversity and could have serious negative impacts upon existing high-latitude ecosystems. Negative ecosystem impacts can be caused by non-native species introduced from outside Antarctica and the redistribution of native Antarctic species to other areas of the continent outside their normal distribution range. Vehicles, such as quad bikes, snow mobiles and plant machinery, are transported routinely into and around Antarctica by ship and aircraft from a wide range of locations. As biological material (e.g. plant fragments, seeds, insects and microorganisms) and soil can become attached to vehicles during everyday use, when vehicles are moved from one location to another, these materials may also be transferred. Transported vehicles therefore have the potential to act inadvertently as vectors that can carry biological organisms over large distances to areas where they are not normally found.

- The term 'vehicles' describes all wheeled, tracked or skied machinery, both powered or unpowered, that moves or is moved over ice and/or ice-free areas. This including all snow mobiles, quad bikes, construction vehicles, bulldozers, trailers, snow blowers, heavy plant and aircraft that are transported to Antarctic by ship.
- Vehicles should be inspected to ensure that they are free of visible soil and biological material (e.g. plant fragments, seeds and insects) and if necessary thoroughly cleaned before being loaded into aircraft or ships for transport into the Antarctic Treaty area, or between field sites or research stations within Antarctica.
- Where practicable, high-pressure steam/hot water cleaning of vehicles is recommended. Alternatively, vehicles may be cleaned manually, such as with a bucket of water and brush. The objective is to ensure that no soil, mud or biological material is left on the vehicle, including the wheels, wheel arches, tracks and areas underneath the vehicle. Vehicle accessories, such as forks and buckets, should be cleaned in a similar manner.
- Where practicable, vehicle interiors, upholstery and mats should be brushed and/or vacuum cleaned to remove any soil or biological material.
- Following cleaning, care should be taken not to contaminate the vehicles prior to loading onto the ship or aircraft. Vehicle storage facilities should minimise the potential for recontamination of cleaned vehicles prior to transport and, if necessary, arrangements should be made to thoroughly clean the vehicles at the ship or aircraft loading site.

- Immediately before being loaded onto the ship or aircraft for transportation, all vehicles should be checked by a designated person to ensure they are free of soil and biological material. If any soil or biological material is found, the contaminated vehicle should be cleaned and re-inspected before being transported.
- If transported into the Antarctic Treaty area, where practicable vehicles should also have their engines started before loading, to ensure rats and mice are not living in the engine compartments.
- If a vehicle is known or suspected to have been transported to, or within, Antarctica without being cleaned, the incident shall be recorded and appropriate action taken to prevent recurrences.
 - (1) If the un-cleaned vehicle has not been unloaded from the ship or aircraft, where practicable it should be cleaned before off-loading. The removed soil or biological material should be collected into a sealed container and disposed of immediately by incineration or removed from the Antarctic Treaty area for disposal. If this is not possible, the uncleaned vehicle should not be unloaded, but returned to the originating location.
 - (2) If the un-cleaned vehicle has been unloaded from the ship or aircraft, as far as it practicable, it should be re-loaded immediately and then either cleaned in accordance with (1) above, or removed from the Antarctic Treaty area. Prior to re-loading, precautions should be taken to avoid spreading any attached soil or biological material from the vehicle to other locations in the local area. If re-loading the vehicle is not possible, the vehicle should be cleaned to remove all soil and biological material. Every effort should be made to collect and isolate the detached soil and biological material in a sealed container before disposal by incineration or removal from the Antarctic Treaty area.