

Rainwater tank care: problems and how to correct them

Problem	Cause	Determined by:	Ways to prevent	Maintenance
1. H ₂ S strip (low cost) test result positive	Microbial growth (bacteria) in the tank.	<ul style="list-style-type: none"> Monthly test - using H₂S strip (low cost kit) – <i>photo below</i> shows test results. 	Pre-filter or leaf excluders (screens) installed to keep out debris, mosquitoes, rats, etc which decompose and pollute the water.	<ul style="list-style-type: none"> Disinfect tank with 5ml of unperfumed Jik (12.5% sodium hypochlorite): 150-250 ml Jik per 5000 litres rainwater, <u>once a term</u> if gutters are dirty. Trim overhanging trees and clean gutters. If <i>not</i> disinfected, water is for <i>non-human</i> use.
2. Sludge in the tank	Soil particles from the air.	<ul style="list-style-type: none"> Check gutters and/or roof for signs of soil 	Pre-filter or leaf excluders (screens) installed.	<ul style="list-style-type: none"> Clean the tank every 2-3 years. Clean gutters and adjust to ensure they drain well.
3. Mosquitos or 'worms'	Stagnant water inside pipe bends or dirty gutters where insects (mosquitoes, midges, etc) lay their eggs.	<ul style="list-style-type: none"> Check water for insect larvae (like tiny worms). Look for mosquitoes flying around tank. 	Pre-filter installed. Seal all tank openings to keep insects out.	<ul style="list-style-type: none"> Place screening filters to prevent mosquitoes entering the tanks (like a fine kitchen sieve). Clean gutters and adjust to ensure they drain well.
4. Faecal matter on roof or around the tank	Bird and animal droppings, decomposing leaf litter.	<ul style="list-style-type: none"> Check gutters and/or roof for signs of bird droppings. Monthly test - using H₂S strip (low cost kit) – <i>photo below</i> shows test results. 	Prevent openings which allow animals or birds into the tank. Trim overhanging trees which encourage birds to sit over the roofs. Pre-filter installed.	<ul style="list-style-type: none"> Trim branches of overhanging trees. Clean roof and gutters and adjust gutters to ensure they drain well. Check that pre-filter is undamaged/intact. Check all tank seals. If tank is contaminated: empty it and clean, or disinfect with non-perfumed Jik.
5. Smelly water due to decomposing matter	Degrading vegetation or soil in the tank. Animals drowned in tank. Light entering the tank causing algal growth.	<ul style="list-style-type: none"> Check gutters and/or roof for signs of & leaves. Check in tank for dead animals. Check if trees overhang the tank and/or roof. 	Pre-filter or leaf excluders (screens) installed. Gutters clean and drain well. No overhanging branches. No light is entering the tank.	<ul style="list-style-type: none"> Empty tank and clean it with non-perfumed Jik (12.5% sodium hypochlorite). Clean the pre-filter or leaf excluder. Clean gutters and adjust to ensure they drain well. If tank is full of leaves, clean the tank.
6. Coloured water	Degradation of painted roofs, tiles. Resuspended sediment.	<ul style="list-style-type: none"> Check if tank water colour is difference from normal, or if there are small white flakes. Check if there is slime on inside of the tank. 	Regular upkeep of roof.	<ul style="list-style-type: none"> If roof is degrading, repaint with lead-free paint. Remove sediment from the tank. If tank is contaminated: empty it and clean, or disinfect with non-perfumed Jik.

Photo of H₂S strip test results:

Pale/yellow = Negative result
(indicates there are no bacteria)



Dark/black = **Positive** result (indicates bacteria are present; do NOT drink water).

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Rainwater tank pre-filter info: www.ru.ac.za/environment/resources/water/rainwater