

Incident Summary

North Hoy Supply Zone Restrictions on water use 9th March 2021

DWQR Inspector:
William Byers

Event No. 11600

Event Category: Significant

A low level alarm on the clear water tank (CWT) at the treatment works on 9th March, alerted operators to a problem. Investigations found there to be no issues with treatment processes but of increased demand in the network and later, to a suspected burst on the supply extending to Graemsay. Through step testing, this was narrowed down to the section of subsea pipe between the islands and closing the line valve on the North Hoy side allowed the CWT to recover. It became necessary however to issue bottled water and establish a temporary water storage tank on Graemsay to provide alternative supplies to consumers there. Two teams worked on the shores of both islands to excavate the ends of the subsea pipe for investigation and it was discovered that pipe couplings at the North Hoy anchor block had failed through corrosion. A precautionary 'Boil Notice' was put in place for consumers on Graemsay at 11:00am on 11th March prior to the temporary tank being brought on line. The pipeline repair was completed at 6:00pm that day and the distribution system recharged, flushed and sampled. The boil notice however remained in place until there was confirmation that satisfactory microbiological samples had been confirmed. Due to misunderstandings, communications and transport difficulties, it transpired that samples were not uplifted and further sampling was required to be undertaken. Ultimately, the boil notice remained in place until 6:00pm on 17th March. There were no failures of water quality standards in any samples analysed.

The cause of this incident is clearly the failure of the pipeline couplings at the subsea pipe anchor point. It is disappointing however, that this situation has arisen so soon after the similar event and incident in 2015. It is evident from my investigations that the learning points identified in my assessment of that incident had not been carried through and had this been done, it is likely that this recent incident would not have occurred. I will require particular evidence from Scottish Water in this case, that all actions and recommendations have been fully implemented to ensure the benefits are achieved for consumers.

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