

Incident Summary

Rawburn SZ
Discolouration
10th March 2021

DWQR Inspector:
Matt Bower

Event No. 11605

Event Category: Significant

Having been postponed several times, planned work to divert a water main at the new Reston railway station took place on 10 March. This involved valve operations on 350mm, 8" and 4" mains. Due to concerns that a large area downstream of the work (up to 8000 people) could experience loss of supply, filled tankers were on standby to augment supplies by pumping directly in to the main. Following the work, the main was recharged carefully in accordance with Scottish Water procedures. A risk of discolouration was acknowledged by Scottish Water, and a warning included in most of the letters sent to consumers. Flushing was undertaken in the distribution system. The following day, complaints of discoloured water were received from the area downstream, especially Burnmouth and Coldingham initially, spreading to Eyemouth by 13th March and subsiding on 14th March. Sampling showed high levels of iron.

This was planned work on relatively large diameter mains in an area known to be at risk of discolouration. Staff completed the appropriate impact assessment form and received approval to commence work. Turbidity was monitored downstream of the work until the morning of the following day, however contacts began to be received in the afternoon of that day from areas downstream such as Eyemouth. Flow trends show that flow disturbances were occurring in the main to Eyemouth well into 11th March. Analysis of samples taken show that the discolouration was mainly composed of iron; this is likely to arise from corrosion deposits in the water main as well as residual iron arising from the water treatment works at Rawburn where it is used as a coagulant.

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 two additional recommendations.