

Helensburgh Low CWT Loss of Supply causing significant consumer concern 3rd February 2015

DWQR Inspector:
Moira Malcolm

Event No. 6727

Event Category: Significant

Summary of Incident

On Tuesday 3rd February 2015 at 20:16 an off duty Scottish Water employee called the Customer Contact Centre to report water rising on Renton Road, Dumbarton. The standby Network Service Operator (NSO) duly discovered a burst on the line of the 24" trunk main supplying Helensburgh and Kipperoch service reservoirs (SRs). At 20:50 the event was escalated and an internal incident management team (IMT) was formed to control and supervise the event. The burst was isolated and the repair to the main completed by 03:40 on 4th February. While the repair was being effected the IMT took precautionary measures to maintain the supply should the repair take longer than expected: 22 tankers and equipment were mobilised to supplement the storage at the SRs and bottled water was made available and delivered to customers on request.

On recharging the main, further complications were discovered that delayed recovery: a pressure regulating valve (PRV) further upstream had failed to reopen when the downstream isolation valve was opened; and an airlock occurred on the main feeding Kipperoch SR. These delays resulted in a depletion of storage at the SRs. To combat this, water was tankered directly to Helensburgh SR, plus water was injected into the main at Kipperoch SR as direct access to the tank was not possible. Bottled water was taken to local muster points for delivery when required.

As a result of the reduced water levels at the SRs, consumers in Helensburgh North, Castlehill and Brucehill experienced a loss of supply during 4th February for 8hrs 43mins. Sampling over the affected areas on the evening of 4th February showed prescribed concentration or value (PCV) failures for manganese, iron, aluminium, turbidity and *Enterococci* bacteria. All samples passed when resampled 2 days later.

278 customer contacts were received by Scottish Water over the course of the incident. The majority of these were for 'No Water', although complaints regarding discolouration continued until into the evening of the 4th February.

DWQR Assessment of Cause of Incident

The cause of the incident was the failure of a gate valve located close to a branch on the trunk main. The delay in recharging the main following the repair was caused by the Garshake PRV failing to open plus an

airlock on the water main. The changes in pressure plus the injection of water directly into the main are likely to have contributed to the disturbance of deposits in the main which caused the PCV failures.

DWQR Assessment of Actions Taken by Scottish Water

DWQR is satisfied that Scottish Water responded appropriately to the event and took the necessary steps to contain and resolve the situation. Several issues were noted and are pertinent:

1. The action taken to repair the burst was prompt and well organised.
2. The Distribution Operation Maintenance Strategy (DOMS) impact assessment report produced for the burst repair was completed well, however the tanker log sheets were not been completed to a satisfactory standard.
3. The internal IMT facilitated satisfactory internal communication throughout the event and anticipated potential problems with the recharge of the main which kept disruption to a minimum.
4. A suitable amount of sampling was undertaken throughout the event – both from the network and during the tankering operation.

The event has been categorised as Significant. Scottish Water has identified a number of actions and DWQR accepts that these are appropriate and will be monitoring to ensure all are completed prior to signing off the incident.

