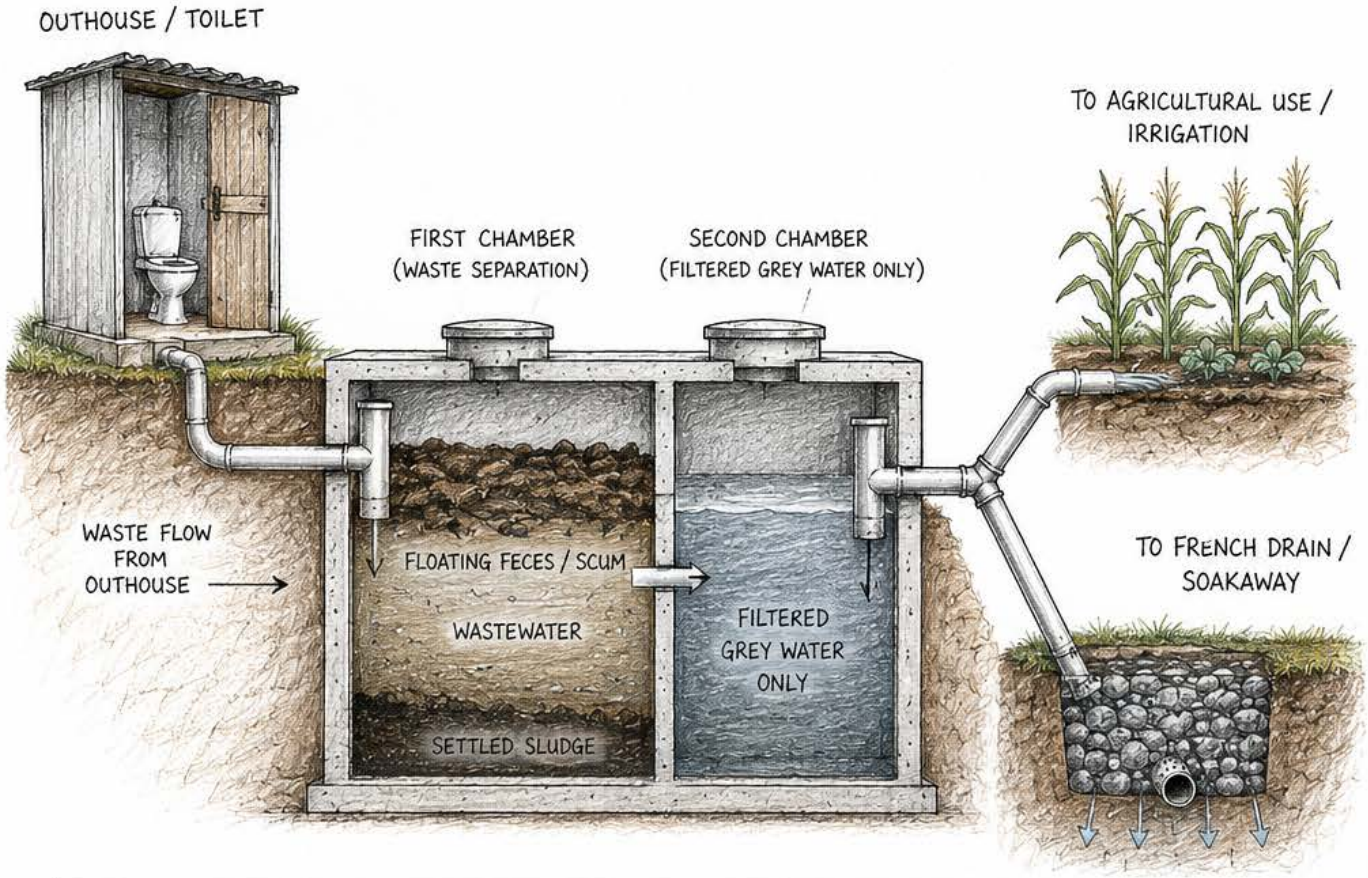
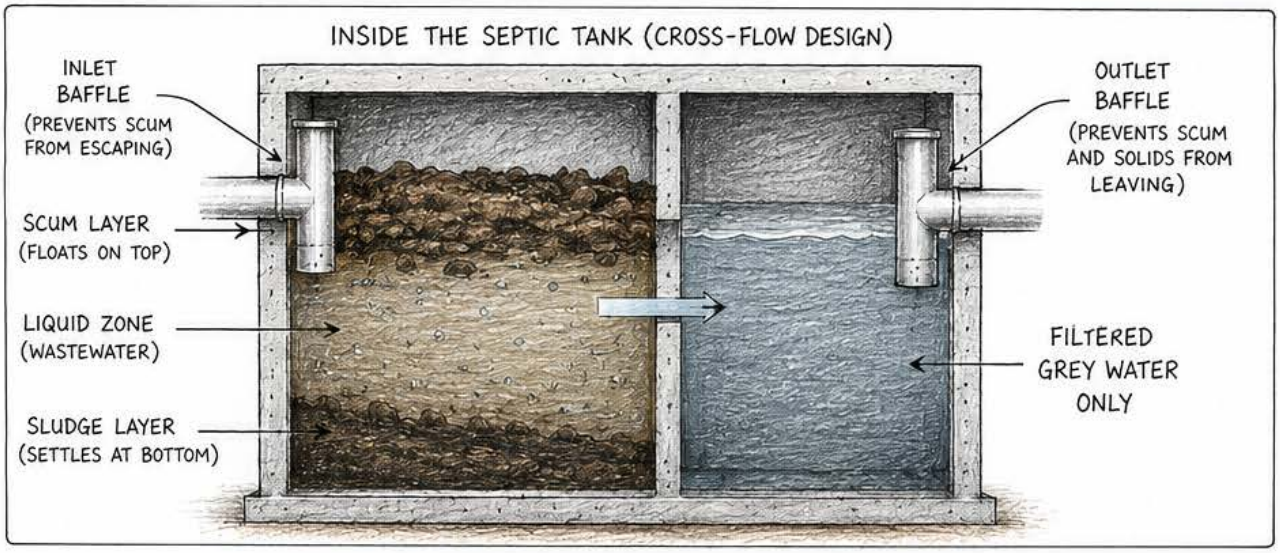
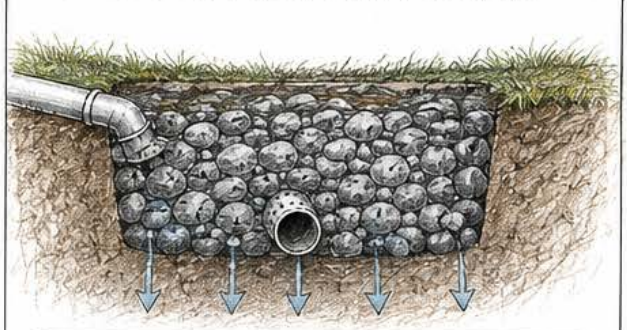




- Filtered grey water can be used for irrigation and agriculturall purposes.
- Supports plant growth and improves food production.



- Filtered grey water flows into the French drain.
- Slowly seeps into the soil.
- Helps prevent surface pooling and flooding.

Dr Water Loo — Large Septic Systems

SANITATION IS DIGNITY

LARGE-SCALE DOSAGE SIZING TABLE

Unlike small household systems, commercial, school, or multi-family community septic tanks require scaled biological treatments to effectively break down high daily waste volumes. Calculate your tank capacity and use the scaling matrix below:

SEPTIC TANK CAPACITY (LITRES)	RECOMMENDED DOSAGE (WHITE WHITE + BROWN PILLS)	TREATMENT FREQUENCY
3,000 L to 5,000 L	9 to 15 Treatments (18 to 30 Tablets total: 9-15 White + 9-15 Brown)	Every 10 to 14 days
5,001 L to 10,000 L	15 to 30 Treatments (30 to 60 Tablets total: 15-30 White + 15-30 Brown)	Every 10 to 14 days
10,001 L to 15,000 L	30 to 45 Treatments (60 to 90 Tablets total: 30-45 White + 30-45 Brown)	Every 10 to 14 days
15,001 L to 20,000 L	45 to 60 Treatments (90 to 120 Tablets total: 45-60 White + 45-60 Brown)	Every 10 to 14 days

FIELD APPLICATION & DILUTION GUIDE

STEP	FIELD APPLICATION & DILUTION PROCEDURES FOR LARGE SYSTEMS
1	**Calculate Tank Capacity:** Identify the exact capacity of the large septic tank in Liters. Apply the standard dosage scaling of **3 treatments (6 tablets: 3 white + 3 brown) per 1,000 Liters** of capacity.
2	**Prepare Large Water Volume:** Measure 10 to 20 Liters of clean water in a large bucket. For massive systems, using more water ensures even distribution of the dissolved microorganisms.
3	**Keep Covered and Crush:** Keep the calculated number of tablets inside their protective plastic packaging and thoroughly crush them using a heavy stone or tool to contain the active powders.
4	**Dissolve and Mix:** Open the protective plastic sachets and empty all the crushed white (biological payload) and brown (growth fuel) powders into the water bucket.
5	**Stir to Uniform Mixture:** Stir the bucket thoroughly with a clean stick or paddle for 2 to 3 minutes until all powders are fully dissolved and suspended in a uniform liquid solution.
6	**Pour or Flush:** Pour the treatment mixture directly into the primary chamber's cleanout pipe or inspection manhole. Alternatively, flush the mixture down multiple connected household toilets to distribute it.
7	**Sustain Aerobic Balance:** Repeat this calculated dosage every 10 to 14 days. Consistent application maintains the active aerobic microbe colony and prevents anaerobic sludge from reforming.

CHEMICAL SANITIZER HAZARD WARNING

CRITICAL WARNING: Do not use harsh chemical cleaners, industrial acids, bleach, or chlorine disinfectants in any treated septic system. These toxic chemicals destroy the living aerobic microorganisms, completely arresting the biological breakdown of waste and leading to rapid sludge build-up and structural overflows.

Dr Water Loo — System Design & Mechanics

SANITATION IS DIGNITY

CROSS-FLOW SEPTIC TANK DESIGN

Anaerobic Flow Failure: In standard large-scale, stagnant septic tanks, wastewater remains highly oxygen-deprived (anaerobic). Slow-acting anaerobic pathogens dominate, producing thick organic sludge at the bottom and a hardened crust layer (scum) on top. Over time, a thick, slimy anaerobic layer forms on baffle walls and outlet ports, restricting flow and leading to pipe blockages, noxious odors, and catastrophic overflows.

Aerobic Cross-Flow Digestion: Introducing Dr Water Loo's organic two-tablet treatment shifts the biological balance. The white tablet releases lab-propagated aerobic microorganisms alongside localized oxygen bubbles, initiating a "microscopic turf war" that neutralizes odor-causing anaerobic pathogens. The brown tablet delivers critical micronutrients and organic stimulants to sustain rapid microbial growth.

Multi-Compartment Flow Dynamics: Solid waste entering the first chamber is digested and separated. Liquid wastewater flows cleanly beneath the inlet baffle into the second chamber as filtered grey water, while the heavy solids are digested. The resulting effluent is clear, free of organic slime, and ready for environmentally safe disposal or irrigation, completely avoiding the high cost and hazards of manual tank pumping.

LARGE SEPTIC TANK TECHNICAL SIZING SPECS

For community facilities and municipal clinics, proper tank construction is vital for successful cross-flow gravity separation. The following table highlights standard physical sizing guidelines:

TECHNICAL SPECIFICATION	5,000 LITRES CAPACITY	10,000 LITRES CAPACITY
Structure Material	Reinforced Concrete / Pre-cast	Reinforced Concrete / Cast-in-situ
Tank Length (Internal)	3.20 Meters	4.50 Meters
Tank Width (Internal)	1.50 Meters	1.80 Meters
Liquid Operating Depth	1.40 Meters	1.60 Meters
Freeboard Headspace	300 mm (minimum)	300 mm (minimum)
First Chamber Volume	3,333 Litres (2/3 of total)	6,666 Litres (2/3 of total)
Second Chamber Volume	1,667 Litres (1/3 of total)	3,333 Litres (1/3 of total)

Dr Water Loo — Recycling & Community Health

SANITATION IS DIGNITY

ECOLOGICAL GREY WATER DRAINAGE PATHWAYS

A core benefit of Dr Water Loo's biological treatment is the transformation of dangerous, pathogen-filled sludge into a clear, nutrient-rich liquid effluent. This water can be channeled into two highly sustainable environmental pathways:

AGRICULTURAL IRRIGATION RECYCLING

OPTION 1: ABOVE-GROUND AGRICULTURAL USE

Through a dedicated outlet valve at the top of the septic tank or a drainage tap at the bottom, the filtered grey water can be pumped directly onto agricultural lands, corn crops, or vegetable gardens. This water is rich in dissolved nitrogen and organic phosphorus, acting as an exceptional, cost-free biological fertilizer to boost crop yields.

STRICT CRITICAL WARNING: Treated grey water is strictly non-potable. It is suitable only for above-ground agricultural irrigation and **must NEVER be consumed** by humans or animals under any circumstances.

FRENCH DRAIN & SOAKAWAY DISPOSAL

OPTION 2: SOAKAWAYS & FRENCH DRAINS

Alternatively, grey water can be directed to a standard gravel-filled French drain or soakaway trench. Active aerobic microbes carried in the water continue to consume organic matter on the gravel surfaces and surrounding soil. This biological action dissolves the sticky slime layer that typically clogs soakaways, ensuring natural water absorption, eliminating odors, and preventing surface pooling and backyard flooding.

COMMUNITY SICKNESS PREVENTION & PUBLIC HEALTH

Pathogen Vector Control: Stagnant anaerobic septic systems breed flies, mosquitoes, and maggots, which spread critical waterborne pathogens. Active aerobic microbial digestion completely eliminates the breeding ground and odors within 3 days. This direct sanitation management reduces the immediate community risk of **cholera, childhood diarrhea, roundworms, and bladder infections**.

Groundwater and Borehole Protection: Standard unmanaged septic tanks leak harmful pathogens into the shallow groundwater table, contaminating nearby communal drinking water wells. Dr Water Loo neutralizes the waste biologically, creating a safe barrier to shield communal boreholes and rivers from fecal contamination.

Factual Validation (2023 Sierra Leone Study): A public health pilot study conducted by the Sierra Leone Ministry of Health and Sanitation across 267 community households verified a **83% high satisfaction rate** and reported that **0% of treated toilets required physical desludging** after initiating the biological treatment.

Dr Water Loo is an organic, 100% natural microbial sanitation treatment manufactured by SH & MA Trading in Johannesburg, South Africa.
For technical support or corporate partnership inquiries, please contact:
Email: info@drwloo.com | Website: www.drwloo.com | Corporate Slogan: *"Sanitation is Dignity"*