

Drinking Water Quality Regulator for Scotland

Incident Summary

Glendevon B RSZ Burst raw water main 29 September 2020

DWQR Inspector: Bill Byers

Event No. 11249

Event Category: Significant

On 29 September, field staff operated valves in the distribution system to switch the supply to provide greater and more stable water pressure to a new housing development in the Crossgates area of Fife. Shortly after this, around midday, the Customer Engagement Centre (CEC) began taking calls from consumers reporting discoloured water. With the number of calls increasing, at 3:00pm the CEC alerted Operations teams to the escalating situation. Field staff began flushing the supply at various fire hydrants and consumers were advised to run their taps. However, as the discoloration did not appear to be improving, at 10:00pm, a decision was taken to return the distribution system to the original supply configuration following which, the supply gradually cleared.

Over the course of the recovery activity, arrangements were made for water samples to be taken to check water quality. The sampler however was unable to obtain samples from the identified locations provided and due to unfamiliarity with the supply area, took the samples from premises within an area unaffected by the issue. The error was spotted by Public Health Team members early the next morning and further sampling was arranged from addresses within the affected area. One sample failed the standard for iron. Subsequent sampling over the next two days showed the supply met water quality standards. In all, 53 consumer contacts were received regarding discoloured water over the 20 hour period.

It is clear that the cause of the discoloured water provided to consumers was the disturbance of pipeline deposits arising from changed flow and pressures due to the operation of distribution system valves. Scottish Water had investigated the means to provide a more consistent water pressure to properties within a new housing development and had installed new cross connections and pressure reducing valves (PRV) to facilitate this. The arrangements were established without adverse effect but the commissioning of the PRVs and valve operations to create the new supply area, failed to take into account the significant increase in flows generated in the supplying water mains.

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.

