

## Milngavie M1 Supply Zone Significant loss of supply 8 July 2013

DWQR Inspector:  
William Byers

Event No. 5412

### Event Category: Serious

### Summary of Incident

On the 8<sup>th</sup> July 2013, one of the major water supply mains into Glasgow burst in the Maryhill area of the city. The failure of the pipe caused devastating flooding of a number of properties and the loss of supply to a significant area of the city. Maryhill Road where the burst occurred is a main commuter route and the event also caused closure of the road and major disruption to traffic flows.

First indication of the burst came to Scottish Water through an alarm of high flows in the water main at 5:10 in the morning. Consumers were quickly on the phone to the Contact Centre reporting loss of supply and location of the problem. The 36 inch water main installed around 150 years ago, supplies a population of approximately 48,500 and during the event, Scottish Water was able to quickly restore supplies to some 35,000 consumers through implementing backfeeds from adjacent supply areas.

It became evident in the course of the recovery actions, that the backfeeds put in place were not fully able to restore mains supply to some localised areas due to demand and tankered water was used to recharge the mains in those areas. Bottled water was delivered to a number of locations to ensure vulnerable consumers and those who had been out of water for a time, could obtain an emergency supply. Over the course of the incident, around 6,200 contacts were received from consumers. The water main was repaired by 9:00 in the evening and the water supply network returned to normal by 2:20, the following morning.

### DWQR Assessment of Cause of Incident

Scottish Water has carried out a wide ranging examination of possible reasons for the failure of the water main. DWQR is satisfied that their conclusion of the root cause being a combination of age related deterioration of the pipeline material, ground movement and possible pressure transient, is likely. There is no indication operational or third party activity has been a factor.

### DWQR Assessment of Actions Taken by Scottish Water

DWQR declared this burst main an incident due to the extensive area affected and the potential for widespread disturbance of deposits within the water mains network causing poor water quality for consumers. Scottish Water implemented their contingency plan for the loss of a Trunk water main and this was effective in minimising the impact on consumers and facilitated the speedy repair of the pipe. It is clear from the investigation that Scottish Water dealt proficiently and sensitively with property owners who had

suffered flooding of their properties caused by water from the burst main and staff are deserving of the praise received from members of the public.

Although the burst caused initial high velocities within the main pipeline and recovery activity necessitated the reversal of flows in other water mains, through introduction of backfeeds, there were very few reports of discoloration, aerated water or other water quality issues. DWQR is satisfied that appropriate sampling was carried out at customer taps within the supply zone during the network reconfiguration and in the post repair period.

DWQR is however very concerned that Scottish Water has been unable to provide evidence of samples having been taken from the tankered water supplies injected into the water mains to assist recovery of the system. It is important that samples are taken and records are kept of the analysis to ensure any resultant water quality issues can be traced. Whilst evidence has been presented of satisfactory tests carried out at other times on the tankers utilised in this operation, it does not comply with the requirements or provide confidence of hygienic practice. DWQR considers it a serious matter that tankering issues have now arisen twice in the investigation of water quality incidents in 2013.

The event has been categorised as serious.

Scottish Water identified a number of actions following the incident and DWQR accepts that these are appropriate. Additionally, DWQR has made one recommendation and will be monitoring to ensure all are completed prior to signing off the incident.

