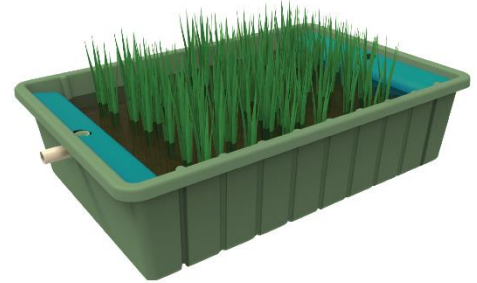


Aerated Wet Cell Treatment System-MAINTENANCE REQUIREMENTS

Minimal maintenance is required for a well-designed wet cell. However gloves should be worn when undertaking maintenance, and avoid contact with effluent if you are feeling unwell or have cuts on your hands.



1. **Blockages in Inlet/Outlet Structures.**

Blockages should be rare if large rocks are placed around the inlet and outlet structures. When the macrophytes are growing well it may be necessary to check that their roots are not blocking the inflow and exit pipes. Effluent on the surface of the reed bed that has ponded, or an overflowing septic or greywater tank, are good indicators that a blockage has occurred somewhere in the system.

2. **Effluent Filter.**

Effluent Filter are required to be fitted to the outlet of septic and greywater tanks to reduce the concentration of suspended solids entering the reed bed. These filters can be easily cleaned by the system owner. This should be checked periodically and cleaned when necessary. Once again gloves need to be worn when undertaking this process.

3. **Pump Out**

It is important to have the greywater/septic or AWTS tank periodically pumped (approximately 3-5 years as per your recommended system this may vary as per volume of effluent treated ie the number of people using the system) out to remove accumulated sludge and scum, in order to minimise the carry-over of excess solids into the wet cell. The carry-over of solids will potentially clog the gravel in the wet cell.

4. **Chlorine Tablet For Discharge Above Ground**

For systems that discharge above ground the chlorine applicator in the pump out chamber must be checked and replenished with 72mm chlorine tablets (Trichloroisocyanuric acid) at 3 monthly intervals.

5. **Mini-Trenching or Sub-surface Drip Irrigation Systems & Back-flushing the Lines.**

If you have a mini-trench or sub-surface drip irrigation system (pressurised emitters) then you will need to flush the lines every 6 to 12 months with chlorine to remove the build-up of slime on the inside of the pipe work. Chlorine tablets can be dropped into the pump well before back flushing the lines to assist in flushing process.

6. **Harvesting**

This is not critical and is primarily conducted for aesthetic purposes (to remove dead leaf/stem material and promote fresh regrowth). Prior to harvesting check on the variety and recommendation of the supplier of the suggested frequency and best time to harvest. Due to the variety of macrophytes being used in wet cells, there are several harvesting techniques that can be used. The harvested material should be removed from the wet cells and can be used for garden mulched. The majority of wetland plants undergo deterioration during the winter months, when the plants stop growing and the above-ground stems die-back. Prior to this, the plants translocate nutrients from the leaves and stems to the rhizomes. Thus, in order to maximise the amount of nutrients removed via harvesting, the aboveground plant material should be removed before the bulk of nutrients have been redistributed to the below-gravel parts. Some experts recommend harvesting in late spring and then again in early to mid-autumn. The rhizomes will send out new shoots, usually when the weather starts to get warmer. Harvested vegetation can be used as mulch on the garden or composted. Mulch can be a valuable source of organic carbon to provide food for the bacteria that are responsible for nitrogen removal in the reed bed.

7. **Holidays**

If all the occupants of the dwelling will be on holidays for an extended period (perhaps longer than 8 weeks) it will be necessary for the wet cells to receive water. A tap can either be left dripping or a friend can use the system. However, in high rainfall conditions it is unlikely that this should be of concern during the wet season, as rainfall may provide adequate water during this time.

8. **Two or More Reed beds in Parallel** Where two or more reed beds exist in parallel, one can be decommissioned to allow maintenance to be undertaken.

9. **Signage**

Check that all sign warning of the presence of waste water is still installed to warn people of the danger of waste water.

