

Lintrathen Supply zone
Discoloration
22 September 2014

DWQR Inspector:
William Byers

Event No. 6374

Event Category: Significant

Summary of Incident

On 22 September, Scottish Water started to receive calls of discoloured water from consumers in Forfar. The initial call was taken at 1:00pm and as investigations were made, it became apparent they were related to a problem experienced earlier in the day with a faulty line control valve. Arrangements had been made temporarily in the distribution system to avoid disruption of supplies to consumers and the full repair work had been scheduled to be carried out the following day. Some 53 calls had been taken by 7:00pm and sampling had been initiated in the area to monitor water quality. The problem dissipated overnight with five calls being received the following day.

DWQR Assessment of Cause of Incident

DWQR is satisfied that the cause of the discoloration episode was the failure of the control valve allowing high velocity flows to occur in the trunk mains, which disturbed pipeline deposits and transported them into the wider distribution system. There was no maintenance or operational activities being carried out on the trunk mains or other aspects of the distribution system, which would have led to the valve failure. DWQR accepts this has been attributed to wear and tear or other defect in the valve.

DWQR Assessment of Actions Taken by Scottish Water

Scottish Water had bypassed the local storage point, Baggerton Service Reservoir, to carry out repair works on the roof and consequently, through being directly connected to the trunk main, it meant consumers were directly exposed to the problems created by the higher flows. In the normal supply configuration, it could be expected that they would have had an element of protection from the generated discoloration and indeed, there were no complaints recorded from other communities served by the same main via other storage points.

In all, 89 contacts were recorded from within an area supplying almost 7000 population indicating a significant consumer concern over the problem. Scottish Water took the appropriate actions to minimise the effects of the discoloration and initial sampling showed elevated levels of manganese - confirming that mains sediments had been disturbed. Subsequent samples taken in the days following the event, show water quality to have returned to normal

The event has been categorised as Significant.