

Incident Summary

Balmore C5 North, Woodburn WSZ Discoloured water 11 June 2019

DWQR Inspector: Colette Robertson-Kellie

Event No. 10723

Event Category: Significant

At 10:35 on 27 November 2019, Scottish Water shut down a 10 inch main to install a connection to a new housing development and to fit a hydrant. At 16:10 the water was turned back on and the hydrant was flushed to remove discoloured water. After two hours of flushing the supply was running clear, so the valves were returned to their normal status, and staff left the site at 18:10. At 18:57, the Customer Engagement Centre (CEC) received the first of a number of contacts from consumers reporting discoloured water, and at 20:30, the CEC contacted Operations staff to advise them of the calls. The CEC monitored the situation and interrogated the Operations Log to check for activity on the network in the area that day. The only local activity had been in the Oxgangs DMA, but since this was in a separate Water Supply Zone (WSZ) to where the consumer contacts were located, it was discounted. Calls continued to be received by the CEC. Details were sent to the Standby Operational Team Leader, who plotted consumer contacts on a map, and at 21:30 the standby Network Service Operator (NSO) was sent out to investigate the situation. Water at fire hydrants was discoloured, so flushing of the system was carried out, with two hydrants left running overnight. By 23:00 there were 31 consumer contacts.

At 09:12 on 28 November, the Lead Asset NSO advised that the valve operations disregarded the previous day in the Oxgangs DMA area were the likely cause of the discoloured water. Flushing of that system began, with regular sampling and communications on water appearance. Ten fire hydrants were left running overnight which resolved the issue. By 23:00 there were 125 contacts relating to the incident and there were 143 contacts in total by 29 November. There were 14 failures of the iron standard, seven of the manganese standard and one of the Coliform bacteria standard – this microbiological failure was attributed to a tap which was difficult to disinfect and all samples complied with standards when resampled.

It is likely that the cause of the discolouration was valves being operated in the incorrect order, causing a rapid filling of the pipework and disturbance of sediment in the main. The incident was significantly prolonged by a delay in recognising where the valve operations had occurred.



The event has been categorised as Significant. Scottish Water has identified five actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made no additional recommendations.

