

Incident Summary

Shapinsay Service Reservoir Restrictions on water use 13 September 2017

DWQR Inspector:
William Byers

Event No. 8809

Event Category: Serious

A sample taken from Shapinsay service reservoir (SR) on the 13 September 2017 failed the microbiological standards with 3 Coliforms and 1 *E.Coli* present. On receipt of the laboratory report, additional samples were arranged to be taken from the service reservoir the following day, 16 September. Following discussions with the Consultant in Public Health Medicine (CPHM) on the morning of the 16 September, a decision was however taken to issue a "Do Not Drink, Do Not Cook" notice and bottled water was shipped to Shapinsay for distribution to all consumers. An Incident Management Team (IMT) was also formed to coordinate and agree actions and roles during the incident. As a precaution, a decision was also taken to isolate the SR from the water network to supply directly from the mainland and this was carried out by 6pm. Distribution of the restrictions on water use notice was completed by 10pm.

Confirmation was received on the 17 September that all five additional samples taken following the initial failure had met microbiological standards and it was agreed to lift the restriction on use. End of restriction notices were provided to all customers by 8:30pm. The SR was refilled on the 18 September and put back into supply the following day, after confirmation that the samples that were taken prior to the SR being isolated were clear.

Scottish Water's investigation has failed to identify conclusively, the root cause of the sample failure and has identified two issues. One concerning the handling and storage of sample bottles and the possibility of sample contamination and the other of the integrity of the Service Reservoir itself. Their investigation of the service reservoir has identified a number of concerns with the tank structure that may permit surface water ingress or insect or other contaminants into the water storage space. Reference to rainfall records highlights heavy rain in the locality in the days prior to the sample being taken, giving strength to this being the possible key issue. I visited the site following the incident, carrying out an audit of the tank and made a number of observations on integrity issues. These being of sufficient concern to expect priority attention by SW.

The event has been categorised as serious. Scottish Water has identified six 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.

