

**NW Syria Seismic Event Humanitarian Response  
Initial Key Environmental Guidance Overview  
Issue #1  
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**Introduction**

This **Overview** summarizes key environmental guidance for the humanitarian response to the damage caused in NW Syria by the February 2023 seismic events. The guidance focuses primarily on on-going response operations and guides response organizations to more detailed information as may be appropriate.

The **Overview** has been developed by the Global Shelter Cluster Environment Community of Practice with a primary focus on shelter and settlements. However, the **Overview** is also relevant for associated responses in early recovery and livelihoods and WASH.

The order of the guidance below is based on a combination of importance from an environmental perspective and ease of application. Individual organizations may focus on one or more topical areas based on existing projects and planned activities.

**However, all organizations responding in NW Syria should begin conducting environmental impact assessments to identify and minimize avoidable additional harm to affected populations.** Support is available on conducting these assessments.

Support on environmental issues can be secured through a request to the WWF Environment and Disaster Management [Help Desk](#), at WWF's [Environment and Disaster Management](#) and the OCHA/UNEP Joint Environment Unit's [Environmental Emergency Centre](#).

Note that all the guidance provided below has specific gender and protection aspects which should be considered as part of project design and implementation.

**Summary Guidance**

Topical Area	Guidance Summary	Environmental Implication
<b>Real-time Environmental Assessments</b>	1. Use the <a href="#">R or U NEAT</a> <sup>1</sup> tools to identify implementation-level environmental impacts. A 30 minute set of <a href="#">YouTube videos</a> explain the easy use of NEAT+.	1. Identifying environmental impacts will aid in providing assistance which reduces harm to affected populations and improves the effectiveness of assistance. 2. Improved understanding of environment-related issues will aid in identifying actions to improve sheltering options, human security, water and waste management,

<sup>1</sup> Rural/Urban Nexus Environmental Assessment Tool.

	<ol style="list-style-type: none"> <li>2. Use the <a href="#">REA</a><sup>2</sup> tool to identify strategic-level environmental issues.<sup>3</sup></li> <li>3. Incorporate environmental expertise into assessment and coordination teams. (See the WWF Environment and Disaster Management <a href="#">Help Desk</a>, above).</li> </ol> <p><b>Note: Environmental reviews are a key action under <a href="#">Sphere Shelter Standard 7</a> and may be required by donors.</b></p>	<p>livelihood support and flooding and landslide risk reduction.</p>
<b>Energy</b>	<ol style="list-style-type: none"> <li>1. Provide bottled gas to minimize use of alternate sources of energy, particularly the use of disaster debris, fuelwood or charcoal for heating and cooking.</li> <li>2. Establish health-and-safety plans and guidance (e.g., for carbon monoxide poisoning, fuel storage safety) for energy source stockpiles and household use.</li> <li>3. Assess needs for generators based on long term energy requirements, fuel availability and noise pollution and consider a buy-back program when generators are no longer needed.</li> <li>4. Increase the use of solar energy sources, for electricity and water heating, to reduce use of fuelwood, charcoal and generators, and demand on central power generation, when available.</li> </ol>	<ol style="list-style-type: none"> <li>1. Reduced use of wood or charcoal fires will reduce air pollution and public health impacts from open fires.</li> <li>2. Fuelwood and charcoal needs may be met from cutting forests and orchards, reducing livelihoods options and contributing to soil erosion and flooding. See <a href="#">Axed and Burned</a> for a detailed assessment of the impact of cutting firewood and making charcoal.</li> <li>3. Limiting generators to only 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>Fuel Source Alert</b>		
<p>Syria has seen a significant use of low technology refining of crude oil, with significant negative health, environmental and personal safety impacts. See <a href="#">Dying to Keep Warm: Oil Trade And Makeshift Refining in North-West Syria</a> and <a href="#">Scorched Earth and Charred Lives</a>. A crude oil processing site is reported to be located at Chbirane, 18 km north of Al Bab. Humanitarian organizations should avoid purchasing fuel from these low-technology operations and take care to not site camps near these facilities.</p>		
<b>Debris Management</b>	<ol style="list-style-type: none"> <li>1. Assess and development plans to recovery usable durable goods (e.g., stoves) and other household supplies from damaged buildings should be developed.</li> <li>2. Use livelihoods support to fund local debris management activities.</li> </ol>	<ol style="list-style-type: none"> <li>1. Standards-based debris management will reduce negative environmental impacts.</li> <li>2. Recovering usable durable good and other household supplied, and the <i>repair, reuse, repurposing and recycling</i> approach will reduce the quantity of debris which needs final disposal, reduce the need for external</li> </ol>

<sup>2</sup> Rapid Environmental Assessment.

<sup>3</sup> The REA can be done as an online survey, in English or Arabic over a week or 10 days.

	<ol style="list-style-type: none"> <li>3. Consider debris <i>repair, reuse, repurposing and recycling</i> (4R) as community-based livelihoods support activities.</li> <li>4. Use established guidance to plan and execute any debris management operations. Consult: <ul style="list-style-type: none"> <li>• <a href="https://resources.eecentre.org/resources/disaster-waste-management-guidelines-dwmg-online/">https://resources.eecentre.org/resources/disaster-waste-management-guidelines-dwmg-online/</a>,</li> <li>• <a href="https://www.humanitarianlibrary.org/collection/debris-management">https://www.humanitarianlibrary.org/collection/debris-management</a>).</li> <li>• <a href="https://www.alnap.org/system/files/content/resource/files/main/debrisq46.pdf">https://www.alnap.org/system/files/content/resource/files/main/debrisq46.pdf</a> and,</li> <li>• <a href="https://www.humanitarianlibrary.org/sites/default/files/2023/02/DWVG.pdf">https://www.humanitarianlibrary.org/sites/default/files/2023/02/DWVG.pdf</a>.</li> </ul> </li> <li>5. Contact the Early Recovery and Livelihoods Cluster for more on debris management efforts.</li> </ol>	<p>assistance required and expand the resources available to affected populations (e.g., repairing and reusing stoves or light fixtures).</p> <ol style="list-style-type: none"> <li>3. Efficient management of debris will reduce transport requirements for final disposal (reduced CO<sup>2</sup> footprint) and reduce anarchic debris disposal.</li> </ol>
<p style="text-align: center;"><b>Asbestos</b></p>	<ol style="list-style-type: none"> <li>1. Promote <a href="#">safe management of asbestos</a> in debris management plans, local clearing of debris, light repairs and for livelihood activities which may cause individuals to be exposed to dust from debris or the soil.</li> <li>2. Do not use asbestos-containing materials in emergency, transitional or permanent shelter.</li> </ol>	<ol style="list-style-type: none"> <li>1. Asbestos is both a human health and environmental contamination issue.</li> <li>2. Asbestos becomes more dangerous when released into the air during deconstruction, debris removal and repairs to buildings and other parts of the built environment.</li> <li>3. Given historical building methods, asbestos is likely present in the built environment where concrete has been used, for heat or fire insulation (e.g., heating boilers) or a range of other uses.</li> <li>4. Additional information on safe management of asbestos is available from: <ul style="list-style-type: none"> <li>• <a href="https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/3.3.16.asbestos_in_emergencies.pdf">https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/3.3.16.asbestos_in_emergencies.pdf</a>,</li> <li>• <a href="https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/Asbestos%20disaster%20debris%20guide.pdf?VersionId=T292U71a_GyVWwOd078U5wtGLlvbLK4v">https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/Asbestos%20disaster%20debris%20guide.pdf?VersionId=T292U71a_GyVWwOd078U5wtGLlvbLK4v</a>, and</li> </ul> </li> </ol>

		<ul style="list-style-type: none"> <li>• <a href="https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/asbestos_removal_manual_002.pdf">https://sheltercluster.s3.eu-central-1.amazonaws.com/public/docs/asbestos_removal_manual_002.pdf</a>.</li> </ul>
<b>Fire Safety</b>	<ol style="list-style-type: none"> <li>1. Minimize fire risk in emergency/transitional shelter from heating, lighting and cooking. See <a href="https://www.kindlingsafety.org/">https://www.kindlingsafety.org/</a> for more guidance.</li> <li>2. Monitor weather for periods of high winds (e.g., thunderstorms) which may contribute to or facilitate the spread of fire.</li> </ol>	<ol style="list-style-type: none"> <li>1. The increased use of tents and other non-durable shelters increases the overall flammability of shelter and settlements, particularly where cooking is done outside formal kitchens and lamps and candles used for lighting.</li> <li>2. Fires destroy shelter and relief assistance, creating an unnecessary doubling in the quantity of assistance provided.</li> </ol>
<b>Flood Risk Management</b>	<ol style="list-style-type: none"> <li>1. Incorporate flood risk management into all settlement planning.</li> <li>2. Expand past site configuration efforts to reduce flood risks.</li> <li>3. Provide rain barrels and gutters to capture rainfall.</li> </ol>	The NW Syria humanitarian response has been dealing with flood risk for several years. The additional populations living in tents and other non-durable shelter means that flood risk management efforts will need to be expanded.
<b>WASH</b>	Shelter and settlements assistance should include water, sanitation and hygiene and 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 (see 4R, above).</li> </ol>
<b>Procurement</b>	<ol style="list-style-type: none"> <li>1. Use environment-impact-based specifications for non-food items.</li> <li>2. Assess environmental impacts of providing funds to affected populations.</li> <li>3. Air transport should only be used for saving or life sustaining assistance.</li> <li>4. Ground sea transport should be used as much as possible.</li> <li>5. Conduct <a href="#">market capacity assessments</a> which consider the environmental impact of sourcing commodities, including sand, soil, wood and water for repairs or rebuilding.</li> <li>6. Incorporate measures to reduce packaging to minimums in procurement requests.</li> </ol>	<ol style="list-style-type: none"> <li>1. Assessing the environmental impacts of providing funds to the affected or other market-based assistance will reduce unanticipated negative environmental economic and social impacts.</li> <li>2. A packaging waste management plan will reduce the pressure on existing waste management systems.</li> </ol>

	7. Develop packaging waste management plans as part of supplies procurement planning. (See 4R. above.)	
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