

Replacement of hollow roof support structures

Annual Tank Inspection and Disinfection

Department of Health released an “action required alert” in relation to the use of uncapped PVC-U pipes (or similar) within cold water as a support structure for the lid as it is likely to lead to stagnation and harbouring of harmful micro-organisms.

Department of Health Findings:

Contaminated water supplies have been discovered in cold-water storage tanks were by TVC readings for *Pseudomonas* readings were in excess of 500cfu/100ml (after 72-hour incubation) TVC readings fell to 0cfu/100ml immediately after cleaning and chlorinating the tanks.

Construction of the tanks utilised vertical 4-inch PVC-U pipes to support the lid, held in position by strategically placed cross members.

The pipes were sawn to length with the top supporting the lid and the base sitting directly on the tank floor. Since the ends of the pipes were not sealed, water was able to seep into and out of the pipes as the tank water level varied, providing near stagnant conditions for micro-organism growth while at the same time preventing effective disinfection. When the tank was drained and a pipe dislodged, detritus spilled out, further supporting the conclusion that this was almost certainly the source of the contamination.

Replacing the pipes with solid supports proved successful in eliminating the source of contamination.

The proposed action from Department of Health:

If there is any reason to support a water tank as a source of micro-organism contamination, it should be inspected for uncapped and semi-submersed hollow pipes (or similar) used as a support structure. These should be removed to eliminate possible contamination and replaced with ‘clean’ solid supports, i.e. ones without cavities, crevices or details allowing water to stagnate and harbour micro-organisms.

The Department of Health clearly stated that action was required to inspect tanks for hollow pipes used as a support structure and replace with solid structures as the preferred option.

Purewater Environmental Services can:

- Carry out a full tank inspection and report, detailing any faults potential issues with the cold water storage tank
- Supply only of solid structured roof support structures
- Supply and installation of solid structured roof support structures
- Clean and chlorination of the cold-water storage tank and associated pipework.
- Microbiology analysis - water sampling via UKAS approved laboratories
- Building flush and mains injection

Before showing hollow roof support structure

After showing replacement roof support structure

