

Technical Inspection of Scottish Water Distribution System

Thainstone Service Reservoir, East Region

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Summary of Inspection

Overall Summary

The audit was carried out on aspects of the operation and maintenance of Thainstone Service Reservoir in the Inverurie area. This Service Reservoir failed microbiological standards in two samples during 2018 with the asset condition attributed to being the root cause in both cases. There are however very few water quality consumer contacts arising from within the supply area. The tank had been removed from service to allow remedial works to be carried out and it is reassuring to see concerns over ingress to the Service Reservoir being addressed. The audit showed however that controls over the operation and reporting of boundary valves to be deficient and this must be addressed.

Number of Findings:

2

Quality of Water

There have been two microbiological failures at Thainstone Service Reservoir during 2018 with the asset condition attributed as being the root cause. There are very few water quality consumer contacts arising from within the supply area.

Asset Robustness

At the time of audit, SW's Contractor had possession of the site to carry out remedial works on the Service Reservoir. The tank had been removed from service and work had been undertaken internally, externally to the roof and the wall head joint exposed.

The site in general, appears well maintained with good access and a good stock proof fence all round. It is clear from the condition of the concrete and construction of the access upstands, that there are conditions for ingress to occur.

Operational Practices

Weekly visits by Ops to check site. The tank is thought to have been cleaned in 2013 although the report provided details only an R.O.V inspection. Replacement of a PRV on 29 October 2018, has allowed the SR bypass to be operated and the single cell tank to be drained for inspection.

Management of Risk

Telemetry communications log demonstrates an effective service at the site showing alarms and interrogation polling most recently associated with management of summer dry spell.

The requirements for management of boundary valves were not fully met with the need to maintain valve tags and foaming being deficient.

Recording Information

Information on the water supply system is maintained in the Geofield GIS on field laptops. All NSO's etc. have access to the up to date information on layout and valve status.

Water Safety Plan

There is no reference within the safety plan of any risks of contamination through ingress at this site illustrating a deficiency in meeting their purpose. The integrity of the tank is a known concern and was identified in the 2013 Service Reservoir inspection report meriting inclusion.