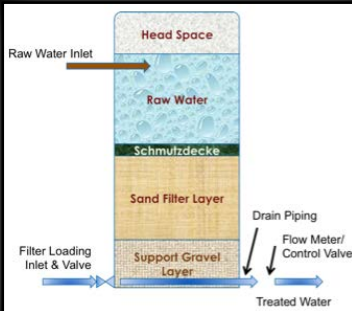


Proprietary Potable Water Filtration

SSF System

BWE

For over 150 yrs. Slow Sand Filtration has been an extremely efficient method for removing microbial contamination and will usually have no indicator bacteria present at the outlet. SSF's are effective in removing protozoa and viruse.



Working Principle

Freshwater flows through a sand-bed with a thin layer populated by microorganisms. The water gets purified through various biological and physical processes.

Modular Capacity

Easily expandable due to small land requirements. Up to 500,000+ GPD (gallons per day) and as low as 50 GPD.

Performance

Removes turbidity, protozoa, pathogens, and viruses. 100–300 liters per hour per square meter of surface.

O & M

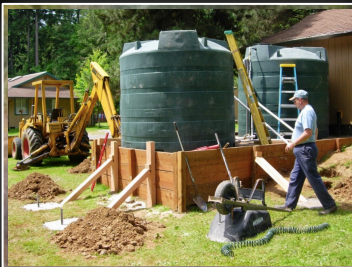
Very low maintenance. No moving parts or chemicals.

Main Strength

Simplicity; can be constructed, operated and maintained by the community; often no need for pumps/electricity.

Reliability

Very high if properly operated and maintained.



Slow Sand Filtration

In recent years, there has been a tendency to assume that slow sand filtration is an old-fashioned method of water treatment that has been completely superseded by rapid-gravity and other high-rate filtration techniques. This idea is definitely mistaken. Under suitable circumstances, slow sand filtration may be not only the cheapest and simplest but also the most efficient method of water treatment. Its advantages have been proved in practice over a long period, and it is still the chosen method of water purification in certain highly industrialized cities as well as in rural areas and small communities. It has the great advantage over other methods that it makes better use of the local skills and materials available in developing countries, and it is far more efficient than rapid filtration in removing bacterial contamination.

Advantages for Rural Applications

- Simple filtration technology,
- Can use local materials and labor,
- Does not need constant operator attention,
- Minimal power and chemical requirements,
- Close operator supervision is not necessary,
- Reduces cloudiness, and organic levels,
- Low construction and operation cost,
- Excellent removal of pathogenic organisms,
- Long design life,
- Inexpensive and easy to construct,
- Filters enough water for a community,
- Good removal of turbidity,
- Reduces bacteria,
- Low energy consumption,
- Minimal sludge handling problems,
- Minimal sludge handling,