

Clarklyhill DSR Microbiological Failures 21st July 2025

Event No. 15968

Event Category: Significant

Clarklyhill DSR has had a series of microbiology failures since it was returned to service following refurbishment in June 2024. The first failure on 24 September 2024 (for both coliforms and E. coli) was attributed to the sample line, which was not up to the current specification. This was replaced, and further sampling demonstrated a reduction in cell counts. The roof of the tank was not assessed due to the need for a fall arrest system.

However further coliform failures followed on 13 November and 11 December. Local staff witnessed rain being blown towards the vents at the top of the tank wall prior to these failures, and a flood test revealed ingress points along the roof. Remedial action was scheduled for the end of summer to prevent supply problems to local properties.

DWQR audited the site in June 2025 and recommended that interim measures be put in place until the SR could be removed from service for repair.

A further failure was recorded on 21 July 2025 for coliforms and E. coli, and at this point the SR was taken out of service.

The microbiology failures were likely to have been caused by ingress to the service reservoir through the air vents and the wall head joints.

The attribution of the first E. coli failure to the sample line (with no consideration of the potential for ingress) is insufficient, as it does not explain the source of the E. coli. The first

flood test undertaken (in June 2024) was inadequate: the tank is an above-ground structure with a fragile roof which is difficult to access. Images taken at the time of the flood test demonstrate that it did not robustly test the asset integrity, with water hardly reaching the roof of the tank.

Before returning the SR to service after the first failure, a further flood test was not undertaken: only an external inspection, which did not include examination of the roof or upper structures (where the areas of ingress are) due to the need for a fall arrest system. This should have been provided. It is my view that the tank condition was not thoroughly investigated as the root cause was attributed to the sample line, and so it was not considered a priority.

The incident was caused by multiple failures as a result of Scottish Water not dealing with the known risk promptly. I am very critical that the asset was not removed from supply and kept isolated when the first failure was recorded. In my opinion, leaving the service reservoir in service was a clear risk to public health.

The event has been categorised as significant. Scottish Water has identified two actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made one additional recommendation.

