Inspection & Maintenance of GRAF Underground Stormwater Tanks

The owner of the structure is responsible for maintenance.

For small soakaways/attenuation tank to individual houses, the only necessary maintenance of the system is to keep all gullies clear of debris such as leaves.

For large installations or where the receiving waters are environmentally sensitive, a system of regular inspections should be established to prevent siltation of the system which, if allowed to develop could reduce effectiveness. They should also be inspected after every major storm event.

It is recommended that silt traps, filters or other means of reducing the amount of silt and solids entering the system to a minimum, should be incorporated into the pipework at the inlet of the tank. There must be a maintenance plan that ensures regular cleaning of the trap to ensure correct performance.

For all flow control devices, it is sensible to incorporate access (via a manhole or similar) to the location of the pipe entry, orifice or vortex control. This will enable easy removal of any blockage. The orifice itself may be protected by a debris screen.

Paved surface areas above an installation should be inspected at the same time to ensure the units continue to provide the required structural support.

Silt traps prior to inlet pipework should be routinely inspected and cleaned out to minimise debris reaching the tank. It is important to prevent construction silt from entering the tank structure.

It is recommended that any system be inspected no less frequently than at monthly intervals for the first 3 months and thereafter at 6 monthly intervals. In addition, it is suggested that the installation is inspected immediately following the first storm event, whenever this should occur post installation.

Individual maintenance schedules should be drawn up using the information obtained from the initial inspections. It should also be noted that more regular inspections may be required should the catchpit(s) fill more frequently and/or if the initial inspections reveal that maintenance/cleaning will be required more regularly than at six month intervals.

OPERATION & MAINTENANCE REQUIREMENTS

Regular inspection and maintenance is required to ensure the effective long-term operation of below ground modular storage systems. Maintenance responsibility should be placed with a responsible organisation. Maintenance requirements for modular systems are described in Table 1.0 below.

Specific maintenance needs of the system should be monitored, and maintenance schedules adjusted to suit requirements.

Table 1.0 Modular systems – operation and maintenance requirements

Maintenance schedule	**Required action**	**Recommended frequency**
Regular maintenance	Inspect and identify any areas that are not operating correctly. If required, take remedial action.	Monthly for 3 months, then six monthly
	Debris removal from catchment surface (where may cause risks to performance)	Monthly
	Where rainfall infiltrates into blocs from above, check surface of filter for blockage by silt, algae or other matter. Remove and replace surface infiltration medium as necessary.	Monthly (and after large storms)
	Remove sediment from pre-treatment structures, i.e. Silt Trap/Catchpit Manholes.	Annually, or as required
Remedial actions	Repair/rehabilitation of inlets, outlet, overflows and vents	As required
Monitoring	Inspect/check all inlets, outlets, vents and overflows to ensure that they are in good condition and operating as designed.	Annually and after large storms