







This initiative is supported by **PacWastePlus** a 85-month project funded by the European Union (EU) and implemented by the Secretariat of the Pacific Regional Environment Programme (SPREP) to **sustainably and cost effectively improve regional management of waste and pollution.**

This has been produced with assistance from the European Union. Its contents are the sole responsibility of SPREP and do not necessarily reflect the views of the European Union.

FACTSHEET

Recommended Safe Options for Landfill Disposal of ACM Wastes in Pacific Island Countries

Asbestos has been widely used in the Pacific as a building material and in a range of other uses. Today asbestos containing material (ACM) represents a significant health risk to Pacific Islanders who may be exposed to the asbestos fibres.

Over the last decade numerous projects have been undertaken to remove asbestos in the Pacific and reduce the risk of exposure. But much still remains, often in a deteriorating condition where fibres are readily released to the air.



In some recent projects sponsored by SPREP asbestos waste has been exported for disposal whereas local disposal would, in most cases, be more appropriate. Landfill disposal of ACM waste remains a key strategy for ensuring the safe containment of ACM, preventing fibre release, and minimizing environmental and human health impacts. Some Pacific countries – with suitable facilities and procedures in place do permit the disposal of asbestos to land. This fact sheet outlines recommended best practices for ACM waste disposal by landfill in Pacific Island Countries.

Safe ACM Landfill Disposal Options

Dedicated ACM Landfill Cell

It is preferable to locate dedicated ACM landfill cells at existing landfill sites as these locations are already dedicated to waste management.

The main requirements are:

- ▶ A separate cell is allocated for ACM disposal, sized according to ACM waste volume.
- ▶ The base is lined with compacted clay or another impermeable material, depending on what is available.
- ▶ The ACM waste, once placed, must be immediately covered with 300mm of inert material (e.g., clean soil, crushed rock or whatever suitable material is available).
- ▶ Once the cell is full, a permanent cap (e.g., concrete or synthetic liner) should be applied for long-term containment.

This option therefore offers enhanced safety but requires some specialized landfill design.

Co-disposal in General Landfills

This option involves placing the ACM waste with existing general waste.

The main requirements are:

- ▶ The ACM waste is placed with general waste for disposal at a convenient location, using special procedures, as part of the normal waste management operations
- ▶ Once the ACM waste is placed, it needs to have proper coverage with a minimum of 300mm of compacted general waste.
- ▶ The location should be recorded, and the ACM waste disposal areas must remain undisturbed to prevent exposure risks.
- ▶ Landfill operations must prevent future compaction that could break ACM containment.

This is a lower-cost option than dedicated landfill cells, but if strict landfill management practices are followed, it is deemed an acceptable ACM waste disposal method.



Best Practices for ACM Landfill Management

For both dedicated cells and co-disposal, the following should apply, for waste preparation, management and disposal, and site selection.

Proper Waste Preparation, Management and Disposal



There should be at least 24 hours notification of ACM waste arrival to ensure proper preparation takes place.



The ACM waste should be double wrapped in heavy-duty plastic (200-micron HDPE) or placed in specialized strong sealed bags, such as hazibags.



Landfill operators should wear appropriate PPE – disposable overalls, half-face respirators with particulate cartridges, rubber boots and goggles and disposable gloves.



Permanent records of the ACM disposal location should be maintained to prevent future disturbance.



The ACM waste should be careful placed in the landfill to avoid breaking containment.



Regular inspections should be carried out to ensure the ACM waste remains contained.

Site Selection Best Practice Criteria



The landfill used for ACM waste placement should be located at least 1 metre above the groundwater table if it is used for potable purposes.



The site must be away from coastal erosion zones and areas prone to climate risks.



ACM wastes should be disposed of only in well-managed landfills with long-term operational security.

Conclusion

Proper landfill disposal of ACM waste is essential for protecting human health and the environment. By following these recommended practices, Pacific Island countries can effectively manage ACM waste, ensuring its long-term containment and minimizing future risks.