Checklist-Based Guide
to
Identifying Critical Environmental Considerations in Emergency Shelter Site Selection, Construction, Management and Decommissioning[1]

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[1] Revised from **Checklist-Based Guide: Identifying Critical Environmental Considerations in Transitional Shelter Site Selection, Construction, Management and Decommissioning** developed for the funding organizations in Sri Lanka following the 26 December 2004 tsunami.

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Environment-Related Considerations in Emergency Shelter Construction

(From *transitional shelter technical implementation*, developed by humanitarian assistance organizations in Sri Lanka following the 26 December 2004 tsunami.)

Site selection: Safe and secure sites, such as those at minimum risk from natural disasters, should be selected … to maximise the protection of affected persons and to minimise mortality, morbidity and gender based violence. Risk must not be rebuilt and all site selection should be based upon localised risk mapping integrated to include all risks, including cyclones, floods and landslides.

Access, infrastructure and services: In close collaboration with local government and … sectors … such as water and sanitation, assessments should be made of whether there is adequate and appropriate provision of: road or other access; infrastructure such as drainage; and services such as water, sanitation and power

Vulnerable families: The vulnerability of families should be assessed using the UNHCR criteria and methodology…. Full assistance should be offered to families identified as vulnerable…. Self-help programmes should not impact negatively on activities essential to families, such as child care.

Environmental protection: Rapid environmental assessment tools should be employed to identify potential impacts and mitigation measure must be undertaken, informing site selection. The environmental impacts of construction materials harvesting, manufacture and use must be included in the assessments.

Relocation: It must be possible to dismantle the shelter so that it can be relocated, involving the minimum of damage to construction elements.

Reuse of materials: The maximum number of construction elements within each emergency shelter design should be reusable in later reconstruction.

Local materials: Local materials should be used in preference to imported materials when they are available in sufficient quantities and at appropriate costs. An understanding should be formed of local culture, climate and building tradition in order to inform the use of all materials, whether local or imported.

Extension: The shelter should be modular or extendable, so that the design can be adapted to more than one different family size, as well as acting as a possible core for later reconstruction when land rights allow.

Site preparation: Sites should be cleared and made safe, especially if there is any indication of UXOs on the site, including providing surface water drainage.

Footings or foundations: Shelter footings or foundations should be adequate to minimise the risk of failure during cyclones, involving an assessment of soil type.

Frame: The structural frame supporting the roof, walls, and partitions should be designed to resist cyclones, especially from wind loads from the roof and walls, such as by involving cross-bracing and additional strengthening at joints.

Walls: Walls or enclosure screens should allow adequate privacy and security. Structural continuity and strength should be sufficient to avoid safety risks in cyclones.

Roof: Roofing materials, as with all materials used, should be selected with an understanding of local variations in culture, climate and availability. Roofing should be waterproof, and fixed securely so that roofing elements are not dislodged during cyclones. Materials should selected to minimise internal temperatures, or other measures should be taken such as providing a ceiling and ventilated roof space. Materials containing asbestos must be avoided.

Ventilation: Local variations in climate should be understood and responses integrated into emergency shelter designs. Sufficient ventilation should be ensured, to minimise internal temperatures. If cooking is undertaken inside, additional ventilation is required to minimise respiratory health problems, which would otherwise become are a major cause of mortality and morbidity.

Flammability: Material use and space planning should minimise flammability and flame spread, as well as maximising opportunities for rapid escape.

Introduction

Organizations providing emergency assistance in the shelter sector need to assess and incorporate environmental impacts into their activities to comply with the **Sphere Standards for Humanitarian Assistance**.

This **Checklist-Based Guide to Identifying Critical Environmental Considerations in Emergency Shelter Site Selection, Construction, Management and Decommissioning** provides an easy-to-use way to assess whether environmental issues have been appropriately addressed in emergency shelter efforts. In most cases, unaddressed issues can be resolved by changing plans or implementing specific up-grades of shelter sites.

The **Checklist** can also be used to review planning for new emergency shelter sites. In this mode, the issues raised in the guide can be addressed by specific actions incorporated into an emergency shelter program before the program is implemented.

The **Checklist** was initially developed as part of the emergency transitional shelter effort in Sri Lanka following the 26 December 2005 tsunami (see http://www.benfieldhrc.org/SiteRoot/disaster_studies/rea/rea_resources.htm). The Sri Lanka **Checklist** was developed based on **Sphere** standards and policy and transitional shelter guidance developed by the humanitarian community in Sri Lanka.

This version of the **Checklist** has been edited and reformatted to be used in most types of humanitarian crisis which result in the displacement of populations and the need for emergency shelter.

Sphere and the Environment

Sphere identifies the environment as a cross-cutting issue in humanitarian assistance (see box). In addition, **Chapter 4 - Shelter, Settlement and Non-Food Assistance**, sets a standard that the:

> *adverse impact on the environment is minimised by the settling of the disaster-affected households, the material sourcing and construction techniques used* (*Shelter Standard 6* – page 227).

The Environment

The environment is understood as the physical, chemical and biological surroundings in which disaster-affected and local communities live and develop their livelihoods. It provides the natural resources that sustain individuals, and determines the quality of the surroundings in which they live. It needs protection if these essential functions are to be maintained.

The Minimum Standards address the need to prevent over-exploitation, pollution and degradation of environmental conditions. Their proposed minimal preventive actions aim to secure the life-supporting functions of the environment, and seek to introduce mechanisms that foster the adaptability of natural systems for self-recovery.

From **The Sphere Project, Humanitarian Charter and Minimum Standard for Humanitarian Response**, *page 13)*

Sphere identifies five indicators to defining whether the environmental impact standard has been met:

- *The temporary or permanent settling of the affected population considers the extent of the natural resources available.*
- *Natural resources are managed to meet the ongoing needs of the displaced and host populations.*
- *The production and supply of construction material and the building process minimizes the long-term depletion of natural resources.*
- *Trees and other vegetation are retained where possible to increase water retention, minimize soil erosion and to provide shade.*
- *The locations of mass shelters or temporary planned camps are returned to their original condition, unless agreed otherwise, once they are no longer needed for emergency shelter use.*

Environmental impact is also integrated into the other five shelter standards dealing with **Strategic Planning**, **Physical Planning**, **Covered Living Space**, **Design** and **Construction**.

As a cross-cutting issue, environmental impact is also relevant to other sectors covered by **Sphere**. Most humanitarian activities covered under the **Water Supply, Sanitation and Hygiene Promotion** standards have clear links to environmental conditions. Similarly, many activities covered under the **Health Services** standards have tight or loose links to environmental conditions and impact. Activities under the **Food Security, Nutrition and Food Aid** have, in many cases, indirect or medium to long term impacts on the environment.

Focus

The **Checklist** focuses on four stages in the life cycle of a shelter site:

1. Selection of the shelter site
2. Construction of buildings and infrastructure on the site,
3. Management of the site while it is occupied, and
4. Decommissioning (closing) of a site when it is no longer needed. The decommissioning stage also includes shifting to permanent shelter constriction at a site currently being used for emergency shelter.

Considering environmental factors at these four stages in the life cycle of an emergency shelter site is important to:

1. Ensure emergency shelter sites and operations comply with national and donor environmental review requirements.
2. Avoid potential problems at shelter sites, such as flooding or poor environmental sanitation.
3. Improve operations at an emergency shelter site. Many environmental issues relate to the best practice operations of an emergency shelter site as well as the quality of life of site residents.
4. Ensure that once a site is closed it is not an environmental hazard.

The **Checklist** is designed for use in emergency operations to highlight likely critical issues. The **Checklist** does not replace a formal environmental impact assessment (EIA).

An EIA process should be completed for any significant permanent shelter effort, or for long term temporary shelter programs. The Checklist does not replace and should be used in conjunction with other guidance on emergency shelter (see **Key Resources** box below.)

Linkages

Environment-focused reviews usually identify a range of issues which relate to other sectors, such as health, safety, and water supply. It is likely that many environment-related issues can be addressed through efforts in other sectors. For instance, Oxfam or UNICEF may be able to provide assistance in addressing sanitation issues rather than an organization creating their one parallel and duplicative structure to address this type of problem.

This guide is limited to the environmental aspects of emergency shelter. However, the guide may also be useful for the environmental review of permanent shelter activities when there is no other appropriate guidance available.

Users

The guide is designed for use in the field by communities, government authorities and NGO staff involved in establishing and managing emergency shelter sites. Where possible, residents (or prospective residents) of a shelter site should be involved in completing the review.

Structure

The guide uses simple checklists and guidance to identify environmental considerations which should be incorporated into the establishment and operation of post-tsunami emergency shelter. The checklist format has been adopted to facilitate use in the field.

The provision of preliminary guidance on how to address specific issues identified is intended to aid field personnel to take quick action to address problematic issues or as indication of the type of technical assistance which may be required.

Timing and Use

The **Checklist** is designed to be use before, during or after an emergency shelter site has been established. The ideal use would be as a review of shelter site plans before final decisions have been made on site selection, plans and designs. In this mode, the **Checklist** would serve as a compliance review.

Alternately, the **Checklist** can be used to guide planning and activity development at the site planning stage. As the **Checklist** is a review document, and should not replace

other more detailed shelter planning materials (see **Key Resources**, below), this use is not encouraged.

Given the rushed nature of humanitarian response, it is most likely the **Checklist** will be used to review an existing emergency shelter site. In this situation, completing all four forms in the **Checklist** provides a catalogue of environment-related issues which can be addressed:

- In the day-to-day site management,
- In upgrading of a site, or,
- As part of decommissioning a site.

The preference is for issues to be addressed before site decommissioning.

Only parts of the **Checklist** need to be used where emergency units are constructed on sites on which a housing unit had been previously existed. The assumption at these sites is that the new emergency unit will not result in any greater environmental impact than if the original housing unit had not been damaged or destroyed. The items which need to be considered in this case are marked on each checklist.

Addressing Environmental Issues[3]

Once a Shelter Site is Open

Where a **Checklist**-based review is conducted for an emergency shelter site which is already open, it is likely that most environment-linked issues can likely be addressed (as "upgrades" to the site) using the normal range of financial and technical resources available during and following a disaster. The **Key Resources** identified below can be useful in working out practical ways to resolve or mitigate most environment-related issues at an emergency shelter site.

Key References

- **Camp Management Toolkit**, Norwegian Refugee Council, http://www/nrc.no/camp/
- **Emergency Settlement Displaced Populations**, The Shelter Project, http://www.shelterproject.org (A source of information on shelter issues.)
- **Engineering in Emergencies**, Jan Davis and Robert Lambert, RedR and Intermediate Technology Group.
- **Environmental Guidance for USAID Financed Housing Projects**, CARE Honduras.
- **Handbook for Emergencies**, UNHCR, http://www.unhcr.ch
- **Handbook for Rapid Environmental Assessment in Refugee and Related Operations** (draft), UNHCR.
- The Sphere Standards, http://www.sphereproject.org

[3] The **Checklist** does presume that the organization(s) planning and operating an emergency shelter site have the professional and financial resources to accomplish these tasks in compliance with the **Sphere Standards** and current best practice. If this is not the case, the **Key References** can be used to guide this effort.

However, in a limited number of cases, closing and moving an emergency shelter site may be the only way to resolve serious threats to the lives and wellbeing of site residents. (Serious environmental problems generally pose serious immediate or long term risks to humans.)

Before a Shelter Site is Open

Incorporating a **Checklist**-based review process into site selection, design and operation will avoid most major environmental issues. However, the identification of environmental issues at a site does not necessarily exclude the location for use as an emergency shelter site.

It is not uncommon for circumstances to necessitate the use of a sub-optimal site for emergency shelter. If this is the case, the checklists help identify ways to address these negative impacts as part of the establishment, management or decommissioning of a site.

For example, it may be necessary to remove most trees and other vegetation from a site for security reasons. Plans should be made to replace the same or similar vegetation as part of the decommissioning process. (The **Key References** above are useful in identifying ways to avoid or mitigate environmental impacts before a site is opened.)

The **exception** is for sites which

- Do not have access to sufficient water,
- Are where there are hazardous sites (e.g., waste pits) or
- Where the legal status of the shelter site is not clear.

In these cases, prospective sites should not be used until the life-threatening issues are addressed.

Reporting

There is no requirement to generate a report on the results of the environmental review using the **Checklist**. When used before an emergency shelter site is opened, the results of the review will be integrated into the design of the site.

In the case of a shelter site which already exists, it is recommended that a short report be completed which details the issues identified and any suggested solutions. This type of short reporting is useful for monitoring and planning purposes. In many cases it will serve as a simple action plan for site managers in efforts to resolve the outstanding issues.

Completing the Forms

Four steps are required to identify potential environmental issues related to emergency shelter:

Step One: Answer the question in the first column of each form with a yes or no.

Step Two: Mark the answer in the second column. If the question is not relevant, cross out the Yes-No box.

Step Three: Refer to the 3rd column (**Guidance**) to determine whether the yes or no answer identifies an environment-linked issue ("If the answer is…").

Step Four: If the answer ***identifies*** an environment issue not yet addressed then review the guidance in the 3rd column as to what actions should be taken to address the issue.

The 4th column provides potential sources of information which can be used in implementing the guidance provided. (Where the guidance is considered sufficiently clear no source of information has been cited.) Local government officials, NGO/IO and academics will, many cases, be able to assist in identifying ways to implement the guidance.

An additional column can be added for comments. For instance, notation can be made that additional specialized trucks are needed to remove sewage and that UNICEF will be contacted for assistance. However, to keep the form as short as possible, the comments can just as easily be added in the margins or on a separate sheet of paper.

Questions which apply to shelter units constructed at a location where a housing unit existed previously are indicated with an "*".

Emergency Shelter Site Selection Checklist

Person/s Completing the Checklist: Date:
General Location (e.g., District): Specific Location (e.g., road, division or community):

Question	Answer	Guidance	Sources of Information
Has the community near or surrounding the site been consulted about the site selection? *Consultation is an important way to avoid or limit conflict over the location of a shelter site. This conflict often revolves around access or control over natural resources.*	**Yes – No**	**If the answer is No:** Communities near or surrounding the site should be involved in the site selection process.	ALNAP Global Study: Participation by Affected Populations in Humanitarian Action: Practitioner Handbook (draft) especially Chapter 10 (http://www.alnap.org/gs_handbook/gs_handbook.htm). Participatory rapid appraisal information and links can be found at http://www.fao.org/participation/ft_find.jsp. Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 1: *Negotiations Prior to Camp Set-up* (http://www.nrc.no/camp/).
Do prospective shelter site residents and the surrounding community have similar occupations or religions? *Significant social, occupational or religious differences may indicate differing views on the use and control of natural resources and lead to conflict.*	**Yes – No**	**If the answer is No:** To the degree possible, social and cultural make-up of communities before the disaster should be maintained in the selection of emergency shelter sites.	Local informants and NGOs staff working in the area before the disaster. Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 1: *Negotiations Prior to Camp Set-up* (http://www.nrc.no/camp/).

*Have the prospective site inhabitants been consulted about the site and types of shelter to be constructed? *The resources and effort made to establish a site will be wasted if the prospective inhabitants are not willing to use the site.*	**Yes – No**	**If the answer is No:** Prospective inhabitants of a emergency shelter site should be involved in the site selection and shelter design process.	ALNAP Global Study: Participation by Affected Populations in Humanitarian Action: Practitioner Handbook (draft), especially Chapter 10 (http://www.alnap.org/gs_handbook/gs_handbook.htm) Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 1: *Negotiations Prior to Camp Set-up* (http://www.nrc.no/camp/).
Is the site more than 15 km of a natural park, wildlife refuge or protected area? *A site near a park or similar site the risk that shelter occupants will extract resources from the protected site.*	**Yes – No**	**If the answer is No:** Site occupants can be educated about not damaging the protected areas.	Local, national and international environmental NGOs.
*Does the site avoid ecologically sensitive locations? *Ecologically sensitive areas include wet lands, lagoons, lakes, coastal zones (as defined in regulations), parks, wildlife refuge and protected areas or areas inhabited by rare or endangered animals.*	**Yes – No**	**If the answer is No:** If use of this type of site cannot be avoided then activities to limit or remediate unavoidable environmental impacts needs to be developed. These activities will need to be developed by specialists as part of the site plan.	Local and national maps, Local informants. Local, national and international environmental NGOs.
Does the site avoid culturally significant locations? *Culturally significant sites include temples, churches, holy sites and archeological sites.*	**Yes – No**	**If the answer is No:** Use of these types of locations should be avoided. If they need to be used, buffer zones and use rules should be established in consultation with owners of the site, local authorities and concerned populations.	Local and national maps. Local informants. World Database on Protected Areas (http://sea.unep-wcmc.org/wdbpa/)

Has the site been used for industrial or commercial purposes or as a dump in the past? *Industrial sites include mines and quarries. The types of sites indicated may contain toxic materials.*	**No – Yes**	**If the answer is Yes:** Verify that there are no toxic materials present in the soil or ground water.	Local informants. Local/National Chamber of Commerce or Industry. National or local environmental authorities. Many governments maintain lists of industrial sites. Site testing can often be done by government or private laboratories. In a major disaster, UNEP Post Conflict Unit may generate maps of known industrial sites (see http://postconflict.unep.ch/).
*Has the site been used for housing the past? *Former housing sites may include hazardous locations, such as garbage dumps or septic systems.*	**No – Yes**	**If the answer is Yes:** Verify that there are no environmentally hazardous sites (e.g., septic systems) are located where a shelter will be built. Mark hazardous sites if they exist.	Local informants.
Is the site located near or next to an industrial site or commercial location? *These types of sites can generate air and water pollution which can affect the health and welfare of site inhabitants.*	**No – Yes**	**If the answer is Yes:** Sites with a risk of air or water pollution from industrial or commercial activities should be avoided.	Local informants. Local or nation governments maintain lists of industrial sites. National or local environmental authorities.
*Is the site located in an area subject to earthquakes or other geological hazards? Although earthquakes and similar geological events (e.g., volcanoes) can be rare, establishing settlements in at risk sites can increase the risk of future disaster for the disaster survivors.	**No – Yes**	**If the answer is Yes:** Seismically active or volcanic zones should be avoided is possible. If these sites must be used, then seismically resistant construction should be used in all construction activities, and early warning systems established (with strong community participation) from the initial planning of the site.	transitional settlement: displaced populations (part b), Chapter 6: *Construction,* (www.shelterproject.org). Natural Hazards: Causes and Effects, Lesson 2: Earthquakes (http://dmc.engr.wisc.edu/courses/hazards/BB02-02.html)

*Is the site located in an area subject to flooding? *Flooding can come from rivers/streams, lagoon overflow, heavy rains and poor drainage, or from sea waves, e.g., at high tide or during storms. Note that sites should have a slope of 2 to 4% to facilitate natural drainage.*		**If the answer is Yes:** Flood-vulnerable sites should be avoided. When such sites must be used, then provisions for raising ground level under structures, drainage and protective dikes are necessary. Such interventions may need to be removed during decommissioning. A local flood warning system should be established.	Local informants. National or local disaster or emergency management office. Universities. Background on flooding issues can be found at The Flood Hazard Research Centre (http://www.fhrc.mdx.ac.uk/resources/index.html), Flooding Hazards, Prediction & Human Intervention (http://www.tulane.edu/~sanelson/geol204/floodhaz.htm), and Natural Hazards: Causes and Effects Lesson 6: Floods (http://dmc.engr.wisc.edu/courses/hazards/BB02-06.html).
*Is the site subject to landslides or heavy erosion? *Sites with a slope of more than 10% may be prone to severe erosion. The steeper the site the more likely landslides will occur, particularly during the monsoon.*	**Yes – No**	**If the answer is Yes:** Landslide and erosion prone sites should be avoided. If not possible, natural vegetation should be maintained in the landslide-vulnerable slopes and throughout the site, the site should be terraced to limit run-off, and structures should not built on landslide-prone slopes. A local landslide warning system should be established.	Local informants, geological survey (local and national offices), universities. Background information on landslides can be found at: Natural Hazards Research and Applications Information Center (http://www.colorado.edu/hazards/resources/landslides.html), and International Landslide Centre (http://www.landslidecentre.org/index.htm).

*Does the site have a high water table? *A high water table may indicate the potential for flooding, and poses problems for the construction and use of toilets, particularly during the monsoon.*	**No – Yes**	**If the answer is Yes**: Appropriate drainage systems will be needed during the periods of heavy rain. Provisions for safe latrine use during the rainy season will be needed as part of the site physical and management plans.[4]	Local informants, local water board or geological survey. Handbook for Emergencies (UNHCR), Chapter 12: *Site Selection, Planning and Shelter:* Criteria for Site Selection (http://www.the-ecentre.net/resources/e_library/index.cfm).
*Is there potable water available on a sustainable basis for the site? *The water can come from wells, stand pipes, bowers/tanks or other sources. "Sustainable" means that 15 liter of potable water per person per day will be available throughout the life of the shelter site.*	**Yes – No**	**If the answer is No:** A site should not be selected until a sustainable source of potable water is available.	Water Board, Ministry of Hydrology or similar government entity (local and national offices). Oxfam, UNICEF (local and national offices). Handbook for Emergencies (UNHCR), Chapter 6, *Water* (http://www.the-ecentre.net/resources/e_library/index.cfm). Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion* (www.sphereproject.org). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 10: *Water and Sanitation* (http://www.nrc.no/camp/). Note that supplies of potable water may be sufficient at one period after a disaster but experience a reduction in quantity and quality as short term relief programs come to an end.

[4] UNICEF can be consulted on the construction and management of toilets in locations with high ground water levels.

*Are there adequate health and educational facilities within 1 km from the site? *These and other public facilities are needed for a normal life of the site inhabitants. If they are too far away they cannot be easily used and increasing the hardship faced by site inhabitants.*	**Yes – No**	**If the answer is No:** Adequate access to health and educational facilities should be provided as part of the site plan.	Local informants, Ministry of Health, UNICEF, WHO. Ministry of Education.
*Is the site located near a major road with heavy traffic? *Shelter sites in these locations expose inhabitants to air pollution and well as an increased risk of accidents.*	**No – Yes**	**If the answer is Yes:** Sites should not be located within 50 meters of main roads. If such locations cannot be avoided, the site area nearest the road should be allocated to non-residential/non-school activities and barriers should be placed along the road side of the site to reduce the chance for accidents.	Local informants.
*Does the site have easy access to roads and public transportation? *Access to roads and transportation improves livelihood options for site residents and reduces their need to locally extract environmental resources. Good access also lowers the price of commercial items in the emergency shelter site, which has a positive impact on livelihoods and demand on local environmental resources.*	**Yes – No**	**If the answer is No:** Sites should have good access, or access (e.g., roads) should be established as part of the site construction process. These roads may need to be removed when the site is closed.	Local informants. Local or national maps.

*Are the cooking fuels used by the shelter inhabitants available at the site without requiring unsustainable harvesting of local natural resources? *Note that women are often responsible for collecting fuel. The more time, cost or effort involved in collecting fuel, the less time for other recovery tasks.*	**Yes – No**	**If the answer is No:** Identify the cooking fuels to be used as the site and plan for adequate supplies which do not overtax local resources.	Local or national environmental NGOs. Government organization dealing with forestry and natural resources (local and national offices). FAO.
*Will fuel efficient stoves be available, and are users familiar with the proper operation of these stoves? *Properly used fuel efficient stoves reduce demands on the environment. Different types of stoves may be needed depending to domestic activities.*	**Yes – No**	**If the answer is No:** Incorporate the provision of fuel efficient stoves and training in their use into site management plans.	Local or national environmental NGOs. Government organization dealing with forestry and natural resources (local and national offices). FAO. Information on fuel efficient stoves is available from http://www.unhcr.ch/cgi-bin/texis/vtx/home?page=PROTECT&id=3b94c47b4.
*Is there a clear and legally established agreement to use the potential emergency shelter site? *This agreement can be in the form of government decree, lease or other legal arrangement. Agreement terms should cover (1) land ownership,(2) the conditions for the use of the site, (3) decommissioning of the site and (4) any payments or services due during the occupation or decommissioning of the site.*	**Yes – No**	**If the answer is No:** No site should be selected without a legal agreement for use and decommissioning.	Local government. Lawyers. Ministry of Justice (in some countries). transitional settlement: displaced populations (part a), Chapter 1: *Introduction: Legal Context* (www.shelterproject.org).

Emergency Shelter Site Construction Checklist

Person/s Completing the Checklist: Date:
General Location (e.g., District): Specific Location (e.g., road, division or community):

This checklist refers to plans for the construction of a emergency shelter site. It covers site preparation, building and infrastructure construction, services provision and future of the site. This checklist presumes that the Emergency Shelter Site Selection Checklist has been completed and issues identified are incorporated in the site physical and management plans.

Question	Answer	Guidance	Sources of Information
*Is there a site physical plan? *A site physical plan is necessary to understand the layout and organization of the site.*	**Yes – No**	**If the answer is No:** Develop a site physical plan.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Shelter* (http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 2: *Camp Setup, Care and Maintenance of Camps* and *Camp planning: Model designs (from NRC)* (http://www.nrc.no/camp/).
*Does the site physical plan meet the requirements set out in Sphere? *All site plans should comply with the appropriate Sphere standards, including having sufficient space for social activities.*	**Yes – No**	**If the answer is No:** Review and incorporate appropriate Sphere standards into the site plan (see the Sphere web site for information on Sphere).	Humanitarian Charter and Minimum Standards, Chapters 1 to 5, and specifically Chapter 4: *Minimum Standards for Shelter, Settlement and Non-Food Items* (www.sphereproject.org).

*Has the removal of existing trees and vegetation been minimized? *Leaving as much vegetation as possible reduces erosion and the need to replant vegetation during decommissioning.*	**Yes – No**	**If the answer is No:** As much existing vegetation should be left on the site as possible.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 2: *Camp Setup, Care and Maintenance of Camps* (http://www.nrc.no/camp/).
*Does the site plan have (1) a drainage plan and (2) does it consider natural drainage systems and additional requirements due to run-off? *Natural drainage should be used where possible, supplemented by canals, ditches and holding ponds when necessary. Constructed drainage infrastructure will need to be removed during decommissioning.*	**Yes – No**	**If the answer is No:** Develop a drainage plan for the site which incorporates natural drainage and drainage infrastructure. Take steps to clear existing drainage systems of debris created by the disaster. These efforts may need to extend into the area surrounding the site to be effective.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 6: Drainage* (www.sphereproject.org).
*Will part or all or the surface of the site be covered with rock, clay or other surfacing? *Applying rock, clay or other surface materials may be necessary for roads or to provide a base for buildings. These materials may affect water drainage and may need to be removed during decommissioning.*	**No - Yes**	**If the answer is Yes:** Plan for the impact of rock or other surface covers on water infiltration and drainage. Incorporate removal into decommissioning plans.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org).

*Does the site plan and management plan provide for fire safety?	**Yes – No**	**If the answer is No:** Incorporate fire safety into physical site and management plans.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Shelter* (http://www.the-ecentre.net/resources/e_library/index.cfm).
*Does the site plan provide for expansion of the site, or facilities within the site? *With the possible life of the emergency sites to be at least 24 months, it is likely that additional facilities will be constructed and an expansion of house units will take place. This expansion should be incorporated into the site plan if possible.*	**Yes – No**	**If the answer is No:** Where possible provide space for the expansion of facilities and housing within the shelter site.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Shelter* (http://www.the-ecentre.net/resources/e_library/index.cfm).

*Is a sustainable supply of potable water available for the site?	**Yes – No**	**If the answer is No:** Construction should not proceed until a sustainable source of potable water is available.	Water Board, Ministry of Hydrology or similar government entity (local and national offices). Oxfam, UNICEF (local and national offices). Handbook for Emergencies (UNHCR), Chapter 6, *Water* (http://www.the-ecentre.net/resources/e_library/index.cfm). Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion* (www.sphereproject.org). transitional settlement: displaced populations (part b), Chapter 6: *Construction: Plumbing and Electrical Services,* (www.shelterproject.org). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 10: *Water and Sanitation* (http://www.nrc.no/camp/). Note that supplies of potable water may be sufficient at one period after a disaster but experience a reduction in quantity and quality as short term relief programs come to an end.

*Do the physical and management plans for toilet and wash facilities incorporate procedures (1) to limit excessive water use, (2) limit groundwater pollution, (3) to avoid waste water run-off, and (4) for the safe and environmentally sound disposal of liquid waste? *For sites in areas with high ground water levels, local infiltration of waste water and sewage may lead to groundwater pollution or to the creation of stagnant water pools. These outcomes are to be avoided because of their environmental and health impacts.*	**Yes – No**	**If the answer is No:** A waste water management plan should be developed. The plan needs provide for the collection of waste water and sewage at the site and later disposal in an environmentally sound manner. Sewage disposal may be complicated in areas with high ground water. A single centralized disposal facility for several settlement sites in one area may be needed and should be approved the appropriate government authority.	transitional settlement: displaced populations (part b), Chapter 6: *Construction: Plumbing and Electrical Services,* (www.shelterproject.org). Healthcare Waste Management: A Who Handbook for the Safe Handling, Treatment and Disposal of Wastes, World Health Organization, 1997. Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 3: Excreta Disposal* (www.sphereproject.org). Handbook for Emergencies (UNHCR), Chapter 17: *Environmental Sanitation* (http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 10: *Water and Sanitation* (http://www.nrc.no/camp/).

*Have provisions been made for the collection and environmentally sound disposal of solid waste? *The safe and environmentally sound disposal of solid waste reduces negative environmental impacts and promotes good health conditions.*	**Yes – No**	**If the answer is No:** Develop a solid waste management system for the site, including recycling and environmentally sound disposal, including the use of composting to limit the need for land filling. (Landfills should be approved by the appropriate government authority). Local environmental NGOs can provide advice and assistance on composting.)	Local environmental NGOs and small businesses which do recycling. Engineering in Emergencies, A Practical Guide for Relief Workers, Davis, J. and Robert Lambert, IT Publications (for "RedR"), London, 1995. After the Tsunami: Solid Waste Management, Series on Best Practice (Sri Lanka), Information Paper No. 5, The World Conservation Union (IUCN) (http://www.iucn/tsunami). Handbook for Emergencies (UNHCR), Chapter 17: *Environmental Sanitation* (http://www.the-ecentre.net/resources/e_library/index.cfm). Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 5: Solid Waste Management* (www.sphereproject.org).

*Are the buildings planned for the site designed to be resistant to high winds? *The disaster affected area may be subject to cyclones and severe thunderstorms with strong winds. This storm activity can damage or destroy buildings which are not constructed to appropriate standards.*	**Yes – No**	**If the answer is No:** Only designs which have been assessed as resistant to high winds should be constructed in the emergency shelter sites. Upgrading sub-standard structures may be necessary in existing shelter sites. Wire or metal straps to connect roof members together and to connect roof structures to walls can be an effective way to increase wind resistance.	transitional settlement: displaced populations (part b), Chapter 6: *Construction,* (www.shelterproject.org).
*Are the buildings planned for the site designed to be resistant to seismic activity? *The disaster affected area may be subject to earthquakes which can destroy or damage buildings not constructed to appropriate standards.*	**Yes – No**	**If the answer is No:** Only designs which have been assessed as seismically should be constructed in the emergency shelter sites. Upgrading sub-standard structures may be necessary in existing shelter sites. A variety of retrofitting approaches are available but will probably need to be adapted to the conditions present in each disaster.	transitional settlement: displaced populations (part b), Chapter 6: *Construction,* (www.shelterproject.org). Natural Hazards: Causes and Effects, Lesson 2: Earthquakes (http://dmc.engr.wisc.edu/courses/hazards/BB02-02.html)
*Do all building designs include provisions for harvesting rainwater? *Rainwater collection (1) reduces the need for groundwater supplies, (2) increases the volume of water available to each site inhabitant at limited additional cost, and (3) can reduce the workload on women.*	**Yes – No**	**If the answer is No:** All structures should include gutters and provision for rain water storage.	Rainwaterharvesting.org (http://www.rainwaterharvesting.org/).

*Do building designs minimize the volume of construction materials used and use materials drawn from renewable resources when possible? *To limit the impact on the environment, buildings should use as few resources as possible while meeting cost criteria and Sphere standards. Use of renewable resources (e.g., vegetative matter) is preferred over non-renewable (e.g., sheet metal) on the basis of the environmental sustainability of renewable resources.*	**Yes – No**	**If the answer is No:** Evaluate the quantities and types of materials being used in building designs to minimize the total amount of materials used and to maximize the use of renewable resources.	transitional settlement: displaced populations (part b), Chapter 6: *Construction,* (www.shelterproject.org). After the Tsunami: Materials for Reconstruction – Environmental Issues, Series on Best Practice Guidelines (Sri Lanka), Information Paper No 3., IUNC (http://www.iucn/tsunami).
*Can 100% of the materials used in building construction be reused or recycled once a building is no longer needed? *Planning for reuse allows emergency shelter occupant to "carry over" the building materials as assets when they move to their new housing. Materials which cannot be reused should be recycled.*	**Yes – No**	**If the answer is No:** Building design should use materials and construction methods which allow all the materials initially used to be reused for permanent housing or other uses after the site closes or recycled (e.g., through composting).	transitional settlement: displaced populations (part b), Chapter 6: *Construction,* (www.shelterproject.org). After the Tsunami: Materials for Reconstruction – Environmental Issues, Series on Best Practice Guidelines (Sri Lanka), Information Paper No 3., IUNC (http://www.iucn/tsunami)

*Does building siting and design take advantage to natural ventilation? *Maximizing the use of natural ventilation reduces the need for fans and improves user satisfaction with the building, making it more likely the building will be used in hot weather.*	**Yes – No**	**If the answer is No:** Where practicable, buildings should be designed and oriented to maximize natural ventilation.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Shelter* (http://www.the-ecentre.net/resources/e_library/index.cfm).
During construction at the site have steps been taken to limit air and water pollution?	**Yes – No**	**If the answer is No:** Develop plans to limit pollution.	
Has a party (government, NGO, community organization) been identified and is willing to take over the management of the emergency shelter site once construction is completed?	**Yes – No**	**If the answer is No:** A site should not be opened until an organization to assist in managing the site has been identified, is willing to take on responsibility for the site and has signed an agreement to this effect.	Handbook for Emergencies (UNHCR), Chapter 8**:** *Implementing Arrangements* (http://www.the-ecentre.net/resources/e_library/index.cfm).

Shelter Site Management Checklist

Person/s Completing the Checklist: Date:
General Location (e.g., District): Specific Location (e.g., road, division or community):

This checklist refers to plans for the day-to-day management of a emergency shelter site. This checklist presumes that the Site Selection and Construction Checklists have been completed and issues identified have been addressed.

Question	Answer	Guidance	Sources of Information
Is there a site management plan? *A site management plan is necessary to ensure all aspects of the day-to-day management of a site are identified and addressed.*	**Yes – No**	**If the answer is No:** Develop a site management plan.	transitional settlement: displaced populations (part b), Chapter 8: *Camps* and Chapter 6: *Construction.* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Shelter* (http://www.the-ecentre.net/resources/e_library/index.cfm).
*Are residents represented on the site management committee? *Involvement of residents in the management of the site improves their ownership of the site and interest in maintaining good environmental conditions.*	**Yes – No**	**If the answer is No:** Include site residents in the management committee.	Handbook for Emergencies (UNHCR), Chapter 7**:** *Coordination and Site Level Organization* (http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 10: *Water and Sanitation* (http://www.nrc.no/camp/).

* Are community residents members of a gender-balanced site water and sanitation committee? *Locally run water and sanitation committees are a good way to establish ownership and sustainable management environmental sanitation activities. Gender balanced committees are more effective.*	**Yes – No**	**If the answer is No:** Incorporate residents in the water and sanitation committee.	Handbook for Emergencies (UNHCR), Chapter 7**:** *Coordination and Site Level Organization, Community Involvement* (http://www.the-ecentre.net/resources/e_library/index.cfm).

*Is there a regular collection and sustainable disposal of solid waste? *Regular collection of solid waste aids in maintaining overall environmental sanitation and health conditions at a site. Sustainable disposal limits the impact of waste on the environment.*	**Yes – No**	**If the answer is No:** Solid waste collection should take place at least weekly, or more often if necessary. Specific collection sites should be established. Disposal methods should incorporate recycling and composting. These activities should be managed by community members[5].	Local environmental NGOs and small businesses which do recycling. Engineering in Emergencies, A Practical Guide for Relief Workers, Davis, J. and Robert Lambert, IT Publications (for "RedR"), London, 1995. After the Tsunami: Solid Waste Management, Series on Best Practice (Sri Lanka), Information Paper No. 5, The World Conservation Union (IUCN) (http://www.iucn/tsunami). Handbook for Emergencies (UNHCR), Chapter 17: *Environmental Sanitation* (http://www.the-ecentre.net/resources/e_library/index.cfm). Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 5: Solid Waste Management* (www.sphereproject.org). Handbook for Emergencies (UNHCR), Chapter 7**:** *Coordination and Site Level Organization* (http://www.the-ecentre.net/resources/e_library/index.cfm).

[5] Local environmental NGOs can assist in this effort.

*Is there a regular collection and sustainable disposal of sewage? *Regular collection of sewage supports good overall environmental sanitation and health conditions at a site. Sustainable disposal limits the impact of waste on the environment.*	**Yes – No**	**If the answer is No:** Sewage collection should take place as dictated by local circumstances, including toilet use, ground water levels and surface water inflows. Disposal of sewage should not lead to ground or surface water pollution and should be approved by the appropriate government authority. These activities should be managed by community members to the degree possible.	transitional settlement: displaced populations (part b), Chapter 6: *Construction: Plumbing and Electrical Services,* (www.shelterproject.org). Healthcare Waste Management: A Who Handbook for the Safe Handling, Treatment and Disposal of Wastes, World Health Organization, 1997. Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 3: Excreta Disposal* (www.sphereproject.org). Handbook for Emergencies (UNHCR), Chapter 17: *Environmental Sanitation* (http://www.the-ecentre.net/resources/e_library/index.cfm).
*Are drainage systems well maintained? *Drainage systems need to be maintained, particularly during the monsoon, to limit flooding and ponding of water, which can contribute to health problems.*	**Yes – No**	**If the answer is No:** Establish a community-based system for maintaining and improving drainage systems.	Handbook for Emergencies (UNHCR), Chapter 7**:** *Coordination and Site Level Organization, Community Involvement* (http://www.the-ecentre.net/resources/e_library/index.cfm).

* Are pesticides being used, are they being used safely and are residents aware of necessary precautions related to the use of pesticides? *Pesticide use may be necessary to control insects and other pests. When use is necessary, pesticides should be used in as small an area and in as small quantities (related to active matter) as possible. Any pesticide use should be done in a way which is safe to applicators and shelter residents.*	**Yes – No**	**If the answer is No:** Implement a safe pesticide use plan and minimize the use of pesticides to the degree possible.	Emergency Vector Control After Natural Disaster: Scientific Publication No. 419; Pan American Health Organization, Washington, 1982. Emergency Vector Control Using Chemicals, Christophe Lacarin and Rob Reed, Water, Engineering and Development Centre, Loughborough University, 1999 (http://www.lboro.ac.uk/departments/cv/wedc/publications/evc.htm).
*Are efforts being made to upgrade living and environmental conditions at the site? *The initial condition of the physical environment at a shelter site may be poor. Improving these conditions improves the quality of life of residents and their ownership of the site.*	**Yes – No**	**If the answer is No:** Implement community-based activities in the areas of replanting vegetation, gardens and site improvements to improve the environmental conditions at a site. Note, however, that planting trees needs to be done in away which does not establish any claim to land.	transitional settlement: displaced populations (part b), Chapter 6: *Construction* and *Chapter 8: Camps* (www.shelterproject.org).
*Are upgrades to shelter units and infrastructure planned? *Initial structures and infrastructure may be very basic. Upgrading can improve the quality of life, environmental conditions and durability of the shelter structure.*	**No - Yes**	**If the answer is Yes:** As practicable, incorporate upgrades into the operation and maintenance of shelter structures and site facilities.	transitional settlement: displaced populations (part b), Chapter 6: *Construction* and *Chapter 8: Camps* (www.shelterproject.org).
*Is there a system in place to repair damaged or degraded structures? *Emergency shelter structures will degrade over time. Resources to make repairs may be taken directly from the environment in an unsustainable manner if not provided by the organization managing the site.*	**Yes – No**	**If the answer is No:** Provide resources to residents to repair damage to structures through a community-managed approach.	transitional settlement: displaced populations (part b), Chapter 6: *Construction* and *Chapter 8: Camps* (www.shelterproject.org).

*Is there a system in place to monitor environmental conditions at the emergency shelter site? *Environmental conditions at the site will change over time and need to be monitored to that steps can be taken to avoid environmental damage or a reduction in the quality of life.*	**Yes – No**	**If the answer is No:** Implement a community-based environmental monitoring system and provide resources to address negative changes in environmental conditions. (This can be done in conjunction with the community water and sanitation committee.)	Environmental Indicator Framework: A Monitoring System for Environment-Related Activities in Refugee Operations (User Guide), Engineering and Environmental Services Section (EESS) UNHCR, Geneva, 2002.
Has a plan been developed to decommission the shelter site when it is not longer needed? *Note that in decommissioning, site inhabitants will likely want to take as many resources with them as possible. This is to be encourages as a way of reusing or recycling resources but needs to be well planed well before the site is closed.*	**Yes – No**	**If the answer is No:** Develop a decommissioning plan with community participation.	transitional settlement: displaced populations (part b), Chapter 8: *Camps: Closing Camps* (www.shelterproject.org). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/).

Shelter Decommissioning Checklist

Person/s Completing the Checklist: Date:
General Location (e.g., District): Specific Location (e.g., road, division or community):

This checklist refers to plans for decommissioning a emergency shelter site. This checklist presumes that the Site Selection and Construction Checklists have been completed. In general, a decommissioning plan is developed at the same time as the site construction and updated when a date for the closing of a site is known.

Question	Answer	Guidance	Sources of Information
*Is there a site decommissioning plan? *A decommissioning plan is necessary to ensure a site is returned to conditions equal to or better than those which existed before the site was use for emergency shelter.*	**Yes – No**	**If the answer is No:** Develop a decommissioning plan.	Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/). transitional settlement: displaced populations (part b), Chapter 8: *Camps: Closing Camps* (www.shelterproject.org).
*Have plans been made for the shelter site to be used in a way which is different than previous use? *Changing the use of a site after decommissioning may have negative environmental impacts and needs to be agreed to by neighbors to avoid the potential of conflict.*	**No-Yes**	**If the answer is Yes:** Changing the use of a site from pre-shelter use should be based on consultations with neighboring communities and take into account environmental considerations.	Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/). transitional settlement: displaced populations (part b), Chapter 6: *Construction*, and Chapter 8: *Camps: Closing Camps* (www.shelterproject.org).

*Will the site be site be returned to the same or better condition than before use as a shelter site? *The general principle is that a decommissioned site should be in at least as good condition, and preferably in better condition, than before use.*	**Yes – No**	**If the answer is No:** Identify ways to leave a site in better condition than before use for emergency shelter.	transitional settlement: displaced populations (part b), Chapter 8: *Camps: Closing Camps* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Construction: Environmental Considerations (*http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/).
*Will all infrastructure be removed from the site? *In general, decommissioning involves the removal of all physical infrastructure built to establish the emergency site. However, infrastructure may remain depending on the future use of a site.*	**Yes – No**	**If the answer is No:** Plan for the removal of all physical infrastructure, including roads and other surfacing (depending on the future use of the site), and the environmentally sound disposal of the resulting materials. (Environmentally sound disposal means no negative impacts on the environment and can include recycling and reuse.)	transitional settlement: displaced populations (part b), Chapter 8: *Camps: Closing Camps* (www.shelterproject.org). Handbook for Emergencies (UNHCR), Chapter 12**:** *Site Selection, Planning and Construction: Environmental Considerations (*http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/).

*Will all toilet and water facilities be closed and returned to pre-existing conditions? *Toilet and water infrastructure, including wells, drainage systems, septic tanks and piping can pose long term environmental problems if not removed properly.*	**Yes – No**	**If the answer is No:** Plan to clean out, remove infrastructure and fill in all toilet facilities. Plan to remove all pipes, tap stands and drainage facilities.	transitional settlement: displaced populations (part b), Chapter 6: *Construction: Plumbing and Electrical Services,* (www.shelterproject.org). Healthcare Waste Management: A Who Handbook for the Safe Handling, Treatment and Disposal of Wastes, World Health Organization, 1997. Humanitarian Charter and Minimum Standards, Chapter 2, *Minimum Standards for Water Supply, Sanitation and Hygiene Promotion, Section 3: Excreta Disposal* (www.sphereproject.org). Handbook for Emergencies (UNHCR), Chapter 17: *Environmental Sanitation* (http://www.the-ecentre.net/resources/e_library/index.cfm). Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/).
Will the shelter site be replanted with natural vegetation and steps taken to minimize erosion? *The removal of infrastructure from a site can lead to conditions which promote erosion. Standard soil conservation measures should be used to limit this outcome.*	**Yes – No**	**If the answer is No:** Replace natural vegetation lost during the use of the site for emergency shelter. Install bunds and other low-cost soil conservation structures to limit erosion.	

Will transport and technical assistance be provided to residents to assist them in moving housing and other materials from the site to their permanent housing site? *Residents should be able to transfer assets gained from the construction of shelters and other infrastructure to their new homes. The availability of these assets will reduce the demand on the environment for similar assets at the new housing sites.*	**Yes – No**	**If the answer is No:** Plan for and provide the means necessary to allow residents to maximize the assets which they can remove from the emergency shelter site.	Camp Management Toolkit, Norwegian Refugee Council (2004), Chapter 18: *Camp Closure* (http://www.nrc.no/camp/). Handbook for Emergencies (UNHCR), Chapter 19: *Voluntary Repatriation: Transport Capacities* and *Transporting People by Road* (http://www.the-ecentre.net/resources/e_library/index.cfm).