

Turret West WOA 15" Burst Main Incident Causing Significant Consumer Concern 7 August 2015

DWQR Inspector:
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Event No. 7109

Summary of Incident

On 6th August 2015 a customer in Alva called to report water rising in their garden. A Network Service Operator (NSO) attended and decided that as it would be a complex repair and the leak was not large, that the work should be done the next day. The following day the leak had become much more severe and the event was escalated. An incident management team was formed due to the restricted access to effect the repair and the contingency measures required to maintain supplies to the wider community. The 15" water main was at a depth of 3 meters in the garden of a private property and served 45 customers through direct connections. Bottled water was delivered to the 45 direct feed properties and tankering was mobilised to minimise the impact to consumers in the wider area served by the water main.

The initial repair on 8th August was not a complete success required a bespoke collar to be ordered to complete the repair. This second repair was undertaken on 12th August and while the repair itself was successful, a delay in opening a fire hydrant valve to activate the contingency tanker feed into the distribution system caused a drop in pressure which flattened the network leading to 150 customer contacts for no water. When water was restored, sediment in the network was disturbed resulting in 12 customer contacts for water quality.

Sampling undertaken as part of the repair procedure showed that the mains disturbance caused 5 failures for manganese, 1 for iron and 1 for lead.

DWQR Assessment of Cause of Incident

The burst in the 15" ductile iron trunk main was caused by a limited longitudinal stress fracture. DWQR considers the water quality incident to be caused by the failure to open a valve at Dollarbank DMA by a tankering operative. This caused the network to flatten and the subsequent recharge of the system caused disturbance of pipeline deposits and consequential customer contacts due to poor water quality.

DWQR Assessment of Actions Taken by Scottish Water

DWQR is satisfied that Scottish Water responded appropriately to the initial burst and took appropriate and timely action to resolve the event. Several issues were noted:

1. DOMS Impact Assessment Forms for the planned work were completed to a good standard and followed with the exception of the valve operation at Dollarbank DMA.
2. Suitable and sufficient sampling was undertaken throughout and following the incident.



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 they are completed prior to signing off the incident.

