Assessment of water, sanitation and hygiene (WASH) conditions in refugee accommodation centres in the Republic of Moldova

Summary report

Prepared by:

Kate Medlicott
WHO headquarters
Water, Sanitation, Hygiene and Health Unit
Team Lead Sanitation

Oliver Schmoll
WHO European Centre for Environment and Health
Water and Climate Programme
Programme Manager

Bonn and Geneva,
21 March 2022

Contents

1. Background and scope of the assessment

On 24 February 2022, a military escalation in Ukraine triggered a humanitarian emergency in Ukraine and surrounding countries. By mid-March, more than three million people had fled to neighbouring countries to escape the ongoing hostilities.

By 6 March 2022, about 235,000 Ukrainian refugees had arrived in the Republic of Moldova, of whom about half moved on to Romania and the other half stayed in the country. Most refugees come from the southern and southwestern areas of Ukraine, although the situation is changing rapidly. Seventeen border crossings have been established on the border with Ukraine, of which Palanca is the most frequented. Women and children make up about 90% of the Ukrainian refugees.

The government operates about 80 temporary refugee accommodation centres (RACs) of varying capacity, using various facilities such as sports facilities, exhibition halls, dormitories, tents and other types of accommodation. The primary responsibility for overall coordination for these centres obliges the Ministry of Labour and Social Protection, supported by a central crisis coordinating unit that convenes all relevant agencies from different sectors, including the Ministry of Health. The Ministry of Interior operates a transit centre near the Palanca border post. Local authorities operate centres in the districts and report to Ministry of Labour and Social Protection.

Many international organisations are currently working in the country to support the national authorities in their response operations. The WHO Country Office coordinates the Interagency Working Group on Refugee Health, which aims to mitigate risks to public health and secure access to essential health care services of refugees and continuation of health services of the host population.

On 9 March 2022, the WHO Representative in the Republic of Moldova requested the WHO Regional Office for Europe to send experienced experts to assess water, sanitation and hygiene (WASH) conditions in refugee centres – an issue that the international community had not yet systematically addressed at the time of the request. In response, two WASH experts – one from the WHO European Centre for Environment and Health and one from WHO headquarters – supported a rapid assessment mission that took place from 14 to 17 March.

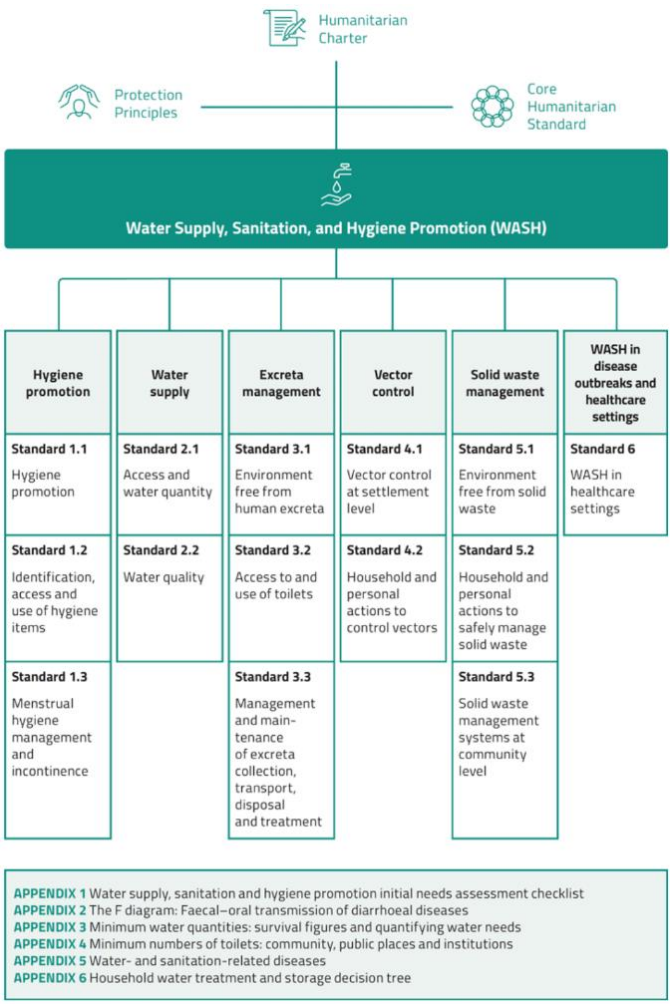


Figure 1: Scope of assessment as per Spere Handbook

The purpose of the assessment was to take stock of the prevailing WASH conditions at the refugee centres and to provide recommendations on any possible improvement interventions to strengthen health, well-being and dignity of the residents. The findings of the assessment can inform measures and fundraising by the Government and/or international and nongovernmental organizations.

The scope of the assessment included the various WASH domains shown in Figure 1, as suggested in the WASH chapter of the fourth edition (2018) of *The Sphere Handbook: Humanitarian Charter and Minimum Standards in Humanitarian Response* (www.spherestandards.org/handbook). In our assessment, we used the Sphere checklists and indicators for the initial needs assessment and adapted them to the specific circumstances of the refugee centres, also taking into account WHO technical resources relevant to aspects of the response interventions (see Annexes 1 and 2 for more details). The assessment employed different tools, including interviews/conversations with the managers and other staff of the refugee centres, onsite observations of WASH and other facilities at the centres, as well as focus group discussions with residents. The assessments were also supported by staff of the WHO Country Office.

The assessment mission focused on onsite visits at the following centres:

- Sport centre *Manejul de Atletică Ușoară* ("Manej") in Chisinau (15 March)
- International Exhibition Centre *Moldexpo* in Chisinau (15 March)
- Moldovan-Ukrainian border post in Palanca in the Ștefan Vodă district, the nearby Palanca transit centre and the associated temporary bus station (16 March)
- Boarding school (*Gimnaziul*) in Popeasca in the Ștefan Vodă district (16 March)

Regarding coordination, on 16 March we briefed the Interagency Working Group on Refugee Health on the preliminary findings of the assessment. On 17 March, we met with Dr Svetlana Nicolaescu, State Secretary at the Ministry of Health, and Dr Nicolae Jelamschi, Director of the National Public Health Agency, to inform them of the main findings of the assessment mission. During the mission we also had a (virtual) meeting with Ms Francesca Coloni from the UNHCR office in Chisinau on 15 March 2022 and also contacted Ms Viktoriia Lupan from the local UNICEF office by email.

2. Summary of key findings and recommended actions

WASH facilities were available in all refugee centres and were, by and large, in sufficient quality and designed and managed in a way that meets or exceeds minimum standards to ensure health, well-being and dignity of refugees accessing the centres. Still, we identified several opportunities for improvements that would strengthen health prevention, well-being and dignity in relation to WASH facilities and behaviours. Details of the observations made at the centres visited and the associated suggestions for possible improvement measures can be found in Chapter 3. We have also discussed improvement measures with the heads of the centres during the assessment visits, as well as with UNHCR colleagues, and it is noteworthy that some of the measures are already being implemented as this report is being written.

In the following, we summarise the main findings and the related overarching recommendations based on field observations and interviews with staff, managers and residents at the centre.

WASH service arrangements

In centres where such functions are not or cannot be consistently performed according to a routine schedule by regular centre staff (or other staff of national or local authorities), the conclusion of WASH service contracts is recommended. Service contracts will be important for the following purposes:

- Regular, frequent cleaning, replenishment of essential supplies and emptying of waste bins in critical areas (e.g. toilet blocks, washing and shower facilities, points of medical care, food preparation and eating areas) for maintaining cleanliness in refugee centres and preventing the spread of infections.
- Regular maintenance and timely repair of WASH infrastructure (e.g. toilets, taps, sinks, shower heads) in the centres. For example, in Manej we found non-functioning WASH infrastructure that needed to be repaired/replaced and received verbal reports of clogged toilets in the past (resulting in open defecation on and around the premises).
- Regular de-sludging, cleaning, disinfection and provision of portable toilet facilities located at centres (Manej, Moldexpo) or other public places where refugees are concentrated (e.g. at the bus station near the Palanca border post). For example, we found portable toilet facilities in poor hygienic conditions due to apparently low cleaning/maintenance frequencies.
- Steady provision of gallons of drinking-water for water dispensers, including cleaning and maintenance of dispensers. For example, we found that the water dispensers in Manej were not functioning and there were not enough in Moldexpo.

We recommend that such service contracts are identified and supported by international and/or nongovernmental organizations, in addition to the provision or WASH hardware and supplies. We also suggest exploring service contracts that cover several facilities to benefit where possible from economies of scale.

Essential supplies

The seamless and timely provision of basic hygiene supplies is essential to ensure the health, well-being and dignity of refugees, as well as hygienic conditions in refugee centres. Such essential supplies include soap for handwashing and personal hygiene, toilet paper, menstrual hygiene products, baby diapers, detergents for laundry and environmental cleaning, hand disinfectants and mouth-nose masks. We recommend making arrangements that allow for an even, demand-oriented allocation of such products in all refugee centres, coordinated by a competent government agency, also considering the supply of ad-hoc donations from international and/or nongovernmental organizations.

In all centres visited, water for drinking was provided in plastic bottles or gallons connected to water dispensers/coolers. Although tap water was available in all centres (except for the centre near the Palanca border post, where water was provided from tankers), it was not considered suitable for drinking by both

Moldovans and refugees. The delivery of water for drinking by plastic bottles or gallons comes with significant logistical efforts and produces significant amounts of plastic waste. In the medium-term, we therefore recommend replacing such bottled supplies with point-of-use devices for treatment of tap water that have been evaluated under the WHO International Scheme to Evaluate Household Water Treatment Technologies; a list of evaluated treatment devices can be found at: https://www.who.int/tools/international-scheme-to-evaluate-household-water-treatment-technologies/products-evaluated. Alternatively, water can also be boiled, particularly in smaller centres. According to WHO recommendations, it is sufficient to bring the water to a rolling boil to make it safe to drink; for further details, see the WHO technical brief at: https://www.who.int/water_sanitation_health/dwq/Boiling_water_01_15.pdf.

Procurement quality

Quality and culturally appropriate procured items are important to ensure products are fit for purpose, accepted and used by refugees and safe. We recommend interagency coordination to ensure that:

- Point-of-use devices for water treatment are effective and can produce safe drinking-water. To aid procurement, a list of treatment devices that that have undergone comprehensive, health-based performance evaluations under the WHO International Scheme to Evaluate Household Water Treatment Technologies (see link provided in previous section).
- Contents of dignity and hygiene kits meet cultural expectation of products type, quality, appropriateness, and where possible locally recognized brands, particularly for menstrual hygiene products.

Access to WASH facilities

Nominal resident/toilet and resident/basin ratios have been found low in several refugee centres visited (as compared to SPHERE standards). However, at the time of the visits there were no observable queues and residents reported acceptable waiting times, the situation may change in case of rising numbers of refugees seeking shelter. In such case, additional facilities will need to be provided. We recommend that the possibilities for expanding the facilities be examined now and that the necessary preparation for surge in capacity be made. The sites visited (with the exception of Popeasca) have limited potential for rapid renovation to include additional indoor toilets and water points – as such portable water and toilet facilities are likely to be the most feasible short term option.

At the refugee centre in Palanca, we noted that the distance between onsite toilets and handwashing facilities was too great, which discourages proper hand hygiene practices. Where portable toilet facilities were located at the compound/outside of centres, close-by handwashing facilities were disused (Manej, Moldexpo) or inappropriate (bus station near the Palanca border post). We recommend placing handwashing stations, either soap and water or filling disused dispensers with alcohol-based hand rubs, as close as possible to toilets, canteen areas and at the entrances and exits to accommodation facilities with accompanying signage to encourage handwashing at key times.

Access to WASH facilities for persons with reduced mobility was a problem in all facilities visited. Toilet blocks inside buildings and outdoor mobile toilet facilities were not accessible for wheelchairs, for example. We recommend ensuring that at least one toilet is accessible for people with disabilities in all centres.

Toilet and shower facilities at Popeasca lack privacy due to toilet access through the shower areas. We recommend allocation of wash rooms by sex to improve privacy.

One functional washing machine was available at Moldexpo and several in Popeasca, but none in Manej. To facilitate proper cleaning of clothes and bed linen, we suggest equipping each centre with one washing machine per 100 residents.

Health messaging

Shorter-term and longer-term residents at the refugee centres need to receive health-related information and site-specific guidance (e.g. on where to find medical assistance, access to vaccination, and/or COVID-19 prevention measures, including physical distancing and wearing mouth-nose masks). Such health information should also include important WASH aspects, such as information on the location of toilet blocks, showers and washing machines, reminders on handwashing practices, nudges on sufficient hydration and where to find drinking-water fountains, and/or information on where to find diapers or menstrual hygiene products.

Although this was not the subject of our assessment, in terms of preventing the transmission of COVID-19, we observed in all the centres visited that residents and most staff hardly wore mouth-nose masks. The same observation applies to the physical distancing behaviour, which, however, is not easy to maintain due to the specific circumstances of the refugee centres. This highlights the importance of disseminating effective health messages and nudging preferred behaviours to prevent the spread of COVID-19 among refugees.
Because of the many refugees who come to the centres and stay there for varying lengths of time, it is not easy for the staff to get this information to all residents immediately. We propose to develop different means for effective communication of health information in different languages (Ukrainian, Russian, Romani and Azerbaijani) and in pictorial form (given the high number of children and to address illiterate people). Under the guidance of health communication experts, consideration could be given to developing the following products for distribution to all refugee centres across the country:

- Information leaflets for handout to all incoming residents;
- Large information posters that are eye-catching and clearly laid out and displayed in visible, central locations; and
- Large screens displayed at different central locations to display information above and also rapid advice to residents that may need to be updated frequently.

Inequalities

We found disparities in the level and quality of services between Manej and Moldexpo, including clear differences in the cleanliness, adequacy and functionality of WASH facilities, but also other conditions on-site. These differences can be explained by the infrastructural conditions that make Manej less suitable to host large numbers of refugees compared to Moldexpo, as well as the difference in management support. In Manej, according to information from the centre's management, most of the residents belonged to ethnic minorities such as Romani and Azerbaijanis who had fled Ukraine, while in Moldexpo most of the residents were Ukrainians. Such a practice of assigning ethnic minorities to the centre with less favourable conditions can lead to stigmatization of the refugees, and we recommend that this practice be critically reviewed.

Cross learning

In the absence of previous experience in dealing with refugee crises of such magnitude, the response is naturally characterized by ad-hoc measures and "learning by doing", while the high level of commitment of all actors involved in the government and the international community should be emphasized. In order to further consolidate the lessons learned and experiences gained, to facilitate adaptive planning and management of WASH in refugee centres and to identify good practices that can be adopted by other centres, we recommend organizing exchanges between centre managers to promote peer learning. This may range from simple sharing health messaging posters that are working well in a particular centre, facilitated study tours across Moldovan centres, management training to international exchanges on lessons learnt after the crises.

3. Site-specific observations and recommendations

Manej

Site description

- The centre is located in a municipal sports facility with an occupancy of 400 beds, which are located indoors on the sports field without the beds being separated from each other. At the time of the assessment, the centre was serving approximately 200 occupants who were almost exclusively Roma and Azeri people. Approximately 60% were women and children and 40% were men. Less than 10% were elderly. Occupants normally stay 24-48 hours with some staying longer.
- The site is staffed by a director and facility manager who hosted the visit, including ten cleaners and several volunteers.
- NGO *Samaritan's Purse* are based on site with two full time staff attending to medical needs. The Azerbaijan embassy is also regularly on site attending to the needs of their citizens. A UNHCR staff member was also stationed on site assisting with coordination. UNICEF donations were supporting hygiene kits, container-based toilets and their cleaning and desludging services.
- Other development partners were on site during our visit, including IsraAID and Swiss Humanitarian Aid that also undertook a WASH assessment of centres.
- After our visit, UNHCR informed us that the government plans to close Manej soon, but the date is uncertain.

Layout of Manej

Hygiene

Observations	Options for remediation
Proper hand hygiene practices (washing with water and soap and/or use of hand sanitizers) prevent the spread of respiratory, diarrhoeal and other infectious diseases, including COVID-19. **Hygiene promotion** Some posters are placed next to handwashing facilities in the toilets blocks encouraging regular hand washing and explaining adequate handwashing procedures. However, these posters are in Romanian only. There are few other communication materials in other key areas. However, most of the information is communicated verbally, which is straining staff who need to repeat messages to constant newcomers and causing knowledge/information gaps for occupants. **Identification, access to and use of hygiene items** Hygiene kits for adults and children are available for occupants on arrival and as needed. Cold running water, liquid soap dispensers and alcohol-based hand rubs were available at sinks, but most soap dispensers were empty. Alcohol-based hand rub dispensers are available inside container-based toilets but these were also empty. **Menstrual hygiene management (MHM)** MHM products are included in the hygiene kits and residents can ask for additional products as needed from the stores. Waste toilet paper bins beside the toilets are also used for MHM waste disposal. Information on how to obtain and dispose of MHM products is only communicated verbally by staff. In addition to MHM for dignity of women and girls, poor disposal of MHM products may contribute to toilet blockages and blockage of desludging equipment for container-based toilets and lead to and loss of toilet service and potential open defecation. **Laundry** Residents are handwashing clothes in the shower areas. However, a washing and dryer are reported to be installed. **Cleaning** Toilet and shower blocks as well as common areas looked reasonably clean at the time of observation. Cleaning staff were adequately equipped with cleaning materials and personal protective equipment (PPE).	• Strengthen system to ensure regular cleaning on toilets, handwashing basins and showers and replenishment of supplies using tools, such as cleaning schedules posted in toilets and showers. • Secure regular supplies and prepare a stocklist of soap for hand washing stations and hand sanitizers at other critical points. • Seek a management contract for at least three months with potential for ongoing renewal as needed to provide regular cleaning and top up toilet paper supplies. • Make sanitary product available to women without having to ask. • Place several, permanently installed hand hygiene points with alcohol-based hand rubs in the entrance areas of the facility. They should be accompanied by hand hygiene reminders/nudges in several languages (Ukrainian, Russian, Romani, Azerbaijani) and in pictorial form in key locations in the corridors, entrance areas and toilet blocks. • Place communication messages in relevant languages on key hygiene behaviours at key areas (e.g. where to find sanitary material and where to dispose of items, COVID-19 prevention measures, expectation to leave toilets and bathrooms as clean as you found them, hand hygiene on entry to main hall). • Consider providing electronic screens (linked to laptop) in the main hall and other waiting areas to display updated health messages.

Water supply

Observations	Options for remediation
Access and quantity Water is supplied by piped mains in the building. In the ground floor, there is running water from taps, located in toilet blocks, in addition to showering facilities. They are being used for personal hygiene purposes, but not for hydration. Warm water taps were broken in several places and/or removed on purpose to save warm water. Facility management reported that they are going to be repaired/replaced soon. In total there are eight shower rooms – four for female and four for male – with each room having four showers. They provide warm water from central supplies; however, several shower heads were broken or absent. According to the facility manager, water is running 24/7 and no interruptions are being experienced. There shouldn't be issues with limited volumes available for showering and hygiene purposes. **Water consumption** Water from taps is not being used for hydration, according to the facility manager. Residents can ask facility management for water bottles on an ad-hoc basis, but water cannot be freely accessed when needed. Limited availability of packaged/bottled water may lead to under-hydration, impacting health conditions. Water bottles are provided by the government. Asking facility staff for a bottle of water may present a barrier for residents. There is a limited number of water dispensers (i.e. floor standing water coolers with water gallons). We observed one in the entrance area and two in the main hall, but none were functional and equipped with water gallons. People can grab tea or coffee at the reception bar. **Water quality** Tap water quality is assumed to be of uncertain quality and may cause infectious disease episodes, if consumed. At the day of the visit, water smelled of chlorine and there were no notable appearance problems. A water filter, which is plugged into the mains, is operated in the staff rest room. Water is filtered there and then carried in containers to the tea bar. The product has not been evaluated under the WHO Scheme. From the product description it appears that the main filter component is a carbon block filter that is mainly intended for treatment of "aesthetic" issues, such as minimizing the taste and smell of chlorine and reducing scaling, as well as some removal of organic matter. For carbon filtration, the main mechanism of contaminant removal is adsorption, rather than size exclusion. Their performance in removing microbes is variable, with mostly low removals.	• Repair broken taps and shower heads. • Carry out regular inspections of taps, sinks and showers and make provisions that ensure repair in case of fault or damage. • Uninstall the water filter and bring water to a rolling boil for tea and coffee preparation. Consider procurement and installation of a water treatment device that has been positively evaluated by the WHO Scheme. Such water can be directly consumed and replace bottled water. • Increase the number of functional water dispensers in critical areas, including in the area around the tea bar at the entrance (2) and in the main hall (5). They should be installed in visible places and spread throughout the entrance and main hall areas. • Secure regular supplies of water gallons through a service contract, including maintenance/repair of water dispenser devices. Provide reusable cups so that residents can freely drink water. • In the meantime, offer water bottles at the tea bar in the reception area to lower the barrier for residents to ask for water if they are thirsty. • Put in place multi-lingual and pictorial nudges/ reminders to drink water on regular basis.

Sanitation and excreta disposal

Observations	Options for remediation
Overall, sanitation conditions were adequate to provide for dignity, well-being and health of occupants. However, the management system is reliant on donated supplies and volunteers. Missing or unsecure management services lead to unhygienic toilets, blocking and in the worst instances open defecation when toilets are unavailable due to blocking. **Environment free from human excreta** The environment was free of excreta; however, we received reports that the toilets were at one stage blocked and people resorted to practicing open defecation in boxes inside and outside of the arena. Greywater also drains to sewers and no standing water was observed. Facility managers reported presence of pets at some times, but no pets or animal faeces were observed during the assessment. **Access to and use of toilets** A total of 28 toilets – 18 female and 10 male – for a maximum occupancy of 400 persons. An additional 20 container-based toilets were placed outside, which were less used when it is cold or at times of low occupancy. All toilets have locks and indoor toilets have lighting. There is no lighting for the outdoor container-based toilets. There is a weekly cleaning and desludging service. The number of toilets was sufficient and conveniently located and available for all to use. However, given occupants are predominately female there may be a need to allocate more of the toilets for women and girls; however, at the time of the visit no queuing was observed. Toilets have handwashing stations with cold water and in some instances soap available. Bathing facilities with hot water are also included alongside toilets. No disability accessible toilet was available. Toilets have paper for anal cleaning, bushes for toilet cleaning and were generally clean at the time of the assessment. Waste bins (uncovered) are provided for wastepaper and sanitary products (tampons and pads) alongside toilets. The facility manager and director reported that facilities were cleaned (sometimes several times per day) by a contract cleaning company but that the contract arrangement was not secure or reliable. Donated supplies (paper cleaning products etc.) were provided upon request via the central coordination unit (Ministry of Labour and Social Protection). **Excreta collection, transport, disposal and treatment** The facility has sewer connections for indoor toilets with sufficient flushing water to convey excreta away. UNICEF has a contract with *EcoToilet* for weekly deluding services for the container-based toilets.	• Seek a management contract for at least three months with potential for ongoing renewal as needed to provide regular cleaning of toilet blocks and top up toilet paper supplies. • Install dedicated MHM bins in toilets and include daily replacement in the management contract. • Maintain container-based toilets (even though possibly not needed at time of low occupancy) and desludging/cleaning services, anticipating possible surge in occupancy. Increase cleaning and hand rub refill frequency to daily. • Modify at least one male and one female toilet for people with limited mobility/disability. • Install posters/signs in all toilets (indoor and container-based toilets) on correct use and to explain where to obtain and dispose of toilet paper, sanitary products, and nappies to avoid blockages.

Solid waste management

Observations	Options for remediation
Current waste management is sufficient for basic health, wellbeing and dignity needs of occupants. Generally, the site was quite clean with very little waste accumulation. No flies, insects or rodents were observed. • Generation: Waste is mostly food waste/packaging and personal hygiene items from bathrooms; no larger discarded items were observed. There are no medical/first aid facilities on site and hence no medical waste. The facility manager reported some challenges with enforcing rules on areas for food consumption and associated waste. • Collection: Waste bins are located at various locations in the main hall (but only two large bins in the main arena), high traffic areas, bathrooms and shower rooms. No bins were overflowing. Bins had no lids. Bins are emptied to a combined storage area. • Treatment disposal: Stored waste is collected on a periodic basis by the municipal waste collection authority. • Waste management staff: No PPE for waste collection staff was observed. • Management volunteers are overworked and stressed.	• Some aspects of waste management could be optimised, such as more and more conveniently placed bins in the main hall. • Specific bins and signage on how/where to dispose of waste should be provided, in particular for nappies and MHM waste to avoid causing block in toilets and desludging equipment. • Include solid waste management within the facility inside a cleaning contract (refer hygiene section). • Provide basic PPE (gloves, masks) for staff/volunteers handling waste until such time as solid waste management contractor is in place

Photographs

Handwashing facilities

Shower facilities

Indoor toilets

Outside portable toilets

Utensils of hygiene kits

Waste management and disused water dispensers

Moldexpo

Site description

- The centre comprises of two urban exposition halls that have been converted from a COVID-19 isolation centre, which allowed for a rapid and cost-effective conversion to a RAC with ready accommodation, WASH facilities and trained staff from the COVID response.
- The RAC had an occupancy rate of about 80-90% and a full capacity of 944 beds, making it the largest capacity centre in the Republic of Moldova. The beds are housed in cubicles made up of mobile partitions; there are cubicles of various sizes ranging from one to four beds. At the time of the assessment, the centre was serving approximately 400 occupants of mostly Ukrainian decent. Approximately 65% are women and children. Occupants normally stay a few nights, but some we spoke with had been there for nine days.
- The site is under the management of the municipal health authority. It mobilized 100 staff from the municipality who are working in 12 hour shifts, including a cleaning team from the hospital – the cleaning contract was coming to an end on the day of the assessment.
- The centre has medical points which are staffed with doctors from municipal hospitals. UNHCR provides legal services and coordination. WFP assists with three hot meals daily, UNFPA provides dignity kits. Volunteers and NGOs assist on site, including work in child entertainment and psychology.
- After our visit, UNHCR informed us that the management of the centre has moved from municipality to the central government. UNHCR and its partner ACTED has run today a detailed needs assessment on 18 March, during which toilets were fixed, and more showers and water boilers will be added as of 21 March. UNHCR will procuring washing machines, driers and hygiene products.


Layout of Moldexpo and resident cubicles

Hygiene

Observations	Options for remediation
Proper hand hygiene practices (washing with water and soap; hand sanitizers) prevent the spread of respiratory, diarrhoeal and other infectious diseases, including COVID-19. **Hygiene promotion** In the sleeping cubicles, there are info posters encouraging regular hand washing and explaining adequate handwashing procedures. However, these posters are in Romanian only. **Identification, access to and use of hygiene items** Soap (liquid and/or bars) and running water were available for handwashing in the toilet blocks, as well at free standing basins with water taps. Alcohol-based hand rubs were available at the food and beverage desks. Residents can adhere to hand hygiene at key times. **Menstrual hygiene management** Near the toilet blocks, some limited supplies for menstrual hygiene management were provided. Info sheets at the inside of the doors of the toilet blocks were pointing to the health station at which women/girls could ask for sanitary pads. Residents confirmed that they could obtain pads when asking. All toilet cubicles were lockable and had a bin for disposing of used sanitary pads. **Laundry** In one of the halls, two washing machines are available for use by residents; one washing machine was observed not to function properly. **Cleaning** Toilet blocks looked reasonably clean at the time of observation. Also, the floors of the halls were found clean, including in the residential cubicles. Municipal staff were responsible for cleaning, several times a day, but at least twice a day. From 16 March, a new arrangement for cleaning will have to be found as the municipal staff will not be able to continue it.	• Secure regular supplies of soap for hand washing stations and hand sanitizers at other critical points (entrance, food and beverage desks). • Carry out regular inspections of hand washing stations. Make provisions that ensure timely refill of soap and repair in case of fault or damage. • Place visible hand hygiene reminders/nudges in several languages (Ukrainian, Russian, Romani, Azerbaijani) and in pictorial form in key locations in the corridors, residents' cubicles and toilet blocks. • Consider providing electronic screens (linked to laptop) in the main hall and other waiting areas to display updated health messages. • Provide culturally-appropriate menstrual hygiene materials (pads, tampons or cups) in or in front of toilet blocks for women, so that they do not have to ask for them. Regularly check availability and refill of materials. • Carry out regular inspections of toilet cubicles so that they are lockable and are equipped with waste bins, so that women and girls can safely, comfortably and privately manage menstruation. • Supply additional washing machines and dryers so that in each hall two functioning machines are available. • Secure continuation of regular and reliable cleaning services at appropriate intervals, in particular of toilet blocks and shower cubicles (at several times per day), areas in which children play, residential cubicles, entrance area, and around food and beverage desks (e.g. twice per day). • Seek a management contract for at least three months with potential for ongoing renewal as needed to provide regular cleaning and top up hygiene supplies.

Water supply

Observations	Options for remediation
Water quantity, availability and quality were all sufficient indication of no major risk to human, health, well/being and dignity. **Access and quantity** Water is supplied by piped mains in the building. In both (exhibition) halls, there is running water from taps, located in toilet blocks, in medical care sections and at some free standing basins with water taps, in addition to showering facilities. Water is being used for personal hygiene purposes only, but not for hydration. Showers and taps provide warm water from central supplies. There is a total of four showers – one for men and one for women in each (exhibition) hall – for about 300 residents, which leads to waiting times. Women sometimes also use the showers for men. According to the facility manager, water is running 24/7 and no interruptions are being experienced. There shouldn't be issues with limited volumes available for showering and hygiene purposes. **Water consumption** Water from taps is not being used for hydration, as reported by both the facility manager and residents, who also explained that also at home they never drink tap water (because of concerns over safety). Water for drinking is only available at the food and beverage supply desks in the entrance areas of the halls. It is provided by a water dispenser (i.e. floor standing water coolers with gallons). Water can be freely accessed by residents when needed. **Water quality** Tap water quality is assumed to be of uncertain quality and may cause infectious disease episodes if consumed. At the day of the visit, water smelled of chlorine and there were no notable appearance problems.	• Scale-up number of water dispensers/coolers in different places so that occupants can access it more conveniently and regularly. • Secure regular supplies of water gallons through a service contract, including maintenance/repair of water dispenser devices. Provide reusable cups so that residents can freely drink water. • Consider procurement and installation of water treatment devices that have been positively evaluated by the WHO Scheme. Such water can be directly consumed and replace bottled water. • Double number of shower facilities. • Put in place multi-lingual and pictorial nudges/ reminders to drink water on regular basis. • Carry out regular inspections of taps, sinks and showers and make provisions that ensure repair in case of fault or damage.

Sanitation and excreta disposal

Observations	Options for remediation
Overall sanitation conditions were insufficient in terms of toilet/user ratios but otherwise clean, well-supplied with paper, handwashing facilities and soap, waste bins, MHM pads and diapers, and hygiene signage. No queues were reported for toilets. Occupant reported to be very satisfied with the cleanliness and functionality of facilities. The contract for cleaning services is precarious and low toilet/user ratios mean that what is currently a very good situation could deteriorate with a surge in demand and lack of cleaning. **Environment free from human excreta** The environment was very clean and free of excreta. Several pets were observed but no animal excreta. Occupants are free to take pets outside. No animal faeces were observed during the assessment. **Access to and use of toilets** A total of 18 toilets conveniently located – nine female and nine male spread over both (exhibition) halls – for a maximum occupancy of 944 occupants. There are no additional urinals in male toilet blocks; however, there were very few men in the facility. Women reported feeling free to use men's toilets. The ratio of toilets is too low; however, no queues were observed or reported. Due to the building design adding additional indoor toilets would be challenging and expensive. There are an additional six portable toilets outside which appear to be infrequently used – they were clean, but no toilet paper or soap were available. All toilets have locks and indoor toilets have lighting. There is street lighting for the portable outdoor container toilets. No disability accessible toilet was available. Toilets have paper for anal cleaning, bins (uncovered) are provided for wastepaper and sanitary products (tampons and pads) alongside toilets. A trolly of nappies, pad and tampon was outside the door with easy access. Indoor toilets have handwashing stations with hot and cold water and soap. Cleaning is several times per day but the current contract for cleaning is coming to an end, so an urgent replacement is needed. **Excreta collection, transport, disposal and treatment** Toilets are connected to municipal sewer. Greywater also drains to sewer. No standing water was observed. Container-based toilets are maintained under a service contract.	• Request for proposal and contract regular cleaning, refilling and maintenance services by municipal health authority with donor support (if possible). • Modify at least one male and one female toilet for access for persons with disability. • Maintain container-based toilets (even though possibly not needed at time of low occupancy) and desludging/cleaning services, anticipating possible surge in occupancy. Increase cleaning and hand rub refill frequency to daily. • Install posters/signs in all toilets (indoor and portable toilets) on correct use and to explain where to obtain and dispose of toilet paper, sanitary products, and nappies to avoid blockages. • Share good practice from Modlexpo with other facilities (i.e. posters on where to get MHM products, food handing hygiene posters, handwashing reminder posters).

Solid waste management

Observations	Options for remediation
Current waste management is very good. Occupants reported being very satisfied with the service provided. The contract for cleaning services is precarious, which means that what is currently a very good situation could deteriorate with a surge in demand and lack of cleaning. Solid waste is well managed at the site and well-integrated with municipal waste collection and disposal services. No waste accumulation, flies, insects or rodents were observed. • Generation: Waste is primarily food waste/packaging and personal care products, nappies, used toilet paper and MHM waste from toilets. There are no larger discarded items. There are health stations providing basic medical care and vaccination on-site. • Collection: Many waste bins (no lids) are located throughout the facility including outside sleeping cubicles, bathrooms and shower rooms, common areas, high traffic areas. Health stations have sharps boxes for vaccination waste and general waste bins - no infectious waste bins observed, but it didn't appear they were offering services that would require them. No bins were overflowing. • Treatment disposal: Bins are emptied to a combined storage area and collected on a periodic basis by the municipal waste collection service for general waste and a hospital health care waste management provider for health station waste. • Waste management staff: Cleaning/waste staff observed wearing PPE.	• Include solid waste management within the facility inside a cleaning contract (refer to hygiene section).

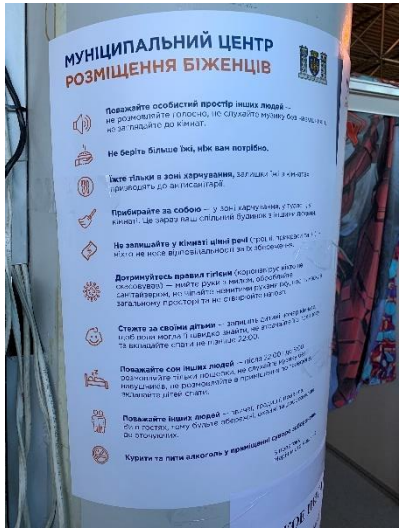
Photographs

Potable water outside the facility

Waste collection at sleeping cubicles

Potties for child faeces management

Laundry facilities



Hygiene rules in Ukrainian

Hand washing station with soap

Toilets with MHM and diapers outside

Shower facility

Palanca

Site description

- We assessed three sites all with short duration use by refugees in transit:
  - At the Moldovan-Ukrainian border post in Palanca, the refugees arrive in cars and buses and pass it mostly on foot in about 30 minutes. About 90% of the arrivals are women and children and 10% are (older) men. Arrivals amount to 4,000 persons per day, with 12,000 two weeks ago. The refugees can rest in an arrival tent where volunteers provide some food and drink as well as basic hygiene items. A health post at the border provides medical support.
  - The Palanca transit centre (tent camp), located 2 km from the border post, is for late evening arrivals and waiting for onward transport to the next destination – refugees usually stay one night. The site is managed, operated and staffed by the Ministry of Interior.
  - A temporary bus station for onward transit of refugees to various destinations across the country. Staff of the Ministry of Interior oversee and support the operations at the bus station. UNHCR and NGOs operated support booths at the bus stations.

Arrival tent at Palanca border post

Palanca transit tent camp

Palanca temporary bus station

Hygiene

Observations	Options for remediation
Proper hand hygiene practices (washing with water and soap; hand sanitizers) prevent the spread of respiratory, diarrhoeal and other infectious diseases, including COVID-19. **Hygiene promotion** All three sites have few posters or other information courses promoting hand hygiene and COVID-19 control measures. All refugees arriving at the border by bus or foot pass through a well-stocked tent where hygiene items are on display. At the transit centre, arrivals pass through a well organised registration system (including checking for dangerous items, COVID-19 testing, provision of legal advice), where hygiene materials/kits and advice are given by staff. **Identification, access to and use of hygiene items** Hygiene kits for adults and children are distributed to refugees on arrival at the border and the transit centre as needed. Cold running water points, liquid soap dispensers and alcohol-based hand rubs were available at sinks at the border and at the handwashing stations at the transit centre. Alcohol-based hand rubs were available at the portable toilets at the bus station. **Menstrual hygiene management** MHM products are included in the hygiene kits distributed at the transit centre and were also available at the arrival tent at the border. Whether such supplies were available at the bus station is uncertain. Waste toilet paper bins beside the toilets at the border and transit centre are used for MHM waste disposal. **Laundry** No facilities available. **Cleaning** Toilet blocks at the border post looked reasonably clean at the time of observation. The cleanliness of the onsite and portable toilets at the transit centre and at the bus station needs improvement. Cleaning staff at the border post were adequately equipped with cleaning materials and PPE.	• Install communication messages in relevant languages on key hygiene behaviours at all three sites, such as visible hand hygiene reminders/nudges in several languages (Ukrainian, Russian, Romani, Azerbaijani) and in pictorial form, in key locations in the transit centre (at onsite toilets, in canteen area, kitchen and sleeping tents), near the onsite toilets at the bus station and in the toilet blocks at the border. • Consider installing screens to display hygiene and wider health messages at high traffic and waiting areas at the border crossing. • Increase cleaning intervals and strengthen system to ensure regular cleaning of toilets and replenishment of hygiene supplies at the bus station and to a less extent at the transit centre. • Secure regular supplies and prepare a stocklist of soap for hand washing stations and hand sanitizers at other critical points.

Water supply

Observations	Options for remediation
Access and quantity Water is supplied by tanker (sourced from nearby local water source) to the transit camp and by piped mains to the border crossing. There is no water supply at the bus station other than bottle water for drinking. Cold running water was available from taps, located in toilet blocks at the border post and the mobile (hand)washing and water collection point at the transit camp. According to the facility managers, water is running 24/7 at both the border and transit camp. There are no bathing or shower facilities in either of the sites. .	• At the transit centre, install 2-3 water dispensers/ coolers in different places so that occupants can access water more conveniently and regularly. • Consider procurement and installation of a water treatment device that have been positively evaluated by the WHO Scheme. Such water can be directly consumed and replace bottled water. • Put in place multi-lingual and pictorial nudges/ reminders to drink water on regular basis. • Carry out regular inspections of taps and sinks and make provisions that ensure repair in case of fault or damage.
Water consumption Bottled water in 500 mL to 4 litre bottles is being used for hydration. Bottles are provided in the arrival tent at the border post, in the canteen area of the transit centre, and can also be obtained at the bus station. Hot drinks such as tea and coffee are available at the border post arrival tent.	
Water quality Tap water quality is assumed to be of uncertain quality; therefore bottled water is used for hydration. The Ștefan Vodă health authority tested the quality of the water trucked to the transit centre and confirmed that water quality meets Moldovan standards.	

Sanitation and excreta disposal

Observations	Options for remediation
Overall sanitation conditions were adequate to provide for dignity, wellbeing and health of transiting refugees at the transit centre and border crossing. Improvements are needed at the bus station. **Environment free from human excreta** The environment was clean and free of excreta at all three sites. No standing water was observed. Some refugees carried pets; however, no animal faeces were observed in the area. Some open defecation was reported at the border post during peak times of refugee arrival. **Access to and use of toilets** Five pit toilets are available at the transit camp servicing a maximum potential population of approximately 400, all located in one corner of the camp only. Three male and three female flush toilets are available at the border post. Six portable and two pit toilets are available at the bus station. All toilets have locks and lighting - outdoor toilets are lit by flood lights. No disability accessible toilet was available at any of the three sites. The number of toilets at the transit camp was insufficient to meet the needs of full occupancy, creating a risk of open defecation at peak times. However, at the time of the assessment visit no queuing was observed. Toilets have paper for anal cleaning and were found generally clean. Potable and pit toilets did not feature bins for wastepaper and sanitary products (tampons and pads). At the transit centre, a handwashing station with cold water and soap is available, but not optimally placed to encourage handwashing – the distance between toilets and handwashing stations was too long and no signs with directions available. The facility managers reported that toilets were cleaned daily. Donated supplies were replenishing from the storage tent as needed. Toilets at the bus station are in poor condition – pits toilets are damaged and contents of pits was visible from the front and side of the building. Some portable toilets seats and doors are damaged and there is ponding of water outside. Some alcohol-based hand rub was available in front of the toilets. Toilets at the border crossing are well designed, clean and well managed. Toilets had handwashing stations with water with soap available. **Excreta collection, transport, disposal and treatment** The transit centre has excreta disposal on site. Toilet superstructures may be moved and pits may be covered when full. The site appears to be low lying and potentially prone to flooding in high rainfall events, which could lead to contents of pits being flooded out into the camp areas. The transit centre manager reported that desludging services for portable toilets needs to come from Chisinau, a 2.5 hour drive away, which likely explains the poor level of maintenance.	**Transit centre:** • Regularly move toilets when full, cover pits with earth and cordon of the old pit area. • To minimize walking time, locate toilets conveniently for users in two different locations that are least prone to flooding. Increasing number of toilets in case of (anticipated) refugee surge. • Undertake at least daily inspections of the pits and the cleanliness of the toilets, and take remedial action as needed. **Bus station:** • Repair or close existing pit toilets. • Maintain portable toilets. Ensure a secure contract for at least daily cleaning, soap supply and desludging. If services are not readily available and affordable locally, replace portable toilets with new pit toilets. • Make available MHM supplies. **All sites:** • Ensure at least one toilet is suitable for disabled users. • Install posters/signs in all indoor toilet blocks and outside toilet areas on correct use, where to dispose of toilet paper, sanitary products and nappies to avoid blockage, and where to access hand hygiene stations.

Solid waste management

Observations	Options for remediation
Current waste management is sufficient for basic health, wellbeing and dignity needs of transiting refugees. The transit centre and the Palanca border post were very clean with no waste accumulation. Facilities mangers reported accumulation of waste on the Ukraine site between border points – they had mobilized with Ukraine border patrol a litter pick to clean up the areas between border points. The bus station was less tidy with some accumulated waste in an open pit and being blown out of waste bins on site. No flies, insects or rodents were observed. • Generation: Waste is mostly food waste/packaging and personal hygiene items from bathrooms. No larger discarded items were observed. There was a medical aid post at the border, which has provision for medical waste collection. • Collection: Waste bins (no lids) are located in high traffic areas, including toilets blocks at the border post, transit tents, aid stations, registration, eating and cooking areas. No bins were overflowing. • Treatment disposal: Stored waste is collected on a periodic basis by the municipal waste collection authority and taken to the local landfill.	• Cover and close the waste pit at the bus station to avoid human contact. • Ensure bins in outdoor areas have lids to avoid waste being blown over the site. • Improve notice and signage on how/where to dispose of waste at all three sites. • Ensure regular supply of basic PPE (gloves, masks) for staff/volunteers handling waste. • Continue periodic waste picking walks to keep surrounding areas clear of solid waste.

Photographs

Hand hygiene at Palanca border

Toilet cleaning at Palanca border

Health care waste management at Palanca border medical aid

Temporary toilets at Palanca transit centre

Temporary toilets at Palanca transit centre

Hand hygiene station at Palanca transit centre

Portable toilets and hand hygiene station at temporary bus station

Popeasca

Site description

- The centre is inside a disused boarding school (*Gimnaziul*) in the town of Popeasca, about 30 km from the Palanca border post. It is made up of four buildings, including a kitchen and dining room, a registration and administration room, the boarding house with a capacity for 120 people and classrooms, which will have a capacity for an additional 100 people when installation of beds and a bathroom block are completed. Total capacity will be 220 people. At the time of the assessment the centre was serving approximately 70 people, almost all women and children. Occupants normally stay several days but some had been staying for three weeks and were waiting for an opportunity to return to Ukraine.
- The site is staffed by a facility manager and two day cleaners and one night janitor.
- NGO Caritas has been providing ongoing assistance with major set up items, including washers, dryers, beds for the classroom renovation and water dispensers/coolers.



Popeasca Gimnaziul buildings

Hygiene

Observations	Options for remediation
Proper hand hygiene practices (washing with water and soap; hand sanitizers) prevent the spread of respiratory, diarrhoeal and other infectious diseases, including COVID-19. **Hygiene promotion** There are very few hygiene promotion materials in different locations of the facility. There are few other communication materials in other key areas and only communicated verbally by staff, which is straining them and causing some knowledge/information gaps for occupants. **Identification, access to and use of hygiene items** Hygiene kits were distributed to occupants on arrival and as needed. Hot and cold running water and soap was available at all sinks. **Menstrual hygiene management** MHM products are included in the hygiene kits and resident can ask for additional products as needed from the stores. Waste toilet paper bins beside the toilets are also used for MHM waste disposal. Information on how to obtain and dispose of MHM product is only communicated verbally by staff. **Laundry** Two washers and dryers have been provided by NGO Caritas and are being used for residents laundry and cleaning bed linen. **Cleaning** Toilet and shower blocks as well as common areas looked reasonably clean at the time of observation. Cleaning staff were adequately equipped with cleaning materials and PPE and working to a schedule with two day cleaner and one night janitor.	• Provide alcohol-based hand rubs at entrance of kitchen/dining hall. • Install communication messages in relevant languages on key hygiene behaviours at key areas (e.g. where to find sanitary material, were to dispose of item, COVID prevention measures, expectation to leave toilets and bathrooms as clean as you found them, hand hygiene on entry to main hall). • Strengthen system to ensure regular cleaning on toilets, handwashing basins and showers and replenishment of supplies using tools such as cleaning schedules posted in toilets and showers. • Secure regular supplies (via centralized website) and prepare a stocklist of soap for hand washing stations and hand sanitizers at other critical points. • Place visible hand hygiene reminders/nudges in several languages (Ukrainian, Russian, Romani, Azerbaijani) and in pictorial form in key locations in the corridors, residents' cubicles and toilet blocks.

Water supply

Observations	Options for remediation
Water quantity, availability and quality were all sufficient indication no major risk to human, health, well/being and dignity. **Access and quantity** Water is supplied by piped mains in the building. There is also a well in the school yard used as a back-up supply. There is hot and cold running water from taps, located in toilet blocks, shower facilities in the administration area and a kitchen. Water is being used for personal hygiene purposes, but not for hydration. According to the facility manager, water is running 24/7 and there has been no need to call on the back up well supply. **Water consumption** Bottled water in 500 ml to 4 litre bottles is being used for hydration, and three water coolers from Caritas with larger bottled water supply will soon be installed according to the facility manager. Residents can ask facility management for water bottles on an ad-hoc basis, but water cannot be freely accessed when needed. People can make themselves tea or coffee in the kitchen area. **Water quality** Tap water quality is assumed to be of uncertain quality; however, the facility manager reported that had been tested and is safe. He also reported the well water tested three times the limit for Nitrate and was not suitable for drinking. Nitrate pollution indicates contamination from human or animal faecal material or chemical fertilizer used in nearby agriculture. All are possible, but the latter is most plausible based on brief sanitary inspection.	• Install basins, shower and water cooler in the classroom building before housing new arrivals in this building. • Offer water bottles at the tea bar in the reception area to lower the barrier for residents to ask for water if they are thirsty. • Increase the number of functional water dispensers in critical areas. • Secure regular supplies of water containers for coolers through a service contract, including maintenance/ repair of water dispenser devices. Provide reusable cups so that residents can freely drink water. • Consider procurement and installation of a water treatment devices that have been positively evaluated by the WHO Scheme. Such water can be directly consumed and replace bottled water. • Put in place multi-lingual and pictorial nudges/ reminders to drink water on regular basis. • Carry out regular inspections of taps, sinks and showers and make provisions that ensure repair in case of fault or damage.

Sanitation and excreta disposal

Observations	Options for remediation
Overall sanitation conditions were adequate to provide for dignity, wellbeing and health of occupants. The management system is reliant on donated supplies and orders though the centralised system, which are running critically low. **Environment free from human excreta** The environment was clean and free of excreta. Greywater also drains to sewer and no standing water was observed. No pets or other animals were observed. **Access to and use of toilets** Toilets are available in all buildings. Toilets in the administration block are squat type stalls without doors, in the boarding house they are pedestal type with two per locking room with access via the shower room. Toilets have handwashing stations with cold water and soap available. Toilets have paper for anal cleaning, bushes for toilet cleaning and were generally clean at the time of the assessment. Bins (uncovered) are provided for wastepaper and sanitary products (tampons and pads) alongside toilets. Shower facilities with hot water are also included alongside toilets. The number of toilets was sufficient and conveniently located, and available for all to use. However, set up presents challenges of privacy. No disability accessible toilet was available. Toilets are cleaned daily by the two day cleaners and night janitor. Supplies of toilet paper and other hygiene and cleaning products are running critically low while the site waits for an order placed on the centralized website to be filled and delivered. **Excreta collection, transport, disposal and treatment** The facility has a sewer connection for all toilets and excreta can be conveyed away with adequate piped flush water on site. Tree roots had damaged the sewer pipe outside the boarding house during the long preceding period of vacancy, but it had now been repaired.	• Renovate former principles office to become a toilet and shower block for residents of the classroom building – respecting minimum requirement for toilets per resident, privacy and sex separation to the extent possible with the space available. • Modify at least one male and one female toilet for access for persons with limited mobility/disability. • Install posters/signs in all toilets on correct use and explaining where to obtain and dispose of toilet paper, sanitary products and nappies.

Solid waste management

Observations	Options for remediation
Current waste management is sufficient for basic health, wellbeing and dignity needs of occupants. Generally, the site was clean with little or no waste accumulation. No flies, insects or rodents were observed. The facility manager reported having an ongoing pest management programme. • Generation: Waste is mostly food waste/packaging and personal hygiene items from bathrooms. No larger discarded items were observed. There are no medical/first aid facilities on site and hence no medical waste. • Collection: Waste bins (no lids)are located in dining, kitchen and registration areas and each room on the boarding house and also in toilets, handwashing and shower areas. No bins were overflowing. Bins are emptied to a combined storage area onsite. • Treatment disposal: Stored waste is collected on a periodic basis by the municipal waste collection authority and taken to the local landfill. • Wate management staff: Cleaning staff was observed wearing gloves.	• Improve notice and signage on how/where to dispose of waste – in particular not to dispose of nappies in toilets and other issues known to cause blockages. • Consider providing more waste bins in high traffic areas.

Photographs

Hand washing points with soap

Toilets in admin block

Toilets in boarding house

Kitchen facilities

Shower facilities

Laundry facilities

Back up well

Annex 1: Guiding questions (adapted from Spere WASH checklist)

General

- Who is responsible for managing the facility?
- Is there a WASH focal person?
- Are there protocols and effective system in place for ongoing operation and maintenance of WASH infrastructure and procurement of necessary supplies for operation and maintenance?
- Who are the key authorities to liaise and collaborate with?
- Are there any UN and/or NGO actors supporting the management/supplies of the facility?
- How many people are currently at the facility? What is the maximum capacity? What are people's likely movements?
- What are the current, prevalent or possible WASH-related diseases observed? How many people are affected?
- How are decisions made? Who are the key authorities to liaise and collaborate with? Who are the local partners working on WASH in this location?
- Who are the vulnerable people in the population and why?
- Is there equal access for all to existing WASH facilities? Do people with limited mobility have access?
- What special security risks exist for women, girls, boys and men? Are there at risk groups?
- Is there access to local markets? What key WASH goods and services are accessible in the local market before and during the crisis (e.g. soap, toilet paper, menstrual hygiene products, cleaning agents)?
- Do people have access to cash and/or credit?
- Are there seasonal variations to be aware of?

Hygiene

GENERAL

- What WASH practices were people accustomed to before the crisis?
- What facilities are available for basic hygiene needs – hand hygiene, menstrual hygiene, bathing, laundry?
- What hygiene items are available and what are the most urgently needed based on preferences and needs?
- Are people provided with basic hygiene items? Where do people access markets to buy their essential hygiene items?
- What existing practices observed are harmful to health? Who practices these and why?
- Who still practices positive hygiene behaviour and what enables and motivates them to do this?
- What type of outreach systems exist – community hygiene volunteers or workers or promoters?

HAND HYGIENE

- Are people encouraged to practice hand hygiene? By which means?
- Do people wash their hands after defecation and before food preparation and eating?
- Are there hand hygiene points available?
- Are there soap and running water reliably available at these points?

MENSTRUAL HYGIENE AND INCONTINENCE

- What are the needs and preferences of women and girls for menstrual hygiene practices?
- Are menstrual hygiene products provided at the facility?
- Is there private space for menstrual hygiene management?
- What are the needs and preferences of people living with incontinence?

BATHING

- Are there bathing/showering facilities? How many?
- Is there warm water available (especially for children)?
- Are they accessible for all refugee segments (children, mothers, the elderly, people with limited mobility)?

LAUNDRY

- Are there laundry facilities? How many?
- Are laundry facilities clean, well-maintained and able to meet demand?
- Are detergents provided?

CLEANING

- Is there a dedicated area for storage, preparation and care of cleaning supplies and equipment exists ("environmental cleaning services area"), is kept clean and well maintained, and is used according to its purpose?
- Is adequate PPE available at all times and in sufficient quantities for all cleaning staff?
- Are the facilities (i.e. water points, toilets, accommodation areas regularly cleaned? By whom and how often?

FOOD HYGIENE

- Is food safely prepared and handled (i.e. with clean hands, on clean surfaces and with clean utensils)?
- Are kitchen stores and prepared food protected from flies, other insects and rats?
- Is water available and is there a hand hygiene point?

Water supply

WATER SOURCE

- What is the current water supply source and who are the present users? Is the water supply centralized/piped, trucked in by tankers or collected from point sources?
- Do people drink water from this source?
- Is bottled water being provided and/or from water dispensers/coolers?

WATER QUALITY

- Is the water being regularly tested? Who is responsible for the testing?
- Are there any known or reported water quality problems?
- Is the water source contaminated or at risk of contamination (microbiological, chemical or radiological)?
- Is there any water treatment system in place? What does it remove? What treatment is necessary?
- Is disinfection necessary?
- Do refugees report problems with water palatability and acceptance associated with chlorine taste and smell?

WATER QUANTITY

- Is the current water supply reliable? How long will it last?
- How much water is available per person per day?
- What is the daily and weekly frequency of the water supply availability? Is the supply intermittent?
- Is the water available at the source sufficient for short-term and longer-term needs for all groups?
- Is water being stored on-site? If so, where and how?

WATER ACCESSIBILITY

- Are water collection points close enough to where people stay?
- How many collection points exist? Where can water be collected from?
- Do people have enough water containers of the appropriate size and type (collection and storage)?
- Are there any obstacles to using the available water supply sources?
- What are the alternatives if water sources are inadequate? Are they safe?
- Do people buy water? If so where, at what cost and for what purposes? Has this access (the cost, quality, regularity of delivery) changed?
- What other users are currently using the water sources? Is there a risk of conflict if the sources are utilised for new populations?

OPERATION AND MAINTENANCE

- What operation and maintenance duties are necessary? What capacity is there to fulfil them in the short and long term? Who shall be accountable for them?
- Is there an existing or potential finance mechanism or system that can recover the operation and maintenance costs?
- Do people have the means to use water hygienically?
- Are waterpoints and laundry and bathing areas well drained?
- Are soil conditions suitable for on-site or off-site management of problem water from waterpoints and laundry and bathing areas?

Sanitation and excreta disposal

OPEN DEFECATION

- Is the environment free of faeces? Are there signs of open defecation being practiced?
- Is the current practice a threat to water supplies (surface or groundwater) or living areas and to the surrounding environment?

TOILETS AVAILABILITY AND ACCESSIBILITY

- Are there any existing toilet facilities? If so, which types of toilets? If so, are they used by residents?
- Is the number of facilities sufficient? Can they be extended or adapted?
- What are the gender ratios (i.e. assuming more women in refugee centres)?
- Are they operating successfully?
- Are there any social-cultural norms to consider in the design of the toilet?
- Are the facilities safe and dignified: lighted, equipped with locks, privacy screens, and waste bins?
- Can people access the toilet facilities during the day and night? If not at night, what are the alternatives?
- Are there any specific facilities or equipment for accessibility for persons with disabilities, incontinence or immobility?
- What happens to the faeces of infants and young children? Are diapers available?

HYGIENE

- Are there materials or water available for anal cleansing? How do people normally dispose of these materials?
- How do women and girls manage menstruation? Are there appropriate materials and facilities available for this?
- Do people wash their hands after defecation? Are soaps or other cleansing materials with water available next to the toilet?
- Are the toilet cubicles regularly cleaned? By whom? How often?

EXCRETA MANAGEMENT

- What excreta management practices exist? Is the site connected to sewer or septic tank? Where does wastewater and sludge go?
- What local materials/service providers are available for:
- Constructing toilets?
- Emptying and treatment (e.g. pit emptiers or desludging trucks)?
- Container based facilities (e.g. porta loos)?
- Is the site suitable for on-site excreta disposal – terrain, groundwater and soil conditions?
- Do current excreta disposal arrangements encourage vectors?
- What is the appropriate strategy for management of excreta – inclusive of containment, emptying, treatment and disposal?
- Are stormwater (i.e. rainwater) and greywater drainage system is in place that diverts water away from the area/facility into a safe drainage or leach field area?

OPERATION AND MAINTENANCE

- What operation and maintenance duties are necessary? What capacity is there to fulfil them in the short and long term? Who shall be accountable for them?
- Is there an existing or potential finance mechanism or system that can recover the operation and maintenance costs?
- Do people have the means to use toilets hygienically?

Vector-borne diseases

- What are the vector-borne disease risks and how serious are they?
- What daily or seasonal patterns do local vectors follow in relation to reproduction, resting and feeding?
- If vector-borne disease risks are high, do people at risk have access to individual protection?
- Is it possible to make changes to the local environment (especially by, for example, drainage, scrub clearance, excreta disposal, solid waste disposal) to inhibit vector breeding?
- Is it necessary to control vectors by chemical means? What programmes, regulations and resources exist regarding the use of chemicals for vector control?
- What information and safety precautions need to be provided to households?
- Is water being stored openly that favours vector breeding?
- Is water ponding that favours vector breeding?

Solid waste management

- Who is managing waste collection and disposal?
- Are there sufficient numbers of waste containers onsite at critical points?

- How do people dispose of their waste? What type and quantity of solid waste is produced?
- Is accumulated solid waste a problem?
- Can solid waste be disposed of on-site (e.g. burning, burial pits, fenced waste dump) or does it need to be collected and disposed of off-site (e.g. municipal services)?
- What is the normal solid waste disposal practice for affected people (for example, compost and/or refuse pits, collection system, bins)?
- Are there medical facilities (e.g. first aid) and activities producing waste? How is it disposed of? Is it properly segregated and disposed of? Who is responsible?
- Where are disposable sanitary materials disposed of (for example, children's nappies, menstruation hygiene materials and incontinence materials)? Is their disposal discreet and effective?
- Do staff who handle waste have access to and use PPE? Are they trained in using PPE?

Annex 2: Key WHO technical references on WASH

Drinking-water

- Guidelines for drinking-water quality, 4th edition, incorporating the 1st addendum: https://www.who.int/publications/i/item/9789241549950
- Sanitary inspection packages for drinking-water: https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/water-safety-and-quality/water-safety-planning/sanitary-inspection-packages
- Water safety plan manual: step-by-step risk management for drinking-water suppliers: https://apps.who.int/iris/handle/10665/75141
- International Scheme to Evaluate Household Water Treatment Technologies: https://www.who.int/tools/international-scheme-to-evaluate-household-water-treatment-technologies
- Technical brief: boil water: https://www.who.int/water_sanitation_health/dwq/Boiling_water_01_15.pdf

Sanitation and excreta management

- Guidelines on sanitation and health: https://www.who.int/publications/i/item/9789241514705
- Sanitary inspection packages for sanitation systems: https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/sanitation-safety/sanitation-inspection-packages

WASH in emergencies

- Technical notes on WASH in emergencies: https://www.who.int/teams/environment-climate-change-and-health/water-sanitation-and-health/environmental-health-in-emergencies/technical-notes-on-wash-in-emergencies

WASH in health care facilities

- Water and sanitation for health facility improvement tool (WASH FIT): a practical guide for improving quality of care through water, sanitation and hygiene in health care facilities: https://www.who.int/publications/i/item/9789241511698
- Water, sanitation and hygiene in health care facilities: Practical steps to achieve universal access to quality care: https://www.who.int/publications/i/item/9789241515511
- Water, sanitation and hygiene in healthcare facilities in emergencies: https://wash.unhcr.org/download/wash-in-health-care-facilities-in-emergencies-who