

# Technical option for faecal sludge management during emergency

Kutupalong camp has natural terrain with uphill and canal flowing through the downhill. The forced Myanmar inhabitants have their shelters mostly at different layers of the uphill that make difficult for desludging toilets pits. However, considering immediate to short term solution of excreta management, this technical option presents relating to emptying, collection, transport and safe disposal of excreta considering local context of such emergency at Kutupalong, Cox'sBazar. Workers involved in the emptying, collection, transport and safe disposal of excreta are provided with Personal Protective Equipments (PPE) to protect their health and safety issue.

## Emptying

- Mechanical Sludge Pump would be used specially designed for pumping excreta.
- The pumping rate would be approximately 30 L/min. The sludge in the pit toilets would be expected to be mostly liquid sludge (more than 90% liquid).
- The Sludge Pump would be placed into the containment structure (Pit toilet) and sludge would be pumped into inlet of transfer station.
- The Sludge Pump would be effective to cover at least 30 ~ 50 Meters radius around the transfer station.

## Collection

- Sludge would be collected at the transfer station (tank) from the pit toilet emptied by sludge pump.

## Transportation

- Transfer operations should not result in the spillage of excreta.
- From outlet of transfer station, the sludge would be transported by gravity to constructed wetland.

## Safe Disposal by Constructed Wetland

- Bottom of any constructed wetland will be at least 1.5 meters above the groundwater table and 10 meters away from nearby tubewell as per SPHERE guideline
- The constructed wetland would be planted with locally available plants like *Cana* or *Phragmites* species of plants. However, the plants may take few weeks to grow and live to adapt local environment.
- The size of the constructed wetland depends on availability of land at the downhill side.
- The liquid portion would be further treated using sand filtration media.

### For any query:

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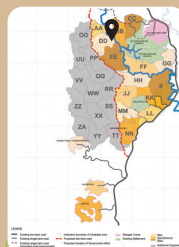
Technical Adviser

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### Site location

**DD Block**

(Near to IOM hospital)



**WaterAid**