

Incident Summary

Camphill zone
Impaired water quality
November 2017

DWQR Inspector:
Colette Robertson-Kellie

Event No. 8935

Event Category: Significant

An alarm was received by the Intelligent Control Centre (ICC) on the 12th November 2017 at 14:29 which indicated high flows entering Giffordland SR. Eleven minutes later, staff from Camphill WTW, which supplies the service reservoir, also raised an alert, as they had noted a sudden rapid increase in flow from the clear water tank at the treatment works.

There are two compartments in Giffordland SR, and one was out of service at the time of this incident. Investigations by Operational staff showed that the inlet flow valve to the out of service compartment had opened unexpectedly, causing high flows through the upstream trunk main, which disturbed manganese deposits. The water from the sample tap from the inlet of the SR was discoloured, and turbidity alarms were triggered at other points in the network. The incident was quickly escalated within Scottish Water, support was obtained from Scottish Water's Emergency Planning team and preparations were made for flushing and sampling the system.

The inlet to the in-service compartment was closed at 17:09 to allow the discoloured water to flow into the out of service compartment. The outlet of the out of service compartment was already set at the closed position, so this allowed the incoming discoloured water to be isolated while flows in the system reduced to normal levels. Consumer contacts continued the following day, so sampling and flushing of the supply continued, and bottled water was supplied to consumers on request. A specialist engineer was sent to Giffordland SR to determine the cause of the faulty valve at the inlet of the out of service compartment, but the investigation was inconclusive as the valve was an older model. Sampling and flushing continued until 20:00 on the 14th November.

Sampling showed a number of failures of the manganese and turbidity standards. There were 46 consumer contacts for discoloured water.

The cause of the incident was disturbance of manganese sediment in the network due to an increase in flow through the system, caused by the malfunction of the motorised inlet valve to an out of service compartment at Giffordland SR.

The event has been categorised as Significant. Scottish Water has identified six actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made one additional recommendation.

