



Job description

Job Title	Sanitation Engineer Faecal sludge processing Team Member Water & Sanitation Emergency Response Unit, Mass Sanitation Module (Watsan ERU MSM FSM) Mass Sanitation Module 20 FSM
Classification Level	
Immediate Supervisor's Title	Team Leader, Watsan ERU MSM FSM
Number of Direct Reports	None

Organizational context (where the job is located in the Organization)

Watsan Emergency Response Units (ERU's) are a long-established component of the Federation's disaster response mechanism. There are currently three different specialist Watsan Modules which can be deployed in an emergency including Water & Sanitation Module 15 (treatment and distribution of water), Mass Sanitation Module 20 (provide basic sanitation facilities and initiate hygiene promotion programmes) and Water & Sanitation Module 40 (treatment and distribution of water for larger populations of up to 40,000 beneficiaries). Any combination of these may be deployed to the field. See www.ifrc.org/en/what-we-do/disaster-management/responding/disaster-response-system/dr-tools-and-systems/eru/types-of-eru/ for further information.

The MSM module has a core capacity to provide services according to SPHERE standards to 20,000 people, with options for adding resources for serving larger or more scattered populations.

The module is designed to do the following:

- Provide an integrated response to hygiene and sanitation problems in emergencies, based on public health needs assessment, community mobilisation, and the use of rapid and effective sanitation technology and hygiene promotion.
- Be deployed as a stand-alone response or as part of a broader Watsan and/or health ERU deployment.
- Provide a platform for longer-term rehabilitation and recovery programming as appropriate.

The request for the Watsan ERU MSM will normally be activated by the IFRC Surge Desk in Geneva on the request of a FACT Team Leader and will form part of a larger emergency relief intervention.

Specifically the MSM FSM will perform the following tasks:

- Modify our toilet design to be safer, longer lasting, and easy to empty.
- Procure and train teams on desludging.
- Install faecal sludge disposal capabilities.

Job purpose

To participate in the Watsan MSM FSM ERU operations, ensuring the activities of the Watsan ERU MSM are managed to deliver essential sanitation services to populations in emergency situations, including the construction of emergency latrines and development of community-based latrine programmes, desludging and disposal faecal sludge treatment.

Job duties and responsibilities

1. Coordinate with Team Leader, BDRCS, the WASH Cluster (Inter-Coordination Group), and government authorities to ensure all faecal sludge management activities are in line with government regulations and overall sector strategy.
2. Plan, assess option for treatment and reuse, design, select technologies for the FSM unit adopting an integrated planning approach (preliminary, primary and secondary treatment).
3. Manage the implementation of faecal sludge treatment measures to address priority public health risks, according to the agreed plan, and in collaboration with the team members;
4. Work with BDRCS logs/FACT WASH in country and provide logistic support for local procurement of some of the component of Mobile Faecal Sludge Treatment Modular Unit (MFSTMU).

5. Set up of a small-scale treatment unit as per design agreed upon with global Wash in Emergencies focal point and BDRCS, and government authorities.
6. In the short term and in line with the WASH Cluster (Inter-Coordination group) guidance, carry out lime stabilization of sludge.
7. Support where possible the capacity of the BDRCS through skills development of local RC volunteers and / or BDRCS counterpart if appointed by the National Society.
8. Create a special focus upon training of BDRCS staff and volunteers, and task at least one team member to this end.
9. Assess needs and resources required for the Watsan ERU MSM's FSM unit activities, together with the Team Leader and other team members, and jointly plan appropriate measures.
10. Maintain a list of the FSM equipment asset and their use.
11. In collaboration with the Hygiene Promotion (desludging/PPE/livelihoods), be responsible for the recruitment of team and training on treatment procedures to operate the Mobile Faecal Sludge Treatment Unit.
12. In collaboration with the Lab technical officer put in place a procedure for testing of the effluents as part of the Lab activities with the definition of the main parameters to be monitored. Put in place a system for reporting of data e.g. COD (mg/L) BOD (mg/L), TSS- total suspended solids (mg/L), pH, TAN- total ammonia nitrogen (mg-N/L), Faecal coliform (FC) concentrations (cfu/100ml).
13. Provide recommendation for reuse of the biosolids for example as fertilizer and the recycle of the effluents.
14. Set up procedures for Operation, Maintenance and Monitoring of Faecal Sludge Treatment unit. Operation and Maintenance (O&M) of on-site sanitation systems is essential to ensure safe and efficient sludge management practices.
15. Investigate potential for scale-up depending on results and need.
16. Documentation of the whole treatment process and procedures for hand to National Societies.
17. Ensure that treatment measures implemented by the Watsan MSM FSM ERU (preliminary, primary and secondary treatment) are technically sound.
18. In collaboration with MSM FSM team, manage the operation of on-site treatment areas;
19. Develop a system for record keeping (at all steps of the treatment process management) and develop guidelines for quality control and as well learning purpose.
20. In collaboration with Team Leader and San. Eng. FSM Desludging logistics, support the development of specific SoP for the treatment operations.
21. Set up a monitoring protocol for the MFSMU in order to assess the operation and treatment of faecal sludge. Monitoring the follow: for example volume of faecal sludge treated, sludge characteristics at inlet and outlet, end by product quality, treated wastewater characteristics at outlet.
22. Ensure that treatment measures achieve the qualitative and quantitative aspects of relevant standards (SPHERE standards, Federation Watsan and Health and Care policies, national standards and international guidelines, Inter-Coordination recommendation etc.).
23. Monitor sanitary conditions and progress of the treatment interventions and produce regular, timely and accurate narrative information for inclusion in the Watsan ERU MSM's reports for the FACT Team Leader, Federation, local NS and/or other parties.
24. Work together with the Team Leader and team members to ensure that the various aspects of the Watsan MSM FSM ERU activities are integrated, and that the Watsan MSM FSM ERU activities form part of a coherent public health response. Work together with team members to ensure that treatment activities are planned and carried out with optimal logistics and administrative support.
25. Coordinate plans and activities with other members of the Red Cross/Red Crescent Movement (FACT team, other ERUs, Federation Watsan Delegate, other NS delegates, local NS staff and volunteers etc.) and with other agencies (governmental and non-governmental), as necessary.
26. Plan and manage treatment budgets for the Watsan ERU MSM activities, control/authorize expenditure, together with the Team Leader.
27. Manage day-to-day logistics, administration and personnel (treatment team) activities (including any local contracted personnel / daily labour) in accordance with guidelines on the use of local staff for ERUs and ERU Local Recruitment Guidelines and in collaboration with the Team Leader and other Team Members.
28. Ensure that any Watsan ERU FSM MSM engineering activities are in line with SPHERE standards, Federation Watsan and Health & Care policies and national policies.
29. Investigate and propose relevant operations and projects for response and recovery as well as for medium/long term programmes to the Federation.
30. Ensure that the Watsan ERU MSM FSM activities and resources are implemented and handed over or ended in a

way that promotes local capacities and sustainable operations.

31. Perform any other related duties or responsibilities that may be assigned by the Watsan ERU MSM Team Leader.
32. Ensure understanding of roles, responsibilities, lateral relationships and accountabilities.
33. Establish and ensure effective working relationships with the other delegates, ERUs and RC partners.
34. Ensure effective working relationships with National Society counterparts.
35. Ensure effective working relationships with technical and service departments at regional level and the Federation Secretariat, Geneva.
36. Ensure effective coordination with WASH sector of the Inter Coordination group;
37. Support the team to meet minimum standards for accountability to beneficiaries and considerations of gender and diversity in emergency programming.

Duties applicable to all staff

1.	Actively work towards the achievement of the Federation Secretariat's goals
2.	Abide by and work in accordance with the Red Cross and Red Crescent principles
3.	Perform any other work related duties and responsibilities that may be assigned by the line manager

Position Requirements

Education	Required	Preferred
Post Graduate qualification in Environmental Health Officer, Civil, Mechanical Engineer, or equivalent	X	
Further qualification in water or sanitation engineering or equivalent		X
Experience	Required	Preferred
Proven experience of managing international humanitarian operations in the water, sanitation, hygiene and/or health sectors	X	
Extensive experience of implementing community-based water, sanitation and/or hygiene programmes in the humanitarian sector	X	
Good knowledge and ideally experience in Red Cross work within public health/Sanitation engineering,	X	
Experience in acute emergency responses		X
Previous work in developing countries for a humanitarian aid organisation	X	
Good knowledge and previous experience of working with local partner agencies/ stakeholders with a capacity to provide formal and informal training.	X	
Experience of working as part of a team	X	
Experience of managing and supporting staff	X	
Experience of preparing, managing and monitoring budgets	X	
Financial and narrative report writing experience	X	
Experience of stock management		X
Knowledge and Skills	Required	Preferred
Understanding of and commitment to Red Cross Fundamental Principles and mandate	X	
Strong interpersonal skills	X	
Flexibility/adaptability	X	
Proactive/solutions focused	X	

Strong team working skills	X	
Ability to prioritise/work under pressure	X	
Strong planning/organizational skills	X	
Ability to work cross culturally/sensitivity to diversity	X	
Understanding of processes and minimum standards to ensure accountability to beneficiaries and issues relating to gender and diversity	X	
Integrity	X	
IT literate to intermediate level (MS Word, spreadsheets, email) and basic knowledge of databases.	X	
Valid international driving licence (manual gears)	X	
Ability to manage resources		x
Ability to network/co-ordinate	X	
Reporting writing skills	X	
Ability to manage self and others	X	
Languages	Required	Preferred
Fluently spoken and written English	X	
Good command of another IFRC official language (French, Spanish or Arabic)		X
General	Required	Preferred
In good mental & physical health – ability to cope with the demands of emergency relief situations	x	
Availability		
Minimum 1 month call period per year Available within 24 – 48 hours' notice to deploy	x	

Team leaders will also need to complete the following training before becoming ERU deployable:

- Mass Sanitation ERU training courses: foundation and specialist
- IMPACT course
- Security Management Course
- Red Cross 'Principles & Rules of Humanitarian Assistance' online training