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Pacific Disaster Waste Management Guideline:

A Guideline for the Establishment of a Disaster Waste Working Group (DWWG)

April 2025



Secretariat of the Pacific Regional Environment Programme (SPREP), 2025.

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Our vision: A resilient Pacific environment sustaining our livelihoods and natural heritage in harmony with our cultures.

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- University of Newcastle (2022). *Practitioner’s Guideline and Introduction of Systems to enable Pacific Islands to Effectively Manage Disaster Waste*. Unpublished report to SPREP. 68p.

Contents

Acknowledgements.....	3
Contents	4
List of Figures	5
Abbreviations	6
Measurements used in this Guideline	6
FOREWORD	7
ABOUT THE GUIDELINE	8
PART ONE: INTRODUCTION TO THE DISASTER WASTE MANAGEMENT CYCLE	9
1.1 Pacific Region Natural Disasters	9
1.2 National Disaster Response Coordination	9
1.3 Disaster Waste	9
1.4 Disaster Waste Management Principles	10
1.5 The Disaster Waste Management Cycle	11
PART TWO: THE DISASTER WASTE WORKING GROUP	18
2.1 Establishing a Disaster Waste Working Group.....	18
2.2 Identification of the Disaster Waste Working Group Membership	19
2.3 Roles and Responsibilities of the Disaster Waste Working Group Coordinator	21
2.4 Disaster Waste Working Group Terms of Reference.....	21
2.5 Operational Framework for the Disaster Waste Working Group	22
2.6 Briefing Note Proforma.....	25
PART THREE: KEY REFERENCES.....	26
PART FOUR: ANNEXES AND ATTACHMENTS.....	27
ANNEX 1: Disaster Waste Working Group Register	27
ANNEX 2: Briefing Note Template	27
ANNEX 3: Draft Terms of Reference (ToR) for Disaster Waste Working Group	27

List of Tables

Table 1: Disaster waste management principles	10
Table 2: Summary of disaster stages and associated disaster waste management actions'	13

List of Figures

Figure 1: The waste management hierarchy.....	11
Figure 2: The disaster waste management cycle	11
Figure 3: Tongan National Disaster Management Framework.....	17
Figure 4: Tongan National Disaster Response Cluster	17
Figure 5: Typical National Disaster Management Office structure	18
Figure 6: Disaster Waste Working Group	20
Figure 7: Disaster Waste Response Taskforces.....	22

Abbreviations

ACM	Asbestos Containing Materials
C&D	Construction and demolition waste
C&I	Commercial and industrial waste
CCA	Copper Chrome Arsenate (treated timber)
DWAT	Disaster Waste Assessment Taskforce
DWCP	Disaster Waste Contingency Plan
DWIP	Disaster Waste Implementation Plan
DWMP	Disaster Waste Management Plan
DWMPT	Disaster Waste Management Plan Template
DWPFT	Disaster Waste Procurement and Finance Taskforce
DWPRT	Disaster Waste Public Relations Taskforce
DWWG	Disaster Waste Working Group
FRDP	Framework for Resilient Development in the Pacific
GIS	Geographical Information System
GPS	Global Positioning System
kg	Kilogram(s)
m ³	Cubic metre(s)
MSW	Municipal solid waste
NDMO	National Disaster Management Office
PPE	Personal Protection Equipment
RDWMG	(Pacific Island) Regional Disaster Waste Management Guidelines
SDS	Safety Data Sheets
SFDRR	Sendai Framework for Disaster Risk Reduction
SPREP	Secretariat of the Pacific Regional Environment Program
UN	United Nations
WHS	Workplace Health and Safety

Measurements used in this Guideline

Measure	Equivalent to
10mm (millimetre)	1cm (centimetre)
100cm (centimetre)	1m (linear metre)
10,000m ² (square metres)	1 hectare
1,000kg (kilogram)	1 tonne (metric)
1,000l (litre)	1m ³ (cubic metre)

FOREWORD

The Pacific region is highly vulnerable to natural disasters, including cyclones, earthquakes, tsunamis, and volcanic eruptions. These events often generate significant volumes of disaster waste, placing immense pressure on already limited national and local waste management systems. The timely and effective management of disaster waste is essential—not only to safeguard human health and the environment, but also to support efficient recovery efforts and build resilience in our communities.

Recognising this urgent need, the development of this Guideline on the Establishment of a Disaster Waste Working Group for the Pacific represents a critical step forward. It provides a practical framework for Pacific Island countries and territories to institutionalise coordination mechanisms that strengthen disaster preparedness and response through dedicated multi-stakeholder engagement.

This Guideline draws on the lessons and experiences of countries across the region and aligns with regional frameworks such as the Framework for Resilient Development in the Pacific (FRDP) 2017-2030. It supports the mainstreaming of disaster waste management into national disaster risk reduction strategies and enhances collaboration through the Pacific Resilience Partnership.

This resource is aimed at empowering Pacific countries to build robust, coordinated systems for disaster waste management—protecting our people, environment, and future in the face of increasing risk and uncertainty.

Adoption of best practice in disaster waste management will enable a coordinated, safe and successful response to dealing with disaster waste and minimise the economic, social and productivity impacts. This will allow Pacific nations to recover and get back to normalcy more quickly, with positive gains for improved community well-being and economic benefits arising from appropriate and effective waste management.

Sefanaia Nawadra

Director General

Secretariat of the Pacific Regional Environment Programme



ABOUT THE GUIDELINE

This Guideline on the *Establishment of a Disaster Waste Working Group* for the Pacific provides practical guidance for Pacific Island countries and territories on how to form, structure, and operationalise a national Disaster Waste Working Group (DWWG). It outlines key steps, roles, and considerations necessary for establishing an effective coordination mechanism to support disaster waste preparedness, response, and recovery. The guideline is designed to help governments integrate disaster waste management into existing disaster risk reduction and environmental frameworks, ensuring a collaborative, multi-sectoral approach. By following the guideline, countries can strengthen their institutional readiness, enhance inter-agency coordination, and ensure timely and effective management of disaster waste, thereby contributing to more resilient and sustainable communities across the Pacific.

The objectives are to:

1. offer Pacific Island countries and territories a structured approach for establishing a Disaster Waste Working Group (DWWG) at the national level, tailored to their specific governance systems and disaster risk profiles.
2. facilitate effective multi-agency coordination among relevant government departments, local authorities, civil society, and development partners involved in disaster waste management.
3. support the integration of disaster waste considerations into national disaster risk reduction policies, emergency response plans, and environmental management strategies.
4. define clear roles, mandates, and responsibilities of the Disaster Waste Working Group to ensure timely and coordinated response actions before, during, and after a disaster.
5. improve national capacity to plan, prepare for, and manage disaster waste in a safe, environmentally sound, and efficient manner.
6. provide guidance for policy formulation and institutional strengthening in disaster waste management, promoting long-term resilience and sustainability.
7. encourage harmonisation of disaster waste approaches across the Pacific and promote the sharing of lessons learned, tools, and best practices among countries.

This guideline provides practical step by step on the establishment of a Disaster Waste Working Group (DWWG). The intensity of disaster events and subsequent emergency responses can complicate the governance for coordinated disaster waste management. Uncertainty may also arise where non-government stakeholders (particularly those with waste management expertise) are not involved in the planning phase and during the implementation of disaster waste management activities. The guideline outlines the approach to establishing and operating a Disaster Waste Working Group as a critical component of disaster waste management. The guide provides the representation, roles and responsibilities of its membership and defines the taskforces required to undertake post disaster implementation activities. A template and instructions for preparing a briefing note used for securing political support in the establishment and operations of a Disaster Waste Working Group is also included.

Who should use the Guideline: This guideline is for stakeholders involved in managing waste and those involved in Disaster Risk Management, particularly during the response and early recovery phases of the disaster cycle. Stakeholders include government, community, humanitarian organisations, waste management companies and emergency services.

PART ONE: INTRODUCTION TO THE DISASTER WASTE MANAGEMENT CYCLE

1.1 Pacific Region Natural Disasters

Disasters in the Pacific region can be caused by geophysical events such as earthquakes, tsunamis, volcanic eruptions and landslides. Disasters relating to climate include floods, storm surge, tropical cyclone, whirlwind/freak wind, droughts and forest fires. Disasters in the Pacific region have had, and continue to have significant economic, social and productivity impacts. As of 2021, most Pacific Island nations are designated as being at a high risk from climate change influenced natural disasters, and preparing for national disasters is one of the most important regional actions for climate change adaptation¹.

1.2 National Disaster Response Coordination

The coordination of all disaster management operations in Pacific Island countries is typically under the direction of a National Disaster Management Office (NDMO). A National Disaster Management Office focuses its work on national disaster preparedness and response, and in the development of disaster management plans which are regulated under associated National Disaster Management legislation.

Managing debris and other wastes following a disaster can:

- Require complex interactions with emergency response teams
- Affect longer term economic and social recovery
- Have a direct or indirect effect on human health and the environment
- Have a lasting impact on affected communities and the environment if not managed appropriately.

The management of disaster wastes can also deliver positive outcomes including:

- The creation of local employment opportunities following the disaster event
- Economic benefits through the recovery of reusable materials for use in reconstruction efforts
- Improved community well-being resulting from the clean-up of wastes and a return to normal life.

1.3 Disaster Waste

Natural disasters can generate large quantities of solid and liquid waste that threaten public health and safety, hinder reconstruction efforts and impact the environment. Disaster wastes can be generated by the actual disaster, and later during the disaster response and recovery phases. Public health risks can arise from direct contact with disaster waste which may include exposure to hazardous wastes such as asbestos, pesticides, oils and solvents released by the disaster. Public health risks can also arise indirectly from exposure to disease vectors such as flies, mosquitoes and rodents, and injury from the post-disaster collapse of unstable structures. Disaster clean-up and reconstruction efforts can be hindered when disaster waste blocks access to affected populations and areas.

¹Japan Ministry of Environment (2018). *Disaster Waste Management Guideline for Asia and the Pacific*. 26p.

Environmental impacts can be closely associated with human impacts, and can also arise from disaster wastes entering waterways, marine environments and agricultural areas and in locations contaminated by chemicals, heavy metals and other pollutants.

1.4 Disaster Waste Management Principles

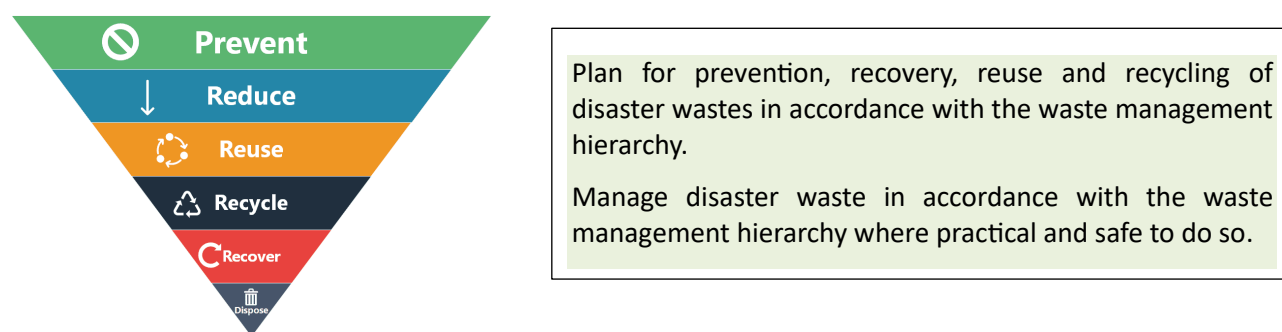
Best practice disaster waste management should be guided by a set of guiding principles during the disaster waste preparation and response phases refer **Table 1** and **Figure 4**.

Table 1: Disaster waste *management* principles ²

Principle	Description
Community resilience	Build capacity within communities to prepare for and carry out responsible disaster waste management practices. Ensure that disaster waste management is embedded in national emergency management procedures.
Protection of health, economic assets and the environment	Identify, avoid or minimise harm to human health, economic assets (including agriculture) and the environment
Sustainable resource management	Sustainable resource management helps mitigate the impact of climate change
Adhere to the waste management hierarchy	Undertake disaster waste management in accordance with the waste management hierarchy, where safe and practical to do so. Refer Figure 4 below.
Recognition of practical constraints and community expectations	Accommodate potential limitations and community expectations when preparing disaster waste management plans. The ability to act in a timely manner, and/or access skilled labour, equipment, facilities and transport logistics may be challenging in a disaster situation. Sometimes processes used in a crisis may not follow business as usual approaches.
Support positive recovery outcomes	Consider how the management of disaster wastes may impact the community. Where possible support local businesses, local employment and the use of recovered materials for reconstruction.
Empathy	Show understanding when liaising with an affected community. Be mindful of the losses that have occurred and aware of cultural sensitivities. Consider these aspects when removing waste materials and demolishing structures.
Accountability	Define roles and responsibilities, lines of authority and communications for disaster waste management. Monitor that procedures are followed and record keeping is maintained.

²Adapted from South Australian Disaster Waste Management Guideline, 2022

Figure 1: The waste management hierarchy

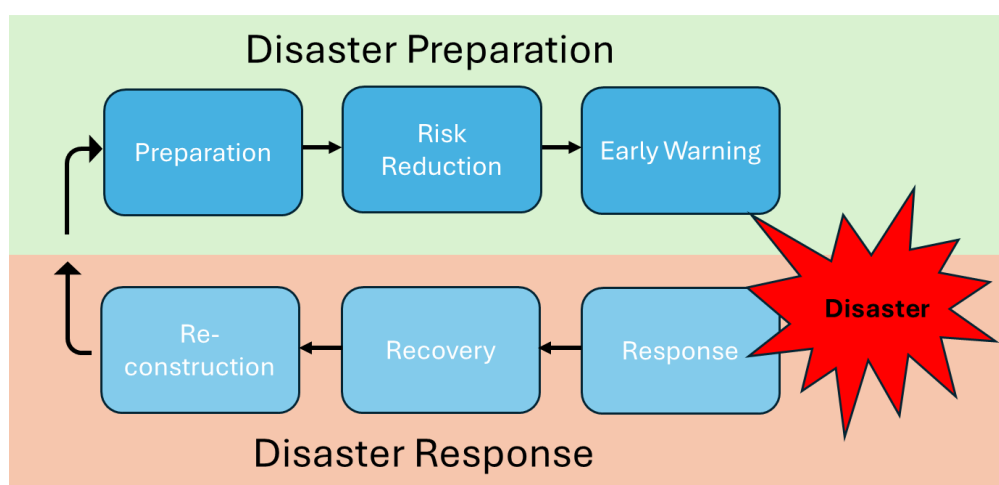


1.5 The Disaster Waste Management Cycle

The disaster waste management cycle shown in **Figure 5** aligns closely with the overarching national management of disasters and provides a holistic approach to national disaster response and disaster waste management. The cycle involves two phases:

- The pre-disaster preparation phase and
- The post-disaster response phase

Figure 2: The disaster waste management cycle³



Within each phase there are several stages that require various disaster waste management actions to be undertaken within strict timeframes - these are described in the sections below and also detailed in **Table 2**.

Phase 1: Pre-disaster Preparation

A range of disaster waste management actions can be undertaken prior to the occurrence of a natural disaster that will enable communities to be better prepared, and to minimise the consequences of

³Adapted from SPREP (2021). *Pacific Island Countries Regional Disaster Waste Management Guideline*. Apia, Samoa. 72p.

disaster waste generated by a disaster. These actions should be conducted within a series of stages that occur in a specific order, as follows:

- **Stage 1: Preparation:** Detail the contingencies that will improve response capabilities of personnel managing disaster waste e.g. training and resources such as a register of available waste collection vehicles, equipment and appropriately located waste disposal and storage infrastructure;
- **Stage 2: Risk reduction:** Completion of actions that reduce quantities of potential disaster waste such as mapping of common construction materials, storage and safeguarding of hazardous substances; and
- **Stage 3: Early Warning:** Will help early mobilisation of responders to disasters (particularly to disasters caused by cyclones and floods).

Phase 2: Post-disaster Response

Following a disaster, a range of disaster waste related actions will need to be undertaken by a community in the short and longer term that will enable a return to pre-disaster conditions as early as possible. These actions include:

- **Stage 4: Response:** (Lifesaving) actions that are undertaken within the first 24-72 hours of a disaster occurring;
- **Stage 5: Recovery:** Longer-term actions taken to restore normal life after the disaster (up to 6 months; and
- **Stage 6: Reconstruction:** Rebuilding or restoration of damaged waste management infrastructure (longer than 6 months after the disaster).

The disaster waste management stages and associated management actions are summarised in **Table 2**.

Table 2: Summary of disaster stages and associated disaster waste management actions^{4,5}

Disaster Management Stages	Disaster Waste Management Actions	Time Frame	Who
Stage 1: Preparedness Actions undertaken to improve readiness to respond to a disaster	<ul style="list-style-type: none"> Disaster Waste Working Group established by the National Disaster Management Office (NDMO) National Disaster Waste Management Plan (NDWMP), inclusive of Disaster Waste Contingency and Disaster Waste Risk Reduction planning, is prepared Waste management baseline data is compiled Building classifications and their construction materials are documented e.g. residential, community and commercial buildings and the presence of asbestos, PCB and mercury-containing materials A register of waste management facilities (including approved temporary waste transfer sites), infrastructure and equipment, inclusive of their ownership and location, is prepared Hazardous substance storage locations are mapped Rapid waste assessor and responder training is delivered annually Third-party partnerships for resource recovery and disaster waste management are established and maintained 	Pre-disaster	
Stage 2: Risk Reduction Preparations to minimise disaster risks complete	<ul style="list-style-type: none"> Potential disaster waste sources are minimised Storage of hazardous substances are safeguarded 	Pre-disaster	
Stage 3: Early Warning Current meteorological information and forecasts provided to first responders and disaster coordinating bodies	<ul style="list-style-type: none"> Disaster Waste Working Group convened and Disaster Taskforces operational Waste management facilities and response team preparations completed Public awareness bulletins provided Third Party waste management stakeholders briefed 	Once a natural disaster hazard has been declared or identified	
Stage 4: Response Immediate actions are undertaken to save lives and prevent injury	<ul style="list-style-type: none"> Rapid disaster waste assessments conducted (first 24 hours) Lifesaving support disaster waste management operations implemented Containment operations for identified hazardous disaster wastes Disaster Waste Implementation Plan (DWIP) prepared to prioritise further actions 	Once disaster ends, within 72 hours following the disaster	
Stage 5: Recovery Actions are taken to recover and restore normal life after the disaster	<ul style="list-style-type: none"> Detailed disaster waste assessments are conducted, and Disaster Waste Implementation Plan is updated Third-party disaster waste management and recycling initiatives evaluated and coordinated Disrupted services restored Damaged infrastructure and buildings removed or repaired Environmental impact assessment is complete, and mitigation works are underway Regular progress briefings and budget updates provided to the NDMO are undertaken 	After 72 hours to 6 months post-disaster	

⁴SPREP (2021). *Pacific Island Countries Regional Disaster Waste Management Guideline*. Apia, Samoa. 72p.

⁵University of Newcastle (2022). *Practitioner's Guideline and Introduction of Systems to enable Pacific Islands to Effectively Manage Disaster Waste*. Unpublished report to SPREP. 68p.

Disaster Management Stages	Disaster Waste Management Actions	Time Frame	Who
Stage 6: Reconstruction Actions are taken to rebuild improved damaged waste management infrastructure	<ul style="list-style-type: none"> ▪ Damaged landfill infrastructure repaired or replaced ▪ Damaged waste management equipment repaired or replaced ▪ Sites used as temporary disaster waste storage stations restored to original use ▪ Environmental restoration works are completed 	Greater than 6 months	

Example: Tonga National Disaster Risk Management Office (NDRMO)

The Tongan National Disaster Risk Management Office (NDRMO) and predecessor Offices were established under the Emergency Management Act (2007). The NDRMO sits within the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change & Communications (MEIDECC). The initial role of the Office was to facilitate and coordinate emergency management for Tonga's safety. The National Disaster Risk Management Act (2021) subsequently expanded the NDRMO's mandate, with an increased focus on enhanced disaster risk reduction efforts.

Tongan Legislative Framework⁶

The Disaster Risk Management Act (2021) (Royal Assented 2023) describes the national framework, structures and committees, and functions and responsibilities of those responding to disaster in Tonga. It also mandates the National Disaster Risk Management Plan which operationalises the legislative framework via disaster risk reduction and emergency management systems and processes. The Act establishes a coherent legal, institutional and regulatory framework for planning and management of disaster risk reduction and preparedness activities before a disaster occurs, coordinating emergency response during a disaster; and facilitating disaster recovery work following a disaster.

- Under the Disaster Risk Management Act (2021), the NDRMO plays a central role in harmonizing disaster risk reduction, preparedness, and response
- Its responsibilities include creating a comprehensive national policy framework for national disaster risk management, coordinating nationwide emergency management, and establishing protocols for quick and efficient emergency responses
- The expanded role includes reducing disaster risks through comprehensive plans, coordinating disaster response efforts for timely assistance, and streamlining recovery initiatives for rehabilitation and reconstruction

Tongan Institutional Framework

The Tongan Disaster Risk Management Act (2021) replaced the almost two-decade old Emergency Management Act (2007) and reinforces a whole-of-society approach while also clarifying the role of central government stakeholders. The Act also introduced systematic improvements to ensure that national disaster risk management governance and institutional arrangements are best practice. Some key changes resulting from the new Act include:

- Revision of disaster risk management structures of existing committees and clarification of roles and responsibilities at the national, island and village level
- Formalisation of the cluster coordination mechanism and the functions of lead/co-lead agencies
- Restructuring of the National Disaster Risk Management Organisation (NDRMO) to accommodate increased responsibilities in the functional areas of disaster risk and resilience, policy advice, emergency operations, administration and finance, and donor and development partner engagement
- Provision of greater clarity of emergency powers during a state of emergency as well as the responsibilities of authorized offices during state of emergency

⁶<https://talanoaotonga.to/tonga-enacts-new-disaster-risk-management-act-and-policy-to-build-resilience/>

- Recognition of the important role of enhancing participation at all levels, including at the strategic, planning and operational levels
- Establishment of the multi-hazard early warning system and its critical role for information dissemination
- Introduction of regulations, standard operating procedures, and guidelines needed to give effect to, or support the Act to achieve the desired outcomes.

Tongan National Disaster Response Co-ordination⁷

National Disaster Council (Cabinet) is the supreme governing body at the strategic level and oversees three national level committees to provide disaster governance support in Tonga, **refer Figure 2**. All Committees are chaired by the Minister and CEO for the Ministry of Meteorology, Energy, Information, Disaster Management, Environment, Climate Change and Communication (MEIDECC). The National Disaster Risk Management Office (NDRMO) serves as the Committee Secretariat at the national level. The three Disaster Governance Committees are:

- National Emergency Management Committee (NEMC). The NEMC is responsible for making policy decisions, coordinating the emergency management activities, approving, and reviewing the National Emergency Management Plan, and supporting District Emergency Management Committees (DEMC).
- National Emergency Operation Committee (NEOC). The NEOC is responsible for activating ministries and organisations during response phase, coordinate with relevant ministries, Nongovernment Organisations, and community groups, **conducting initial damage assessments**, and managing disaster relief requirements including collecting, prioritising, and distributing the relief items.
- National Emergency Recovery Committee (NERC). The NERC is responsible for coordinating the recovery and rehabilitation activities following a disaster, **conducting detailed damage assessments**, and coordinating the emergency relief operations.

In addition, District Emergency Management Committees (DEMC) and Village Emergency Committees (VEC) are established in Tonga to develop and implement effective emergency management at the district and village levels respectively via District and Village Emergency Management Plans (DEMPs and VEMPs).

Tongan Disaster Waste Management Support Services

During disasters, Tonga uses the cluster (or Working Group) system to coordinate disaster response **refer Figure 3**. The Health, Nutrition, Water, Sanitation and Hygiene “Cluster” led by the Health Ministry is responsible for the assessment and reporting of disaster waste types, quantities, locations and sources; identification of key disaster waste issues that pose a threat to human health, community and economic assets and the environment; and provision of information and advice on options and considerations for planning the management of disaster wastes. A formation of a Cluster or Working Group with exclusive responsibility for disaster waste management could be considered into the future for the management of disaster wastes in Tonga.

⁷<https://www.unocha.org/publications/report/tonga/tonga-humanitarian-coordination-structure-10-july-2024>

Figure 3: Tongan National Disaster Management Framework

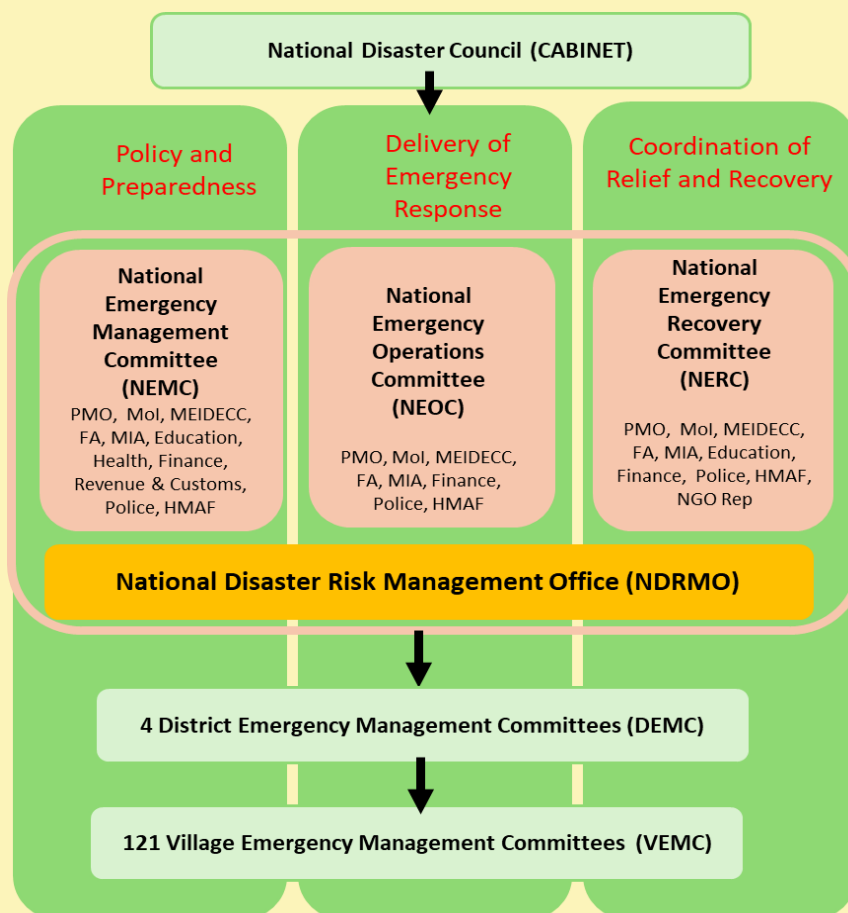


Figure 4: Tongan National Disaster Response Cluster⁸



⁸UNDRR (2022). Disaster Risk Management in the Kingdom of Tonga: Status Report 2022, United Nations Office for Disaster Risk Reduction (UNDRR), Sub-Regional Office for the Pacific

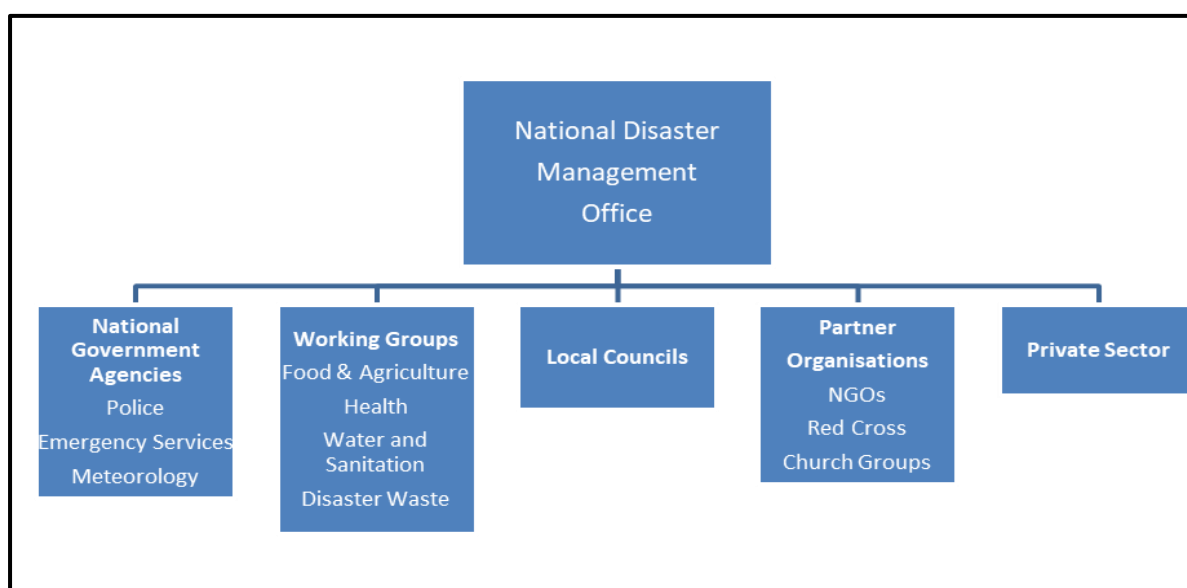
PART TWO: THE DISASTER WASTE WORKING GROUP

The coordination of national disaster management operations usually falls under the authority and direction of a National Disaster Management Office (NDMO) in all Pacific Island countries. The management of waste, however, is typically the responsibility of a national government waste management agency that is authorised to prepare waste management policies and plans.

Establishing a liaison mechanism between the NDMO and the management of wastes is critical to ensuring a coordinated management of disaster waste.

The structure of a National Disaster Management Office comprises representation from national government agencies, local councils, partner organisations, private sector and coordinators of specific working groups as presented in **Figure 5**.

Figure 5: Typical National Disaster Management Office structure



2.1 Establishing a Disaster Waste Working Group

To ensure the coordinated management of disaster wastes, a Disaster Waste Working Group (DWWG) should be established and represented (as a Working Group or Cluster) within the National Disaster Management Office (NDMO).

The purpose of the Disaster Waste Working Group is to:

- *Assess and report disaster waste types, quantities, locations and sources*
- *Identify key disaster waste issues that pose a threat to human health, community and economic assets and the environment*
- *Provide information and advice on options and considerations for planning the management of disaster wastes, during the response phase and in re-establishing waste collection systems*

The key responsibilities of a Disaster Waste Working Group include:⁹

- Provision of public information on disaster preparedness and response
- Revision of relevant waste management and disaster related legislation
- Identification of specific roles and responsibilities for national disaster waste management
- Identification of disaster waste management training needs
- Identification of financial reporting and payment mechanisms for disaster waste management related activities
- Coordination of disaster waste response including the preparation of a Post-disaster Waste Implementation Plan (DWIP)
- Monitoring and evaluation of effectiveness of all disaster waste management responses.

The Disaster Waste Working Group operates in close coordination with national and local government and is responsible for coordinating waste management support to affected communities. National Government financial support and local government resource support will be critical during the disaster response and recovery phases. Therefore, transparency and good governance in the planning and delivery of disaster waste responses are essential.

The Disaster Waste Working Group will provide advisory and immediate response support to national and local governments including but not limited to:

- Assessing and reporting waste quantities, types, locations, sources and ownership (where known)
- Identifying acute waste issues that potentially pose a threat to human health and the environment and/or may hamper the recovery for the affected community
- Provide timely advice to the NDMO, including emergency services, on the options for managing urgent and non-urgent disaster wastes
- Provide information to assist local government to reinstate normal waste management services and operations
- Provide information for use in public media release regarding managing wastes on private and community lands and assessing the affected community's capability in managing disaster wastes and issues.

2.2 Identification of the Disaster Waste Working Group Membership

The Disaster Waste Working Group contributes to the implementation of the National Disaster Management Plan as well as developing and coordinating key disaster waste management activities at each stage of the disaster waste management cycle. The Disaster Waste Working Group is led by the Disaster Waste Working Group Coordinator who is appointed by, and usually is also an Officer of, the National Disaster Management Office (**Figure 6**).

Membership of the Disaster Waste Working Group should include representation from a range of stakeholder groups with a role in national disaster management and more specifically those with disaster waste management knowledge and experience (**Annex 1**). Five core stakeholder categories should be represented on the Disaster Waste Working Group that include: Government Ministries, departments and agencies, emergency services, the private sector, local government and communities. The Disaster Waste Working Group is under the leadership of the Disaster Waste Working Group Coordinator who is appointed from the NDMO (**Figure 6**).

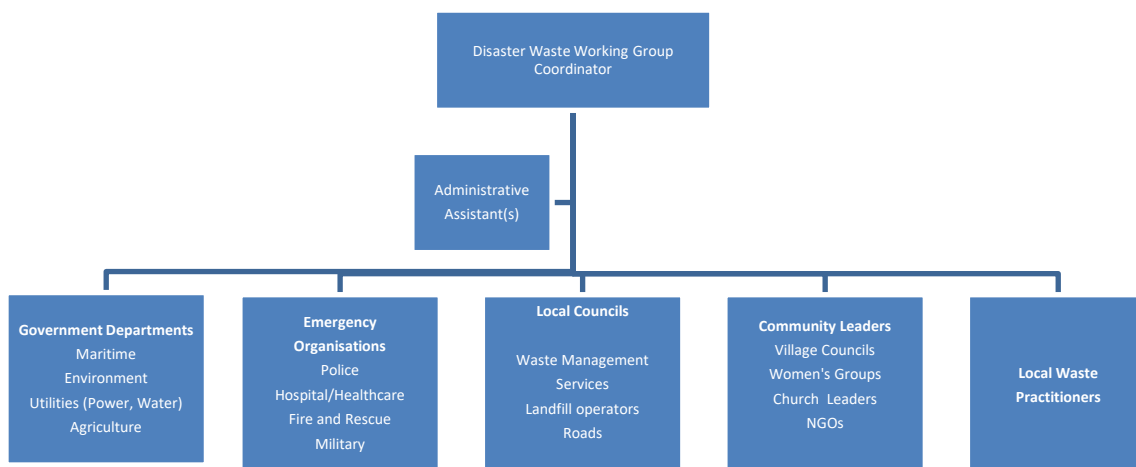
⁹Anon (2022). *State Emergency Management Plan Part 4: Plans*. Green Industries South Australia. 27p.

The Disaster Waste Working Group membership would usually include representatives from:

- National Disaster Management Office (the Disaster Waste Working Group Coordinator)
- National Environment and Health Departments
- National Maritime Authority
- National Emergency Services inc. Fire Authority, Search and Rescue and the Police Service
- National Electricity and Water Utilities
- National Main Roads Department
- Local Government
- Community Leaders and service organisations
- National Waste Management Association
- Private Sector Organisations.

Representatives should be nominated by the Head of each respective organization based on their expertise and knowledge of the capacity of the organization they represent. The contact details of selected representatives should be recorded in a Working Group Register and distributed to all Disaster Waste Working Group members and to the CEOs of each stakeholder group represented on the Disaster Waste Working Group (**Annex 1**). The Disaster Waste Working Group contributes to the implementation of the disaster risk management plan at national and local levels and is well placed to develop and coordinate the implementation of key disaster waste management activities at each stage of the disaster waste management cycle.

Figure 6: Disaster Waste Working Group¹⁰



¹⁰Green Industries SA. (2020). State Emergency Management Plan (Part 4) Disaster management capability plan. Retrieved from: <https://www.greenindustries.sa.gov.au/documents/Disaster-Waste-Management-Capability-Plan.pdf?downloadable=1>.

2.3 Roles and Responsibilities of the Disaster Waste Working Group Coordinator¹¹

The Disaster Waste Working Group Coordinator has responsibility for the overall activities and actions of the Disaster Waste Working Group in managing disaster wastes after a disaster event. The Disaster Waste Working Group Coordinator reports directly to the NDMO and may appoint a Deputy Coordinator. The functions of the Coordinator / Deputy Coordinator include:

- Development of Disaster Waste Working Group Terms of Reference (**Annex 3**)
- Nomination and induction of Disaster Waste Response Taskforce Leaders:
 - Disaster Waste Assessment Taskforce (DWAT)
 - Disaster Waste Procurement and Finance Taskforce (DWPFT)
 - Disaster Waste Media and Public Relations Taskforce (DWPRT).
- Coordination of disaster waste management response through Disaster Waste Response Taskforce Leaders (**Section 2.5**)
- Development and implementation of Group Standard Operating Procedures
- Identification of training needs
- Preparation of meeting agendas and distribution of meeting records
- Identification of financial reporting and payment mechanisms for disaster waste management related activities
- Monitoring and evaluation of effectiveness of all disaster waste management responses
- Coordination of the preparation and annual review of National Disaster Waste Management Plans, (**Part 3**)
- Preparation and/or signoff of Disaster Waste Working Group briefing notes to harness high level government support (**Section 2.6**).

2.4 Disaster Waste Working Group Terms of Reference

After appointment of members to the Disaster Waste Working Group, terms of reference for the group should be created and circulated to members. The terms of reference should identify the:

- Responsibilities of the Disaster Waste Working Group members;
- Term of office for Disaster Waste Working Group members;
- Proxy arrangements;
- Frequency and duration of Disaster Waste Working Group meetings;
- Meeting agenda format and recording of meetings;
- Working Group Response Taskforce membership and operational procedures; and
- Expected and optional contributions of all Disaster Waste Working Group members.

¹¹Anon (2022). *State Emergency Management Plan Part 4: Plans*. Green Industries South Australia. 27p.

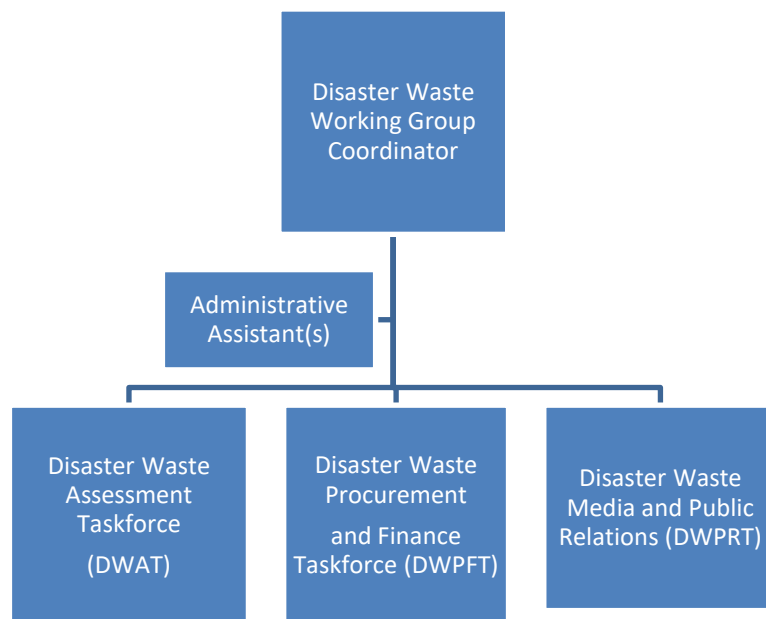
2.5 Operational Framework for the Disaster Waste Working Group

Following a disaster, the disaster waste response should be implemented through the previously established Disaster Waste Working Group Response Taskforces below:

- Disaster waste assessment taskforce (DWAT)
- Procurement and finance taskforce (DWPFT)
- Media and public relations taskforce (DWPRT).

The taskforce leaders report directly to the Disaster Waste Working Group Coordinator, refer Figure 8¹².

Figure 7: Disaster Waste Response Taskforces



¹²WHO. (2020). Health Cluster Guide: A Practical Handbook. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/334129/9789240004726-eng.pdf?sequence=1&isAllowed=y>.

Responsibilities of the Disaster Waste Assessment Taskforce

The primary function of the Disaster Waste Assessment Taskforce (DWAT) is to **plan for and coordinate rapid assessment and analysis of disaster wastes** that have been generated in areas affected by a disaster.

As soon as possible after the event, this taskforce should develop a high-level understanding of the waste stream types and quantities.

The taskforce will plan and allocate areas for rapid assessment during the preparation of the initial response implementation plan. The taskforce will appoint and brief the rapid assessment personnel to carry out on-site investigations according to the areas allocated to each team to ensure efficiency and safety.

The taskforce will be responsible to train the rapid assessment personnel in:

- Safe assessment practices
- Safe work practices and use and maintenance of personal protective equipment (PPE)
- Waste identification, quantity estimation and recording of site assessment information e.g. labelling on potential chemical or hazardous drums
- Using the manual recording tools including on the site risk assessment to prioritise response actions.

Each team will describe and estimate the quantity of the categories of wastes produced by the disaster event, including their source, location, access points and site conditions (e.g. fallen power lines, eroded surfaces etc.) within their allocated assessment areas. Based on the analysis of the collected rapid assessment data, the taskforce will identify the necessary plant, equipment, vehicles and resources needed for the recovery, sorting, collection, interim storage and recycling of disaster wastes including final treatment and disposal.

It is important the rapid assessment teams carry identification (e.g. badges) to enable the community and other services (emergency services, utility services inc. power, water) in a disaster affected area to recognise team members as having a formal role in managing disaster wastes. The rapid assessment team will also be equipped with safety and communications equipment, and appropriate resources to record the findings of the assessment (for example):

- PPE: first aid kits, high visibility safety vests, protective gloves (cut and needle resistant) and covered boots
- Torches (hand-held and/or headlamp)
- Notebooks, cameras, iPad/tablet
- Handheld GPS or mobile phone with GPS app for mapping purposes
- Two-way radio, mobile phone, and if available satellite phones and drone equipment
- Shovels, rakes and small tools.

The methods identified by the taskforce should be used to guide the contractors that are engaged for these activities. The taskforce will monitor the progress of disaster waste management and ensure identified risks and adverse impacts during these processes are appropriately managed.

The DWAT will work in close coordination with the Disaster Waste Procurement and Finance Taskforce and the Disaster Waste Public Relations Taskforce.

Additional tasks to be undertaken by DWAT during the pre- and post-disaster phases include:

- Identification of potential temporary transfer sites
- Development of a waste transfer and disposal site registers
- Assessment and measurement of disaster wastes generated in areas affected by a disaster
- Development and implementation of processes for recovery, sorting, collection, interim storage and recycling of disaster wastes and their final treatment and disposal
- Contribute to the development of Disaster Waste Implementation Plans and budgets
- Contribution to the monitoring and the evaluation the Disaster Waste Implementation Plans in terms of progress, outcomes and outputs.

Responsibilities of the Procurement and Finance Taskforce

The primary function of the Disaster Waste Procurement and Finance Taskforce (DWPFT) is to **manage the financial and procurement activities relating to the disaster waste management response**. The Disaster Waste Working Group Coordinator will have oversight of the budget and expenditures on the basis that these have been approved by the NDMO. This Taskforce will regularly reconcile and report spending against budget and procurement outcomes to the Disaster Waste Working Group Coordinator. The DWPFT will work in close coordination with the Disaster Waste Assessment Taskforce and the Disaster Waste Public Relations Taskforce. The tasks to be undertaken by the Procurement and Finance Taskforce pre- and post-disaster include:

- Coordination of the selection of contractors for cleaning and disposal of disaster waste;
- Establishment and management of systems for cash and/or electronic funds transfer (EFT) payments to contractors and private sector stakeholders including per diems, accommodation/travel allowances, expense claims and petty cash;
- Assistance with strategic financial management activities including annual Disaster Waste Working Group budget development, financial planning and cash flow, and financial reporting. This will include budgeting and expenses associated with the activities of the Disaster Waste Assessment Taskforce and the Disaster Waste Public Relations Taskforce;
- Development of project-level financial and procurement management policies and procedures, manage roll-out and oversight compliance, reporting and periodic review.
- Provision of guidance in the costing of personnel, activities and operations;
- Organisation and maintenance of comprehensive financial and procurement files, including record keeping that is compliant with audit, corporate and client requirements;
- Management of purchasing and procurement activities including supplier management that ensures value for money; and
- Support the Disaster Waste Working Group Coordinator and Deputy Coordinator to develop and implement policies and procedures for fraud control, anti-corruption and anti-bribery.

Responsibilities of the Disaster Waste Public Relations Taskforce

In the event of a natural disaster misinformation can spread quickly which can impact the successful implementation of disaster waste management responses. The primary function of the Disaster Waste Public Relations Taskforce (DWPRT) is to **plan and implement approved public and government information campaigns related to disaster waste management during a national disaster**. The DWPRT will work in close coordination with the Disaster Waste Procurement and Finance Taskforce and the Disaster Waste Assessment Taskforce. Additional tasks to be undertaken both pre- and post-disaster include:

- Develop identification tags and letters of authority for the Disaster Waste Assessment Taskforce and Rapid Assessment Teams
- Develop and implement Disaster Waste Working Group communication plans
- Monitor and evaluate public and media reporting and perception of disaster events
- Write and edit brochures, press releases, speeches, newsletters and websites, arrange events and activities for capacity development of local stakeholders and communities
- Develop a professional working relationships with media organisations at the national level.

Public notifications/communications will be developed by the Taskforce but will require NDMO approval prior to release to ensure the statements align with NDMO communication protocols, refer **Section 2.6**.

The types of information to be communicated include:

- Human health and safety issues, including information on appropriate management of hazardous wastes and the risks associates with waste streams
- Waste collection arrangements

2.6 Briefing Note Proforma

A briefing note proforma should be developed to allow the Disaster Waste Working Group Membership to describe issues related to disaster waste management. The briefing note is used by the Disaster Waste Working Group Coordinator to inform and obtain the support of key government officials in implementing interventions for disaster waste management. A briefing note usually consists of up to four pages of critical information to allow the information to be quickly disseminated, understood and acted upon.

The content of the briefing note should be structured with the following headings:

- Title;
- Introduction or intent of the note;
- Background/current issues to provide context to the note;
- Analysis and considerations including relevant risk assessments;
- Recommendation/s for action required including cost benefit;
- Conclusion including requested decision if appropriate;
- Approval and date;
- Comment/s; and
- Contact information.

PART THREE: KEY REFERENCES

- Anon (2022). *State Emergency Management Plan Part 4: Plans*. Green Industries South Australia. 27p
- Brown *et al.* (2011). Disaster waste management: a review article. *Waste Management* 31 pp. 1085-1098.
- Green Industries SA. (2020). State Emergency Management Plan (Part 4) Disaster management capability plan. Retrieved from: <https://www.greenindustries.sa.gov.au/documents/Disaster-Waste-Management-Capability-Plan.pdf?downloadable=1>.
- Japan Ministry of Environment (2018). *Disaster Waste Management Guideline for Asia and the Pacific*. 26p.
- Adapted from South Australian Disaster Waste Management Guideline, 2022*
- SPREP (2021). *Pacific Island Countries Regional Disaster Waste Management Guideline*. Apia, Samoa. 72p.
- University of Newcastle (2022). *Practitioner's Guideline and Introduction of Systems to enable Pacific Islands to Effectively Manage Disaster Waste*. Unpublished report to SPREP. 68p.
- WHO (2020). *Health Cluster Guide: A Practical Handbook*. Retrieved from <https://apps.who.int/iris/bitstream/handle/10665/334129/9789240004726-eng.pdf?sequence=1&isAllowed=y>.

PART FOUR: ANNEXES AND ATTACHMENTS

ANNEX 1: Disaster Waste Working Group Register

ANNEX 2: Briefing Note Template

ANNEX 3: Draft Terms of Reference (ToR) for Disaster Waste Working Group

Annex 1: Disaster Waste Working Group Register

S/N	Working Group Member Name	Organisation/ network/community/ individual represented	Name of Director/Head	Contact Number	Phone	Email	Physical Address	Postal Address	Description of organisation/network/ community/individual
Government Organisations (ministries, departments, and agencies)									
1									
2									
3									
Local Non-government Organisations									
1									
2									
3									
Local Waste Practitioners (waste recyclers, waste collectors, waste transporters, etc)									
1									
2									
3									
Civil Defence and Emergency Organisations									
1									
2									
3									

Community Leaders								
1								
2								
3								
Humanitarian Partners (Red Cross, Humanitarian Funders etc)								
1								
2								
3								

Annex 2: Briefing Note Template

This template is developed as a guide for development of a briefing note for disaster waste management. The briefing note should be produced on the formal letterhead of Disaster Waste Working Group, and all sections should be completed as far as possible.

Note: each box below will automatically expand as the information is entered.

Title
<i>Input the title of the briefing note below, limited to maximum of 25 words. Ensure the reader can answer 'What the briefing note is about?' after reading the title.</i>
[Add Title here]

Introduction/Intent
<i>Here, capture the high-level overview and purpose of the briefing note.</i>
[Add Introduction/intent here]

Background/Current Issue/s
<i>Provide concise information/summary of the past and/or current events including any development priority, policy or past practices. Describe the result of your assessment and analysis of the disaster event. Explain what the situation is, specify the concerns of the ESWG, describe the events that led to the current situation and indicate the main stakeholders and their interests. Note that key events are better presented in reverse chronological order.</i>
[Add Background/current issues here]

Analysis and Considerations
<i>This section presents an analysis, an argument and the key political priorities, alternatives, options, and compromises, as well as the risks, consequences and cost (financial and non-financial) of the actions. Present all relevant alternatives that have been dismissed and explain why.</i>
[Add Analysis and considerations here]

Recommendation/s
<i>In this section, describe:</i> <ul style="list-style-type: none">• The course of actions to be taken.• When and why the actions are necessary.• Identify who will implement the actions; and• The risks and consequences of not taking action. <i>When other actions are planned, include a detailed schedule of the next steps. Recommendations should be feasible, linked to national priorities and policies, documented and explained in the Background/Current Issues.</i>
[Add course of actions here]

[Add risks and consequences of not taking action here]

Conclusion

In this section, include comments, future projections and next steps. Briefly and selectively summarise the main points, present relevant perspectives of affected communities and stakeholders.

[Add conclusion here]

Review and contributor/s

Name	Position	Signature
<Input name of NC-ESWG>	National Coordinator, ESWG	<Input signature>
<Input names of contributors>	<Input corresponding position>	<Input signature>
<Input names of contributors>	<Input corresponding position>	<Input signature>

Approval and Date

Name	Position	Signature
<Input name of NC-ESWG>	National Coordinator, ESWG	<Input signature>

Approver's Comment/s

The approver can add comment/s about the content of the briefing note and the approval in this section.

[Add comment/s here]

Draft Terms of Reference (ToR) for Disaster Waste Working Group

This Draft ToR outlines the role, structure, and scope of the national Disaster Waste Working Group and serves as a guiding document for its operation.

Background

Disasters, whether natural or man-made, generate significant amounts of waste that can overwhelm local capacities for proper waste management, posing risks to human health, the environment, and recovery efforts. Effective disaster waste management is essential to minimise these impacts and to ensure the rapid and safe recovery of affected areas.

The **Disaster Waste Working Group** (hereafter referred to as "the Working Group") is formed to coordinate, guide, and advise on the management of waste generated by natural disasters. The Group will leverage technical expertise, foster collaboration among stakeholders, and ensure that best practices are applied in disaster waste management across all phases of response and recovery.

Purpose

The Working Group is established to provide support, coordination, and advice on managing disaster waste in the event of a disaster. It will develop and recommend appropriate strategies and practices to address waste management challenges, ensuring compliance with relevant regulations and minimising environmental and health risks.

Objectives

The key objectives of the Working Group are:

- To provide technical expertise in the development of waste management plans.
- To facilitate the coordination of efforts on disaster waste management between government agencies, humanitarian organisations, private sector, and other stakeholders.
- To identify and promote best practices for disaster waste collection, treatment, recycling, and disposal.
- To mobilise necessary resources for the effective implementation of the National Disaster Waste Management Plan.
- To ensure compliance with national and international regulations concerning waste management and environmental protection.
- To advise on sustainable and environmentally sound waste management solutions during all phases of disaster response and recovery.

Scope of Work

The Disaster Waste Working Group typically operates during two key phases of disaster management: the Preparedness Stage and the Response Stage. Below is a description of the scope of work for each phase:

Preparedness Actions:

Long Term Preparedness	<p>Waste Management Planning:</p> <ul style="list-style-type: none"> • Develop comprehensive disaster waste management plans, including strategies for debris removal, segregation, treatment, recycling, and disposal. • Ensure that waste management plans align with national disaster response and environmental policies. • Incorporate sustainable and resilient waste management solutions in recovery planning. • Identify relevant Technical Taskforce to implement the National Disaster Waste Management Plan • Advise Provincial Council and Municipal Councils on identifying Temporary Disaster Waste Storage site.
Short Term Actions – once a Disaster is Declared (early Warning)	<ol style="list-style-type: none"> 1. Stakeholder Coordination: <ul style="list-style-type: none"> ○ Facilitate coordination between local, national, and international organisations involved in disaster waste management. ○ Engage with relevant stakeholders, including environmental authorities, public health agencies, humanitarian organizations, and private waste management companies. 2. Coordination Meeting In preparation for Disaster. Identify what is needed to prepare a Response Plan for the Disaster Season. Ensure plans at the Provincial level. 3. Review a Standard Response Plan for submission to the National Emergency Operation Centre 4. Review questions and procedures for Technical Assessment Form for consideration by NDRMO . 5. Monitoring and Reporting: <ul style="list-style-type: none"> ○ Establish mechanisms for monitoring the implementation of waste management strategies and ensure compliance with agreed standards. ○ Prepare reports on the status of disaster waste management, including challenges, successes, and lessons learned. ○ Recommend policy changes or updates based on post-disaster reviews and findings. ○ Recommend training needs for Disaster Waste 6. The Working Group activate relevant taskforce(s) to implement Vanuatu Disaster Waste Management Plan. The Taskforce will perform the following activities: <ul style="list-style-type: none"> ○ Conduct technical assessments of waste types and quantities generated by disasters. ○ Analyse the impact of disaster waste on public health, safety, and the environment. ○ Identify hazardous waste requiring special handling. ○ Undertake removal and disposal of all Disaster Waste 7. Review the report from technical taskforce. 8. Identify measures to be undertaken based on reports based on 4Ws (What, Where, Who and When) from Technical Taskforce and NDRMO.

Membership and Structure

The Taskforce will consist of representatives from the following entities:

- **Government Agencies:** Government agencies responsible for waste management and disaster risk reduction works
- **Humanitarian Organisations:** Organisation responsible for coordinating response and relief work following a natural disaster
- **Private Sector:** Waste Recycling Association, Waste Collectors, Landfill operation etc.
- **Technical Experts:** Disaster Waste expert, Waste Management expertise and may include inter-governmental or inter-agency organisation.

A Chairperson will be appointed to lead the Working Group, supported by a small secretariat responsible for administration, coordination, and reporting.

Meetings

The Taskforce will meet:

- **Regularly:** Monthly, to review ongoing disaster waste management efforts, plan future activities, and update members on progress.
- **Ad-hoc:** As needed during a disaster event to address urgent issues and provide technical advice in real-time.

Minutes of meetings will be recorded and shared with all members and relevant stakeholders.

Deliverables

Key deliverables from the Working Group include:

- Disaster Waste Assessment Reports.
- Disaster Waste Management Plans.
- Technical guidelines and SOPs for disaster waste management.
- Training materials and capacity-building resources.
- Periodic reports on the progress of waste management efforts during and after disaster events.
- Recommendations for policy and regulatory improvements.

Funding and Resources

The operational costs of the Taskforce will be covered through contributions from participating organisations, government agencies, and relevant donors. Resources for specific activities (e.g., assessments, training, equipment procurement) may be sourced through joint funding proposals or bilateral agreements.

Authority and Reporting

The Taskforce will report to the national disaster management authority and relevant government ministries. Recommendations from the Taskforce will be advisory, and implementation will be the responsibility of the respective authorities or organisations.

Amendments

These Terms of Reference may be amended by consensus of the Working Group members, with approval from the national disaster management authority.

Signatories

- **Chairperson:** [Name, Organization]
 - **Representing:** [Member Organizations]
-

