

## Vanuatu Earthquake Humanitarian Response Quick Note Environmental Considerations Overview 28 December 2024

### Introduction

This **Quick Note** provides summary guidance on the environmental elements to be considered in assessing, planning and delivering assistance following the 17 December 2024 Vanuatu earthquake.

Additional information on the topics covered below is available on the [Environment and Disaster Management](#) and [Environmental Emergency Centre](#) web sites, and in the [Environmental Checklist for Shelter Response – Vanuatu](#).

The **Quick Note** was developed by the Global Shelter Cluster Environment Community of Practice in support of the Global Shelter Cluster and Vanuatu Shelter Cluster. The **Quick Notes** takes a shelter and settlements approach and includes issues beyond just shelter materials.

Additional information on the guidance provided below or on any shelter and settlements environmental issue is available by emailing [environmentoperations@sheltercluster.org](mailto:environmentoperations@sheltercluster.org).

### Summary Guidance

Sector	Guidance Summary	Environmental/Risk Reduction Implication/Opportunity
<b>Energy</b>	<ol style="list-style-type: none"> <li>1. Re-establish electricity and access to bottled gas to minimize use of alternate sources of energy, particularly the use of local vegetation disaster debris for cooking.</li> <li>2. Assess needs for generators based on immediate and long term energy needs, fuel availability and noise pollution.</li> <li>3. Consider the distribution of solar panels and inverters in addition to or instead of solar lights given the resulting wider use of electricity possible, e.g., more charging capacity, more light at night, safety, etc.</li> </ol>	<ol style="list-style-type: none"> <li>1. Enable banking operations, particularly cash points, enables the disaster affected to cover their own needs through commercial markets, reducing the need for humanitarian assistance.</li> <li>2. Use of electricity or LNG reduces air pollution and public health impacts of open fires and reduces deforestation to collect fuelwood.</li> <li>3. Limiting generators to only short-term critical needs and recovering the generators when no longer needed will reduce air and noise pollution and permit reuse of the generators in other disasters.</li> <li>4. Using bottled gas for small generators will lead to lower emissions compared to using gasoline.</li> </ol>
<b>Communications</b>	Re-establish communications to improve access to information on needs.	Improved information sharing will permit a better matching of relief and commercial supplies to clearly defined needs.
<b>Environmental Information in Needs Assessments</b>	<ol style="list-style-type: none"> <li>1. Incorporate <a href="#">NEAT+</a> and <a href="#">REA</a> information needs into assessments and providing analysis of assessment results. Note: both NEAT+ and REA can be completed based on other</li> </ol>	<ol style="list-style-type: none"> <li>1. The impact of humanitarian response is improved by more clearly matching needs and resources and avoiding negative impacts from assistance.</li> </ol>

	<p>assessments using a desk-top approach.</p> <ol style="list-style-type: none"> <li>Incorporate environmental expertise in assessment and coordination teams.</li> </ol>	<ol style="list-style-type: none"> <li>Understanding environmental impacts can identify ecological restoration options which will improve human security, water management, livelihoods, and landslide risk reduction.</li> </ol>
<b>Shelter Assistance</b>	<ol style="list-style-type: none"> <li>Use locally available resources, particularly debris, for immediate and transitional shelter repairs, rehabilitation and rebuilding.</li> <li>Develop a plan to recover, reprocess, repurpose and reuse plastic sheeting and packaging.</li> <li>Consider providing galvanized metal sheeting for shelters rather than plastic sheeting.</li> </ol>	<ol style="list-style-type: none"> <li>Using locally available resources for shelter repairs, rehabilitation or rebuilding will speed these processes and reduce the immediate need to deliver emergency shelter supplies.</li> <li>As shelter items such as plastics sheets and plastic packaging cannot be reprocessed in many disaster-affected locations, these items should be recovered and processed, reused or repurposed in environmentally sound ways.</li> <li>Galvanized sheeting lasts longer with significantly less end-of-life disposal challenges than plastic sheeting. Providing galvanized sheeting can also accelerate the shift to transitional and permanent shelter options.</li> </ol>
<b>Debris Management</b>	<ol style="list-style-type: none"> <li>Assess the volumes and nature of disaster debris.</li> <li>Use established guidance to plan and execute debris management operations (See <a href="https://resources.eccentre.org/resources/disaster-waste-management-guidelines-dwmg-online/">https://resources.eccentre.org/resources/disaster-waste-management-guidelines-dwmg-online/</a>) and <a href="https://www.humanitarianlibrary.org/collection/debris-management">https://www.humanitarianlibrary.org/collection/debris-management</a>).</li> <li>Assess and address debris management challenges for smaller islands where short term storage and long term disposal options are limited.</li> </ol>	<ol style="list-style-type: none"> <li>Quick clearance of debris will speed up physical rebuilding and reduce environmental sanitation hazards.</li> <li>Expert-developed and implemented debris management plans will lead to recycling and reuse of debris and reduce quantities disposed in landfills or elsewhere. (Debris management plans can reduce the need for landfill disposal by 90%.)</li> <li>Efficient management of debris will reduce transport requirements (reducing CO<sub>2</sub> footprint) and reduce anarchic debris disposal.</li> </ol>
<b>Asbestos</b>	<ol style="list-style-type: none"> <li>Incorporate safe management of asbestos into debris management plans.</li> <li>Do not use asbestos-containing materials in emergency, transitional or permanent shelter.</li> </ol>	<ol style="list-style-type: none"> <li>Asbestos presents a short- and long-term health hazard.</li> <li>See <a href="#">Asbestos Management Brief: Vanuatu</a> on asbestos in Vanuatu and <a href="#">A Brief Guide to Asbestos in Emergencies: Safer Handling &amp; Breaking the Cycle</a> for broader guidance.</li> </ol>
<b>Cyclone Season Preparedness</b>	<p>Medium- and Long-term forecasts should be developed to assess risks and impacts from cyclones.</p>	<p>Immediate to medium term actions needed to address cyclone risks may require changes in the scope, timing</p>

		and type of assistance provided, for instance, quick construction or rehabilitation of cyclones shelters.
<b>WASH</b>	Damage assessments and response plans should include impacts of seismic events, debris management and shelter operations on the provision of water, sanitation and hygiene and include solid and liquid waste management.	<ol style="list-style-type: none"> <li>1. Shelter sites need sufficient water supplies and sanitation management capacities before occupation. Shelter sites without basic water and sanitation are not likely to be occupied and be a waste of resources.</li> <li>2. Solid and liquid waste needs to be properly collected and managed to limit environmental damage.</li> </ol>
<b>Biohazard Waste Management</b>	New or upgraded systems may be needed to handle an expected increase in biohazard waste considering likely widespread damage to existing biohazard management systems and increased health care demands (e.g., treating injuries).	Poor management of biohazard waste can lead to negative impacts on human health and environment.
<b>Procurement and NFIs</b>	<ol style="list-style-type: none"> <li>1. Reduce air transport of non-life saving or life sustaining supplies where possible.</li> <li>2. Shift to transport by ship as quickly as possible.</li> <li>3. Shift to local environmentally and socially responsible procurement as soon as markets allow.</li> <li>4. Incorporate measures to reduce packaging to minimums.</li> <li>5. Develop waste management plans as part of supply procurement planning.</li> <li>6. Assess market supply and price conditions to ensure local procurement and cash transfers do not create price distortions or excessive demands on natural resources.</li> </ol>	<ol style="list-style-type: none"> <li>1. Minimize the transport CO<sub>2</sub> footprint where possible</li> <li>2. Minimize packaging waste and pressure on existing waste management systems.</li> <li>3. Use environment-impact-based specifications for non-food items (NFI) and in planning distribution of funds to affected populations.</li> </ol>
<b>Donated Commodities</b>	<ol style="list-style-type: none"> <li>1. Match donated commodities to assessed needs and avoid sending commodities for which an explicit need has not been identified.</li> <li>2. Establish an online or physical market place for sharing commodities across response programs.</li> </ol>	Donated commodities often exceed needs or be culturally or functionally inappropriate. Matching commodities to needs reduces unnecessary transport and eventual waste management requirements in the disaster-affected area.

### Acronyms

1. NEAT+: [Nexus Environmental Assessment Tool](#)
2. REA: [Rapid Environmental Assessment Tool](#)