

UNHCR WASH Manual

**Tools and Guidance for
Refugee Settings**



UNHCR
The UN Refugee Agency

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UNHCR WASH Manual: Tools and Guidance for Refugee Settings

United Nations High Commissioner for Refugees
Case Postale 2500. CH-1211 Genève 2 Dépôt Suisse.

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UNHCR WASH Manual

**Tools and Guidance for
Refugee Settings**

Foreword

This manual is the first major revision of UNHCR's WASH guidelines since the release of the UNHCR Water Manual for Refugee Situations (UNHCR, 1992). It addresses the changing nature of humanitarian emergencies over the last 20 years and summarizes best practice and lessons learned for the provision of WASH services in a number of contexts including: rapid onset emergencies, long-term protracted emergencies, urban settings, collective centres, spontaneous (unplanned) camps, high-density or large camps, host communities, repatriation programs, local integration programs, and assistance for refugee persons living with host families, in rented accommodation, occupying buildings, or in dispersed locations.

This WASH manual aims to create a clear policy environment for refugee settings that defines WHO, WHAT, WHERE, WHEN, and HOW specific WASH interventions should be carried out. This manual does not aim to replace the multitude of excellent WASH technical resources that exist in the field. Instead, this manual aims to define commonly agreed standards and procedures that should be followed - along with which existing technical resources should be used to carry out the correct approaches which include...

- Handbook for Emergencies (UNHCR, 2008)
- Water Manual for Refugee Situations (UNHCR, 1992)
- Engineering in Emergencies (RedR, 2002)
- Water and Sanitation for Populations at Risk (ACF, 2005)
- Hygiene Promotion: A Practical Manual for Relief and Development (Ferron, Morgan, O'Reilly, 2007)
- Excreta Disposal in Emergencies (WEDC, 2007)
- Humanitarian Charter and Minimum Standards in Humanitarian Response (SPHERE, 2011)
- Public Health Engineering in Precarious Situations 2nd Ed (MSF, 2010)
- Public Health Guide for Emergencies (John Hopkins and IFRC, 2008)

The manual should be used as UNHCR's core policy and operational reference document for UNHCR staff and WASH actors around the world. This document contains UNHCR's criteria for design, operation, maintenance, management and monitoring of WASH service provision throughout all phases of the relief cycle. The manual should be used to understand the requirements that are expected in all refugee settings and in particular, UNHCR's role in coordinating, supporting, monitoring, capacity building and regulating the WASH response to ensure that refugee populations receive quality WASH services.

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Steven Corliss
UNHCR Director of Division of Programme Support and Management

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These individuals include:

- Abdou-Salam Savadogo, Senior Regional WASH Officer, UNHCR Dakar
- Allen Gidraf Kahindo Maina, Public Health Officer, UNHCR Geneva
- Ben Harvey, WASH Consultant, UNHCR Geneva
- Caetano Dorea, Dept. of Civil and Water Engineering, Université Laval
- Claudia Perlongo, WASH Officer, UNHCR Geneva
- David Githiri Njoroge, WASH Officer, UNHCR Ethiopia
- Dominique Porteaud, Global WASH Cluster Coordinator, UNICEF Geneva
- Ellen Milnes, Senior Lecturer in Hydrogeology, Université de Neuchâtel
- Francesca Coloni, Senior Regional WASH Officer, UNHCR Tunis
- John Adams, Independent WASH Consultant, UK
- John Cody, WASH Consultant, UNHCR Geneva
- Krischan Makowka, Technical Advisor UWASNET, Uganda
- Marian Schilperood, Chief Public Health Section, UNHCR Geneva
- Marion O'Reilly, Head of Public Health Promotion, OXFAM GB, Oxford, UK
- Murray Burt, Senior WASH Officer, UNHCR Geneva
- Nicole Hahn, WASH Cluster Coordinator, UNICEF Philippines
- Roberto Saltori, WASH WoS Focal Point, UNICEF Jordan
- Samuel Gonzaga, Senior WASH Officer, UNHCR Lebanon
- Sarah House, Independent WASH Consultant, UK
- Tessa Gough, WASH Emergency Response Program Manager, CARE CA
- U Aye Muang, Public Health Officer, UNHCR Ethiopia
- Yegeyem Tsige, WASH Officer, UNHCR Ethiopia

THIS LIST WILL BE UPDATED DURING THE PEER REVIEW PHASE.

Acronyms and abbreviations

The following acronyms and abbreviations have been used in the text.

AGDM	Age, Gender and Diversity Mainstreaming
AWD	Acute Watery Diarrhea
BCC	Behaviour Change Communication
CAT	Comprehensive Assessment Tool
CATS	Community Approaches to Total Sanitation
CBO	Community Based Organisation
CFU	Colony Forming Units
CHW	Community Health Worker
CLTS	Community Led Total Sanitation
CSP	Community Support Projects
DPD	Diethyl-p-phenylenediamine
FGD	Focus Group Discussion
FRC	Free Residual Chlorine
GI	Galvanized Iron (Pipe)
GBV	Gender Based Violence
GIS	Geographical Information System
GPS	Global Positioning System
HDPE	High Density Poly Ethylene (Pipe)
HP	Hygiene Promotion
HTH	High Test Hypochlorite
HRF	Horizontal Flow Roughing Filtration
HWTS	Household Water Treatment and Safe Storage
HWWS	Hand Washing With Soap
IDP	Internally Displaced Person
IEC	Information Education Communication
IM	Information Management
KAP/KABP	Knowledge, Attitudes, Beliefs, Practices
M&E	Monitoring and Evaluation
MF	Micro Filtration
MHM	Menstrual Hygiene Management
MPN	Most Probable Number
MSD	Minimum Safe Distance

Acronyms and abbreviations

The following acronyms and abbreviations have been used in the text.

NFI	Non-Food Item
NTU	Nephelometric Turbidity Units
O&M	Operations and Maintenance
PE	Polyethylene (Pipe)
PHAST	Participatory Hygiene and Sanitation Transformation
PLA	Participatory Learning and Action
PLWHA	People Living with HIV/AIDS
POUWT	Point of Use Water Treatment
PVC	Polyvinyl Chloride (Pipe)
QIP	Quick Impact Project
RAT	Rapid Assessment Tool
RCM	UNHCR Refugee Coordination Model
RF	Rapid Filtration
RO	Reverse Osmosis
RSF	Rapid Sand Filtration
SAR	Solids Accumulation Rate
SSF	Slow Sand Filtration
TDS	Total Dissolved Solids
UF	Ultra Filtration (Water Treatment)
UFW	Unaccounted For Water
UV	Ultraviolet (Water Treatment)
uPVC	Unplasticized Polyvinyl Chloride (Pipe)
VLOMM	Village Level of Management of Maintenance
VIP	Ventilated Improved Pit (Latrine)
WASH	Water, Sanitation, and Hygiene
WSP	Waste Stabilization Ponds
WSP	Water Safety Plan

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Summary of WASH Guidelines

The following pages provide a summary of the WASH guidelines that UNHCR and WASH actors should aim to follow in all refugee settings. More information for each guideline can be found by referring to the associated guidance notes.

WASH Principles

1.1 Saving lives

- a) Ensure that resources, materials and implementation mechanisms are in place to provide a timely and adequate emergency WASH response to refugees. Aim to initially meet SPHERE standards moving rapidly onto adopt UNHCR standards. [\[See sections 1.3 – 1.4\]](#)
- b) Ensure that the rate of change of core WASH indicators are closely monitored to clearly show that target values will be met on-time. If the scale-up rates show that the targets will not be met on-time, additional financial, material and human resources should be allocated immediately. [\[See sections 1.5 - 1.6\]](#)

1.2 Safety and protection of refugees

- a) Ensure that the location and design of all WASH facilities (bathing, toilet, water collection, laundering and waste collection) is carried out with full participation of users, in particular women and girls. Potential daytime and night-time threats must be eliminated. [\[See 1.10 – 1.13\]](#)
- b) Ensure that WASH programmes start or transition as quickly as possible into the construction of household or shared toilets and bathing facilities. [\[See section 1.14 – 1.15\]](#)
- c) Ensure that a WASH feedback and follow-up system is established and operational. [\[See section 1.16\]](#)
- d) Ensure that all water, sanitation and hygiene infrastructure ensures the physical safety of all users (in particular children and infants) and is free from trip, crush, pinch, pierce, cut, splinter, burn and drowning risks. [\[See section 1.17\]](#)

1.3 Working with WASH service providers and regulatory authorities

- a) Ensure, where possible, that WASH programmes are developed and run in full collaboration with the local water, waste, hygiene and vector control service providers and regulatory authorities, extending existing services to refugees where possible. [\[See sections 1.20 – 1.21\]](#)
- b) Ensure that national standards for water supply, water quality, sanitary codes, and environmental measures and monitoring are respected once SPHERE and UNHCR standards have been met. [\[See section 1.22\]](#)

1.4 Consultation, participation and cultural norms

- a) Ensure that WASH programmes are developed and run in full participation with the refugee population taking into account preferences and cultural norms. Women and refugees with special needs in particular should be consulted with regards to the design of WASH facilities. [\[See section 1.23 – 1.25\]](#)

WASH Principles continued.....

- b) Ensure that the refugee population is empowered to manage their own WASH services as soon as is possible. Programmes should aim to strengthen capacities and resilience over time to the point where the refugee population is fully able to manage their own WASH services with limited external assistance. [See sections 1.26 – 1.27]
- c) Ensure that all WASH programmes have active gender-balanced and representative WASH committees. [See section 1.26]

1.5 Universal access

- a) Ensure that all WASH infrastructure including toilets, water collection points, bathing, laundering and handwashing facilities, solid waste collection points, waste containers and recycling facilities can be accessed and used comfortably by all in particularly children, the elderly, pregnant women, the infirm, and persons with disability and mobility issues. [See sections 1.34 – 1.45 and 1.50 – 1.54]

1.6 Equability of WASH services

- a) Ensure that all social, ethnic and religious groups have equitable access to water, sanitation and hygiene services. WASH monitoring mechanisms should not only track WASH service provision within geographic zones but also within each of the target socio-economic groups. [See section 1.47]
- b) During the post emergency phase, ensure that WASH service levels not only meet the UNHCR minimum WASH guidelines, but also takes into consideration levels of access of the host population and the level of access the refugee population was accustomed to in their country of origin. [See sections 1.48 – 1.49]

1.7 Appropriate technology choice and cost effectiveness

- a) Ensure clear strategies are developed from the start that include transfer to more efficient and sustainable technologies, and reduced dependence on imported equipment, fuel supplies or imported chemicals. [See sections 1.55 – 1.56]
- b) Ensure that all post-emergency phase WASH hardware is appropriate for the local technical and financial conditions. Designs should respect the norms and traditional practices of the refugee and local population whilst respecting public health best practice. Technologies should be used that are simple enough to be operated, maintained and repaired by the refugee population with limited external assistance. [See sections 1.57 – 1.62]
- c) Ensure that a clear strategy exists for the eventual transition, phase out or handover of WASH interventions. Technology should be selected as early as possible that can be sustainably managed by local service providers, local regulatory authorities, or the refugee population themselves. Any handover initiatives should be accompanied with adequate capacity building. [See section 1.63 – 1.65]

WASH Principles continued.....

- d) Ensure that all WASH programmes track the per-beneficiary costs of supplying WASH services. Small changes in how WASH staff, vehicles and resources are managed can yield enormous cost-savings. [See section 1.66 – 1.68]

1.8 Capacity building of WASH stakeholders

- a) Ensure that all post emergency phase WASH programmes are accompanied with adequate capacity building to facilitate eventual handover. [See sections 1.73 – 1.75]
- b) Ensure that programmes prioritize the development of WASH related skills which can serve the refugee population during eventual return, integration, or resettlement. Coordinate with the UNHCR programme in the country of return so that refugees with WASH skills can be used to lead WASH return initiatives. [See section 1.76]

1.9 WASH infrastructure quality

- a) Ensure that all water supply, excreta management and solid waste infrastructure meets UNHCR's minimum standards for design and construction workmanship. All design work should be conducted by qualified engineers. Construction should be supervised by experienced technicians. [See section 1.77]

1.10 A comprehensive approach to WASH service provision

- a) Ensure that WASH activities are fully integrated into Education, Livelihoods, Community Services, Protection, Community Health, Nutrition and HIV/AIDS programmes in order to avoid overlaps and gaps. Ensure that all settings have clear documents describing modalities of sectoral support and integration. [See section 1.78]
- b) Ensure that all post emergency WASH interventions are planned based on a comprehensive mix of hardware, software and enabling environment interventions. [See sections 1.79 – 1.81]

1.11 WASH interventions in urban settings

- a) Ensure that assessments are immediately undertaken to fully understand WASH priority needs in addition to the impact of the refugee influx on existing urban WASH services. Ensure that resources, materials and mechanisms are in place to provide a timely and adequate urban WASH response. [See sections 1.82 – 1.83]
- b) Ensure that there is a clear strategy to meet the WASH needs of: refugees in rental accommodation; refugees that have congregated on public land or in collective centres; refugees that are staying with host families; and host and refugee families in districts where the refugee influx heavily inundates WASH services. [See section 1.84]
- c) Where necessary, work with municipal authorities to identify suitable buildings and public spaces that can be safely and adequately occupied by urban refugee families. Undertake WASH assessments to determine upgrades that are necessary so that buildings or land meets UNHCR minimum WASH requirements. [See section 1.85]

WASH Principles continued.....

1.12 WASH strategy documents and operational plans

- a) Ensure that WASH strategy documents and operational plans at the national, sub-national and site levels provide a clear overview of the refugee WASH situation, the WASH needs and gaps, progress against WASH indicators, and a description of the agreed short, medium and long-term WASH strategies. [See section 1.87 – 1.91]

1.13 Monitoring and accountability

- a) Ensure that the UNHCR core WASH indicators are reported on a monthly basis. Where the UNHCR WASH Monitoring System and TWINE have been rolled out (<http://twine.unhcr.org/>), data must be uploaded monthly to TWINE. [See section 1.92 and chapter 10]
- b) Ensure that beneficiaries, local authorities and donors are informed and up-to-date with the progress of the WASH programme. Copies of the updated WASH plan/strategy from each refugee site should be made available to all stakeholders every six months. Selected information from this document should be available to the beneficiary population via camp information boards. [See section 1.93 and chapter 10]

1.14 Protection of the environment

- a) Ensure that all WASH interventions are designed from the outset to minimise the impact on the environment in particular long-term pollution, degradation, or depletion of environmental resources. Failure to do so can have widespread ramifications and prove costly to address. [See section 1.94 – 1.95]
- b) Ensure that in all settings local sanitary codes and environmental legislation concerning excreta, blackwater, greywater, sewage, and faecal sludges are respected once UNHCR guidelines are met. [See section 1.96]
- c) Ensure that all permanent refugee sites are selected based on their ability to provide sustainable access to potable water without conflict with other users, or long-term depletion. Abstraction of non-renewable or fragile water resources (in particular fossil groundwater sources) should be avoided. [See section 1.97]
- d) Ensure that all WASH programmes, regardless of context, monitor levels of unaccounted for water (UFW). [See section 1.98]
- e) Ensure that any water treatment chemicals or by-products are stored, treated, transported, and disposed of in a manner that minimises any potentially negative impacts on the environment. [See section 1.99 – 1.100]
- f) Where viable, ensure that WASH services in refugee settings prioritize renewable energy (solar, wind, or ram pumping) where grid-based electricity is not available. [See section 1.101]
- g) Ensure that all excreta, blackwater (from septic tanks), greywater (from shower and laundering points), sewage, and faecal sludges from all household, public and communal sanitation systems are treated, conveyed, reused or disposed in a manner that minimises any potentially negative impacts on the environment. [See section 1.04]

WASH Principles continued.....

- h) Ensure that all supplies of wood for household latrine slabs, latrine superstructures, privacy screens, and latrine brick production has been procured from sustainable sources outside of the refugee camp environment. [\[See section 1.107\]](#)
- i) Ensure that all domestic and commercial wastes collected from the refugee environment are collected, stored, transported, treated, reused or disposed in a manner that minimises any potentially negative impacts on the environment. [\[See section 1.111\]](#)
- j) Ensure that wastes of environmental and public health importance are dealt with immediately compared to those that require a longer-term approach. In many cases the correct management of toxic domestic wastes (e.g. used oils, electronic wastes, paints, varnishes, paint thinners, lead-acid batteries, and asbestos) may be of greater environmental and public health importance than management of general domestic wastes that are generally inert. [\[See section 1.112\]](#)
- k) Ensure that all waste management programmes are designed around the principles of reduction, reuse and recycling. Ensure activities are in place to source separate organic matter, paper, plastics, metals, and glass from the landfill waste stream. Ensure that landfills are kept small and manageable by only allowing wastes that cannot be recycled, composted, or reused to enter the landfill. [\[See section 1.113\]](#)
- l) Ensure that the selection of sites for sanitary landfills is carried out in full cooperation with the local authorities and refugee and host populations. Sites should be selected that completely seal leachates from the environment by either a natural or artificial impermeable barrier. [\[See section 1.113 – 1.114\]](#)
- m) Ensure that all non-food items (NFI) items that are distributed to the refugee population are free from any unnecessary packaging. [\[See section 1.116\]](#)
- n) Toxic dioxins formed during the low-temperature burning of certain plastics are carcinogenic. Burning of solid wastes must not take place in refugee settings under any circumstances. [\[See section 1.117\]](#)
- o) Ensure that any vector control chemicals used in refugee settings are stored, applied, treated, and disposed in accordance with national and international guidelines and in a manner that minimises any potentially negative impacts on the environment in particularly aquatic wildlife. [\[See section 1.118\]](#)
- p) Ensure that all refugee sites undertake a WASH related environmental impact assessment that includes [\[See section 1.119\]](#):
 - i) An assessment of WASH related environmental related risks along with an assessment of their likely probability and impact.
 - ii) A matrix of mitigative activities to offset the impacts of high risk WASH interventions.
 - iii) A matrix of environmental monitoring parameters.
 - iv) A description of how WASH interventions are meeting UNHCR and national environmental guidelines.

WASH and Public Health

2.1 Public health based approach to disease prevention and control

- a) Ensure that all WASH interventions are fully integrated into the public health strategy for the refugee setting. WASH and Medical focal points should meet regularly to ensure the following. [See sections 2.1 – 2.5]

Emergency phase: ensure water, excreta management, solid waste management, hygiene promotion and disease vector control interventions block all common high-risk disease transmission routes.

Short term: ensure WASH interventions are targeted using weekly health clinic morbidity and mortality data in collaboration with the Health section's case management and follow up activities.

Medium and longer term: ensure that WASH interventions and WASH campaigns are planned based on an assessment of disease epidemic risks and analysis of seasonal disease morbidity and mortality data.

2.2 WASH related epidemic preparedness, response and evaluation

- a) Ensure that every refugee setting has its own epidemic preparedness plan that includes detailed WASH preparedness and response activities. [See section 2.17]
- b) Ensure that WASH actors fully participate in any disease specific coordinated epidemic response and task forces following declaration of a disease outbreak. [See sections 2.20 – 2.24]
- c) Ensure that a full evaluation of the effectiveness of the WASH epidemic preparedness and response activities is carried out and that any weaknesses are addressed in future WASH preparedness and response activities. [See section 2.25]

Water Supply

3.1 Water quantity

- a) Ensure that the refugee population is provided with at least 15 litres of water per person per day on arrival at the setting. [See section 3.8]
- b) In planned settlements, ensure that the refugee population receives at least 20 l/pers/day or a higher level of supply similar to their place of origin or the host population. [See sections 3.10 – 3.12]
- c) In planned settlements, ensure that daily water production takes into account water for public institutions including health clinics, schools, mosques, and administrative facilities. [See section 3.10 – 3.13]
- d) Ensure that up to date details from water production logs and rapid household surveys are fully documented in the site WASH plan/strategy along with an analysis of any trends and discrepancies in service levels. [See sections 3.12 and 3.111 – 3.112]

3.2 Water quality

- a) Ensure that all water supplies in the refugee setting, regardless of their intended use, are fit for human consumption at the point of storage, delivery and consumption. [See 3.14 - 3.16, 3.98 – 3.101, and 3.102]

Water Supply continued.....

- b) Ensure that steps are taken to immediately protect all water sources from contamination. Sanitary surveys should be used to assess each step of the water chain and identify risks and corrective actions. [See sections 3.20 and 3.85 – 3.90]
- c) Ensure that there are no faecal coliforms per 100ml of the point of water delivery and consumption. [See sections 3.14 – 3.15 and 3.98 – 3.101]
- d) Ensure that all water supplies have a free chlorine residual of 0.5mg/l at all collection points at all times. [See sections 3.15 and 3.91 – 3.95]
- e) Where chlorine-resistant protozoans exist, ensure that all water supplies are irradiated to at least 10mJ/cm² before final residual chlorination. [See sections 3.158 – 3.160]
- f) Ensure that the taste, colour and smell of water supplied is acceptable to the refugee population. [See sections 3.107 and 3.157]
- g) Ensure that all refugee settings possess the minimum list of water quality testing equipment and at least three months of consumables. Ensure staff have sufficient capacity to use equipment. [See 3.108]
- h) Ensure that every refugee setting has a water safety plan that includes a water quality monitoring framework and trend analysis. [See sections 3.111 – 3.113]

3.3 Household water storage

- a) Ensure that the refugee population is provided with water storage containers with at least 10 litres of capacity per person on immediate arrival at the setting and consistently throughout the refugee emergency. [See sections 3.17 – 3.19]

3.4 Household water treatment

- a) In planned settlements, ensure that bulk water treatment strategies are fully functional before considering additional household water treatment programming. [See section 3.164]
- b) If household water treatment products are distributed, ensure they are accompanied with a full visual practical demonstration of how to use the products and any supporting equipment required to use the products. [See section 3.167]
- c) Ensure that a full description of the household water treatment strategy, including tracking of distribution rates, usage rates, transcripts from focus group discussions concerning the approach and the monitoring plan are documented in the site WASH plan/strategy. [See section 3.184]

3.5 Water accessibility and the burden of water collection

- a) Ensure that a functional water tap is available for every 100 persons (or every 200 persons in the case of a handpump or well) within 200m of every household. [See sections 3.24 – 3.26]
- b) Ensure that water point coverage is monitored in the site WASH plan/strategy including maps showing 200m water collection buffer zones. [See section 3.25]

Water Supply continued.....

- c) Ensure that there are no more than 10 persons queuing at water points at any time. Excessive queuing is an indicator of either insufficient numbers of water points, inadequate flows, or insufficient hours of operation. [\[See sections 3.24 – 3.26\]](#)

3.6 Site selection based on water availability and ease of treatment

- a) Ensure that the selection of sites includes an analysis of water availability, quality, ease of abstraction, and ease of treatment. If there is any risk of insufficient supply or poor quality water, then an alternative location should be identified. [\[See sections 3.21 – 3.23 and 3.46\]](#)
- b) Ensure that an analysis of the suitability of water supplies is fully documented in the site WASH plan/strategy. [\[See sections 3.21 and 3.46\]](#)

3.7 Reliability, backup supplies and reserve capacity

- a) Ensure that every major piece of water abstraction, treatment and distribution equipment or machinery has at least one backup. [\[See section 3.113\]](#)
- b) Ensure that all refugee settings have at least half a day of reserve water storage capacity to cover system breakdowns and fire fighting. [\[See section 3.113\]](#)
- c) Ensure that all refugee settings have at least 3 months reserve of fuel supplies and water treatment chemicals at all times. [\[See section 3.113\]](#)
- d) Ensure that the strategy to ensure water reliability is fully described in the site WASH plan/strategy. [\[See section 3.113\]](#)

3.8 Bathing and laundering facilities

- a) Ensure that the refugee population have access to facilities where they can bathe and launder clothing and bedding in privacy and dignity. [\[See section 1.30\]](#)

3.9 Management and reuse of wastewater

- a) Ensure that wastewater from water collection, bathing, or laundry facilities is managed in properly designed drainage systems or in conjunction with sub-surface irrigation systems designed to eliminate the risk of pathogen transmission or vector breeding. [\[See section 3.206\]](#)
- b) Ensure that the strategy for waste water management and reuse is fully described in the site WASH plan/strategy. [\[See section 3.206\]](#)

3.10 Water for livestock, agricultural and livelihood activities

- a) Ensure that there are appropriate interventions to provide water for livestock, agricultural and livelihood activities once the basic human needs have been met. [\[See section 3.13\]](#)
- b) Ensure that water interventions for livestock, agricultural and livelihood activities are carefully planned with the refugee and host populations in a transparent manner so that all sections of the population are able to benefit equitably and responsibly. [\[See 3.13\]](#)
- c) Ensure that a description of the medium and long term strategies for equitable and responsible water resource development is documented in the site WASH plan/strategy. [\[See section 3.13\]](#)

Excreta Management

4.1 Environment free from human faeces

- a) Ensure that the environment inhabited by refugee populations is free from human faeces as rapidly as possible. [See section 4.5 – 4.8]
- b) Ensure that steps are taken to immediately prevent contamination of existing water sources from human excreta. [See section 4.9 – 4.10]
- c) Ensure that public health risks are evaluated at every step of the current excreta management chain including storage, treatment, transportation and final disposal/reuse. [See section 4.23]
- d) Ensure that appropriate measures are taken in high water table or flooded environments to ensure that excreta systems continue to isolate excreta from the environment. [See section 4.29]

4.2 Transition to household or shared toilets as quickly as possible

- a) Ensure that excreta management programmes start or transition as quickly as possible into the use of shared or household toilets, rather than communal facilities, if it is clear the emergency will last more than 6 months. [See section 4.11]

4.3 Toilet coverage guidance

- a) Ensure that the excreta management programme meets the following toilet coverage targets. [See section 4.17 – 4.18]

Within first 8 weeks	One toilet per 50 persons (1:50)
Within first 6 months	One toilet per 20 persons (1:20)
Within first year	One toilet per 5 persons (1:5)

- b) Ensure that the number of public toilets installed at reception areas, health clinics, markets, schools and other public institutions meet coverage targets. [See section 4.19]

4.4 Locating of communal toilets

- a) Ensure that if any communal WASH facilities are constructed they are located in consultation with users, arranged for their **exclusive use**, and serve no more than one community (16 families) at a time. [See section 1.30]

4.5 Gender segregation

- a) Ensure that if any communal WASH facilities are constructed there are at least three female toilets to every male toilet, factored to take into account disaggregated population data. [See section 4.20]
- b) Ensure that toilet cubicles are segregated according to sex and clearly marked with culturally appropriate signage. [See section 4.20]

4.6 Water for flushing and anal cleansing

- a) Where necessary, ensure that toilets are provided with sufficient quantities of water for flushing in addition to culturally appropriate anal cleaning materials in situations where they are unable to adequately provide their own. [See section 4.143]

Excreta Management continued.....

4.7 Handwashing facilities

- a) Ensure that all public, communal, shared and household toilets are equipped with fully functioning handwashing facilities. [\[See section 4.123\]](#)

4.8 Arrangements for cleaning and maintenance

- a) Ensure that all shared, communal and public toilet facilities have clear written arrangements with the users concerning responsibilities for cleaning and maintenance. [\[See section 4.133\]](#)

4.9 Monitoring of toilet coverage and condition

- a) Ensure that the condition of any public or communal toilet facilities is closely monitored on a monthly basis and any public health risks are promptly dealt with. [\[See section 4.142\]](#)

4.10 Household toilet tools and equipment

- c) Ensure that every refugee household has the means, tools, materials and appropriate technical guidance to construct, maintain and clean their own household toilet from the start of the emergency. [\[See 4.15\]](#)

4.11 Communal toilets exit strategy

- d) Ensure that a clear strategy to phase out the use of communal toilets is in place if it is clear that the refugee emergency is likely to last more than 6 months. [\[See section 4.146\]](#)

Solid Waste Management

5.1 Environment free from waste

- a) Ensure that the environment inhabited by refugees is immediately free from all wastes, in particularly those that are hazardous, or promote breeding of disease vectors. [\[See section 5.1 and 5.8 – 5.9\]](#)
- b) Ensure that steps are taken to immediately prevent contamination of existing water sources from wastes. [\[See section 5.10\]](#)
- c) Ensure that at every step of the waste management chain there are no risks to public health, or the environment. [\[See section 5.40\]](#)

5.2 Waste collection services

- a) Ensure that the collection of hazardous domestic wastes, or those that provide breeding sites or food for disease vectors, are prioritized over the collection of wastes that are relatively inert. [\[See section 5.9\]](#)
- b) Ensure there is immediate designation of one waste collection point for every 16 families. As soon as is possible, equip each point with durable waste containers of up to 200 litres volume. [\[See section 5.11\]](#)
- c) Ensure that a system is in place to collect domestic and market wastes at least twice or week or more frequently if necessary. [\[See section 5.21\]](#)
- d) Ensure that a full waste survey is conducted at least once a year and waste collection activities are re-evaluated and reorganised according to the findings. [\[See section 5.24\]](#)

Solid Waste Management continued.....

- e) Ensure that all staff involved in waste collection, processing, or disposal activities have adequate personal protective equipment for the tasks they are performing. [See section 5.09, 5.28, 5.59, and 9.12 – 9.13]
- f) Ensure that a street sweeping system is in place to keep public areas free from litter and other wastes. [See section 5.17]

5.3 Management of hazardous domestic wastes

- a) Ensure that systems are in place to facilitate collection of hazardous wastes before they enter the domestic waste stream. [See section 5.36]

5.4 Medical wastes

- a) Ensure that all medical wastes generated in the refugee setting are source-separated, collected, handled, treated and disposed of in strict compliance with WHO protocols and with minimum risk to health-care staff, waste management staff, the general public, or the environment. [See section 5.128]

5.5 Reduce, recycle, reuse

- a) Ensure that all solid waste management programmes are designed around the principles (in priority order) of reduction, reuse and recycling. [See sections 5.41, 5.56, and 5.81]

5.6 Waste management in urban settings

- a) Ensure that municipal waste management services are provided with additional support during refugee influxes. Aim to provide sufficient levels of support so that the host and refugee populations are able to receive the same level of access to services as prior to the influx. [See sections 5.15, 5.20, 5.67, 5.68, and 5.82]

5.7 Sanitary landfill

- a) Ensure that sanitary landfill sites are selected and managed to minimize impacts on public health and the environment. [See 5.113]
- b) Ensure that only wastes that cannot be recycled or reused enter the landfill waste stream. [See section 5.110]
- c) Ensure that all hazardous wastes are managed and do not enter the landfill waste stream. [See section 5.111]
- d) Ensure that the landfill is covered with daily soil cover to prevent access from disease vectors. [See section 5.110]

Disease Vector Control

6.1 An immediate response

- a) Ensure that there is swift assessment and response of vector related public health risks within the first few days of any refugee emergency. [See section 6.1 and 6.6 – 6.12]
- b) Ensure that any dumps of domestic waste, food waste, faeces, any standing water, or any other potential breeding sites for high risk disease vectors are immediately cleaned up. [See section 6.8]
- c) Ensure bi-weekly collection of domestic, market, and commercial wastes is established immediately. [See section 6.8]

Disease Vector Control continued.....

- d) Ensure that the refugee population has the knowledge to protect themselves from high-risk disease vectors on immediate arrival and consistently throughout the refugee emergency. [\[See section 6.9\]](#)
- e) Ensure that all refugee families are provided with essential household vector control items on immediate arrival and consistently throughout the refugee emergency. [\[See section 6.10\]](#)

6.2 Site selection

- a) Where possible, ensure that the selection of sites for the settlement of refugees includes an analysis of risk from disease vectors. [\[See 6.7\]](#)

6.3 Frequency of disease vector interventions

- a) Vector borne diseases are likely to follow seasonal climatic conditions and insect breeding cycles therefore UNHCR and WASH actors may consider broadly basing disease vector interventions around a preventative seasonal calendar. [\[See section 6.11\]](#)

Hygiene Promotion

7.1 An immediate response

- a) Ensure that all refugee families are provided with essential household hygiene related non-food items on immediate arrival and consistently throughout the refugee emergency. [\[See section 7.10 – 7.15\]](#)
- b) Ensure there is immediate dissemination of key hygiene messages related to high-risk WASH related diseases on immediate arrival and consistently throughout the refugee emergency. [\[See section 7.17 – 7.20\]](#)
- c) Ensure that there is swift assessment hygiene and behaviour related public health risks within the first few days of any refugee emergency. [\[See section 7.21\]](#)

7.2 Coordination

- a) Ensure that any hygiene related mass media activities are fully coordinated between the Community Health, Nutrition, HIV/AIDS, Education and Community Services programmes to avoid overlaps and gaps. [\[See section 7.5 – 7.6\]](#)

WASH Programme Management

8.1 Human resources

- a) Ensure that full use is made of locally available human resources from the refugee population, host population, and local WASH authorities and service providers. [\[See sections 8.4\]](#)
- b) Ensure that all WASH staff, volunteers, or daily labour have received sufficient basic equipment and training for the tasks they are performing. [\[See sections 8.5\]](#)

8.2 Health and safety

- a) Ensure that an assessment of health and safety risks has been carried out for all WASH activities and a plan is in place to mitigate and monitor priority risks. [\[See sections 8.9 – 8.11\]](#)

WASH Programme Management continued.....

- b) Ensure that WASH staff, contractors, volunteers, or daily labourers have adequate personal protective equipment and health and safety training for the tasks they are performing. [See sections 8.12 - 8.13]
- c) Ensure protocols and procedures are in place for the safe handling, storage, use, and disposal of water treatment and disease vector control chemicals. [See sections 8.14 – 8.15]
- d) Ensure that there is a system in place for reporting and following-up of work related accidents and near-misses. [See sections 8.16]
- e) Ensure short, medium and long-term WASH related worker health and safety strategies and monitoring are fully documented in the site WASH plan / strategy. [See sections 8.16 – 8.17]

8.3 Operation and maintenance

- a) Ensure that where possible, on-going operation and maintenance of WASH services is planned and carried out in close collaboration with refugees and existing local WASH service providers extending existing services to refugees where possible. [See sections 8.18]
- b) Ensure that a strategy to transition into household or shared facilities is in place if it is clear that the time-frame of the humanitarian situation is likely to last more than six months. [See sections 8.19]
- c) Ensure that all communal WASH infrastructure has effective community-based cleaning and maintenance arrangements in place that ensures facilities are clean and functional at all times. [See 8.20]
- d) Ensure that all public WASH infrastructure receives punctual and appropriate cleaning and maintenance interventions that are both preventative and responsive. [See sections 8.27 – 8.32]
- e) Ensure sufficient budgeting for operation and maintenance activities (including ensuring sufficient back-up capacity for breakdowns and new influxes). [See sections 8.29]
- f) Ensure short, medium and long-term strategies for operation, maintenance, and contingencies are fully documented in the site WASH plan / strategy. [See sections 8.36]

WASH Assessments

9.1 Rapid WASH needs assessments

- a) Ensure that in all contexts a rapid WASH assessment is carried out within the first 72 hours of any refugee emergency to identify humanitarian priorities. [See sections 9.1 – 9.5 and 9.11]

9.2 Coordination

- a) Ensure that all WASH assessments are undertaken in a coordinated manner and the same populations are not visited by multiple agencies. [See sections 9.1 – 9.5]
- b) Ensure that all WASH assessments use common operational datasets (common population names, population sizes, administrative boundaries) and WASH indicators. [See sections 9.3]

WASH Assessments continued.....

- c) Ensure where possible that WASH agencies use common data collection tools and methodologies. [See sections 9.4]
- d) Ensure that harmonized assessment tools and methodologies are prepared as part of contingency planning activities. [See section 11.28]

9.3 General principles

- a) Ensure that all WASH assessments are designed in a participatory and transparent manner taking local preferences and cultural norms into full consideration. [See section 9.5]
- b) Whenever possible ensure WASH assessments are carried out in full collaboration with national refugee & WASH authorities. [See section 9.6]
- c) Ensure that assessments do not overburden the population and do not collect any more information than is required. [See section 9.7]
- d) Ensure that any surveys are carried out with a properly designed survey instrument, a sampling plan, and a sample size calculation. No more data should be collected than necessary. [See section 9.7]

WASH Monitoring and Reporting

10.1 Establishment of the routine monitoring of WASH indicators

- a) Ensure that the UNHCR core WASH indicators are routinely monitored from the start of the emergency according to the collection frequencies and procedures outlined in the UNHCR WASH Manual, regardless of whether the context is camp-based, non-camp based, urban, or rural. [See sections 10.1 and 10.4 – 10.5]
- b) Ensure that WASH actors undertake monitoring in a harmonized manner using common monitoring tools, methodologies, indicators and operational datasets (common refugee population sizes, population names, administrative boundaries). [See section 10.2]
- c) Ensure that WASH programmes not only monitor core WASH indicators but extrapolate their rate of change to clearly show that the UNHCR target values will be met on-time. [See sections 10.6]
- d) Ensure that where the UNHCR WASH Monitoring System has been rolled out that core WASH indicator data is uploaded monthly to TWINE. [See sections 10.7 – 10.8]

10.2 Establishment of the routine reporting of WASH indicators

- a) Ensure that up to date progress against WASH indicators is routinely documented in the site's WASH plan/strategy. Charts, graphs, infographics and maps should be used to present WASH data in a manner that is clearly legible to WASH actors, local authorities and representatives of the refugee population. [See section 10.25 – 10.26]
- b) Ensure that a summary of the latest monitoring data is publically visible to all WASH actors, local authorities and representatives of the refugee population, via a system of camp information boards. [See section 10.27]

WASH Monitoring and Reporting continued.....

10.3 Monitoring and reporting of WASH programme efficiency

- a) Ensure the cost-effectiveness and efficiency of all post-emergency WASH interventions are closely monitored. This is not just to save the donors money but to move to a cost efficient model that may be handed over to the refugee population or local authorities. [See sections 10.17 – 10.21]

10.4 Monitoring of the effectiveness of WASH interventions through the use of annual KAP surveys

- a) Ensure that all WASH programmes undertake an annual WASH KAP Survey (Knowledge, Attitude, Beliefs and Practices) and that analysis is used to inform changes in the WASH strategy. [See 10.14 – 10.15]
- b) Ensure that KAP surveys do not overburden the population and do not collect any more information than is required. [See 10.14 – 10.15]
- c) Ensure that KAP surveys are carried out with a properly designed survey instrument, a sampling plan and a sample size calculation. [See sections 10.14 – 10.15]

WASH Coordination

11.1 Immediate establishment of sector coordination arrangements

- a) Ensure that WASH sector coordination arrangements for refugees are established at the national, sub-national and site level from the start of the refugee situation. If WASH coordination mechanisms for refugees already exist then ensure that coordination is supported, reinforced and functioning effectively - avoiding creating parallel coordination mechanisms. [See sections 11.1 – 11.2 and 11.8]
- b) Ensure that, where possible, WASH coordination arrangements are co-chaired by the national government with strong support from UNHCR. [See sections 11.4]
- c) Ensure that sector coordination arrangements include the establishment of an advisory group to facilitate transparent decision making based on consensus. [See section 11.24]
- d) Ensure that there are regular national, sub-national and site level refugee focussed WASH coordination meetings with clear agendas, copies of minutes and documented action points. In emergencies, weekly meetings may be required. [See section 11.14]
- e) Ensure that where necessary short term ad-hoc technical working groups are used for analysing problems, formalising principles and responsibilities, and preparing technical guidelines. [See 11.15 – 11.16]

11.2 Common analysis of WASH needs and gaps at the national, sub-national and site levels (baseline assessment)

- a) Ensure where possible that agencies use harmonized WASH data collection tools and methodologies. [See 9.1 – 9.5 and 11.11 – 11.13]
- b) Ensure that all WASH assessments use common operational datasets (common population names, population sizes, administrative boundaries) and WASH indicators. [See 9.1 – 9.5 and 11.11 – 11.13]

WASH Coordination continued.....

- c) Ensure that all WASH assessments are undertaken in a coordinated manner and the same refugee populations are not visited by multiple agencies. [See 9.1 – 9.5 and 11.11 – 11.13]
- d) Ensure that a common analysis of WASH needs and gaps is undertaken through sharing of assessment information and pooling of resources. [See 9.1 – 9.5 and 11.11 – 11.13]

11.3 Establishment of a common sector ToR and response plan/strategy at the national, sub-national and site levels

- a) Ensure that there are ToRs and common WASH sector response plans/strategies at the national, sub-national and site levels that are based on a clear analysis of the refugee WASH needs, gaps and progress against WASH indicators. [See 11.10 and 11.21 – 11.22]

11.4 Establishment of common monitoring and reporting

- a) Ensure that there are agreed common WASH indicators and standards for the refugee WASH response. At a minimum ensure that the UNHCR core WASH indicators are routinely monitored in all refugee settings following the collection frequencies and procedures outlined in the UNHCR WASH Manual. [See section 11.11]
- b) Ensure that a common WASH monitoring and reporting system is established for the refugee response and that all WASH actors feed in their monitoring data on a regular basis regardless of whether they are funded by UNHCR or other sources. If the UNHCR WASH Monitoring System has been rolled out ensure that data is uploaded monthly to the TWINE website. [See section 11.11 – 11.13]
- c) Ensure that progress of the WASH sector is regularly presented to WASH actors, local authorities and representatives of the refugee population through the use of WASH updates, sitreps, bulletins, public communication boards and updated WASH plans/strategies. Ensure that WASH sector progress and gaps are presented in a clear and legible manner through the use of charts, 4W matrices (WHO, WHAT, WHERE, WHEN), infographics and maps. [See section 11.20]
- d) Ensure that a common internet platform is used for the sharing of documentation, contact information, meeting minutes and other WASH information. [See section 11.23]

11.5 Coordinated sector preparedness and contingency planning

- a) Ensure that national, sub-national and site level refugee WASH contingency plans are prepared in conjunction with multi-sectorial contingency plans. Contingency plans should include an analysis of historical and probable WASH needs, probable scenarios, likely impacts, WASH stockpiling and stand-by arrangements, coordination arrangements and links to early warning systems. [See 11.27 – 11.28]
- b) Ensure that common interagency WASH rapid and comprehensive assessment tools and approaches are widely agreed and supported by all agencies as part of contingency planning efforts. [See section 11.28]

WASH Coordination continued.....

- c) Ensure that common hygiene messages, tools and approaches are widely agreed and supported by all agencies as part of contingency planning efforts. Messages should be in the refugees own native language and should target the most critical hygiene risks for the context. If these messages are broadcast using mass-media (e.g. radio) ensure adequate time for approval from host government ministries. [\[See chapter 7\]](#)

11.6 Provision of dedicated WASH sector coordination resources

- a) Ensure that resources are immediately available to make coordination work from the start of the refugee emergency which may include a dedicated coordination website, computers, mapping facilities and dedicated refugee WASH sector coordination focal points and Information Managers. [\[See section 11.25\]](#)

11.7 Capture and application of lessons learned and best practice

- a) Ensure that as early as possible efforts are made to evaluate the refugee WASH sector response in terms of speed, relevance, effectiveness, efficiency, impact and sustainability. Ensure that all lessons learned are used to inform policy change and sector best practice on a national and global level. [\[See section 11.29\]](#)

11.8 Monitoring the quality of sector coordination and performance

- a) Ensure that a self-evaluation of the quality of the WASH sector performance, in particular WASH coordination, is undertaken every six months based feedback from WASH actors. UNHCR should change the WASH sector coordination structure if more than 50% of WASH actors find the performance to be below average. [\[See section 11.30\]](#)