The Empower Sanitation Platform

The Empower is the Center for WaSH-AID’s sanitation platform for modular and scalable onsite liquid and solid waste treatment systems for households or communities. The systems are non-sewered and do not require piped-in water or a sewer connection and use minimal electricity.

In the current configuration, liquid and solid waste separates in a settling tank. Leveraging the Reclaimer technology, electrochemical disinfection and active filtration convert blackwater to disinfected, non-potable water that can be reused for flushing, washing or irrigation. Solids are treated through anaerobic digestion after being pumped from the settling tank.

Key Features

- Scalable from household to public settings.
- User options developed through four year in-field household and community design studies.
- Liquid processed via active filtration and electrochemical disinfection, meeting ISO 30500 discharge standards.*
- The platform is compatible with pedestal and squat plate styles. Independent solid and liquid processing modules can be paired with other technologies, such as the S.H.E. - a standalone menstrual waste management unit - to create a suite of sanitation products.

*Phosphorus <20 ppm in influent and effluent
Field-Testing
The Empower sanitation platform is undergoing field-testing in Coimbatore, India, and in Durban, South Africa.

The Empower sanitation platform was updated in India in February 2019 to include the Reclaimer technology. The Reclaimer is treating blackwater from up to 20 users per day.

Partners

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