

## Balmore 'A' RSZ Taste & Odour complaints 22 August 2012

DWQR Inspector:  
William Byers

### Summary of Incident

During the evening of 22 August 2012, Scottish Water began to receive complaints from consumers in Kirkintilloch, of discoloration, taste and odour in the water supply. The calls centred on a large, new housing development in the town where works had been carried out earlier in the day to transfer the development from one water supply system onto another. Consumers had variously described the water as being cloudy, stagnant or having a methane or sewage type smell and there was concern around the possibility of some form of contamination having entered the supply. It was agreed to shut off the supply until the full extent of the problem could be assessed and to enable consumers to be warned that they should only use the water supply for sanitation purposes.

Once the restrictions on use notice had been issued, Operations staff undertook a controlled flushing of the system and a staged re-introduction of supply to the area, carrying out sampling at a range of addresses at different points in the development and surrounding streets. During this work, flows through the water mains unaccountably stopped and investigation of the problem revealed a foam swab to be stuck in the pipeline. This was removed by excavation of the main. One further swab was recovered at a separate point in the supply system during the operation. The presence of the swabs in the pipelines provided explanation to the complaints of stagnant water in that the transfer of the area onto a different supply system was likely to have moved a plug of aged water from an unused part of the mains system into consumers supply pipes. Further flushing was carried out and additional disinfection was provided locally into the system.

Once clear water samples had been confirmed across the area, the decision was taken to issue all-clear notices to consumers and this was completed by 1900 hrs on 24 August.

### DWQR Assessment of Cause of Incident

DWQR considers the root cause of this incident to be the presence of foam swabs in the water mains system. Swabs are used in the commissioning and testing of new water mains to ensure any debris that may have accumulated in the construction phase is removed. It is a serious breach of hygiene standards and installation procedures for swabs to be permitted to remain in a pipeline. It demonstrates that the mains have not been properly cleansed before being introduced into supply and their presence provides a harbour of future water quality and operational issues, the consequences of which are clearly demonstrated here.

### DWQR Assessment of Actions Taken by Scottish Water

DWQR finds there to have been significant shortcomings in Scottish Water's control of Developers and self-lay Contractors providing water mains. They have been unable to demonstrate sufficient record of inspections or audit over the essential main laying activity and hygiene arrangements of the Organisations operating on this development but also across the breadth of the Development sector. Scottish Water needs to ensure the rigour applied in other Functions of the Company to ensuring water quality is brought to bear.

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In terms of the response to the incident, Scottish Water's attention to the requirements of consumers over the duration of the incident was good. DWQR recognises the steps taken by staff to be visible in the area and responsive to consumer concerns to be good practice. It is clear also that the preparations for the transfer of the area onto a different supply system met with requirements and appropriate precautions were taken for the expected work. DWQR does however retain some concern around the use of consumer information to fully understand a developing situation and of sampling strategy to close-out the incident.

Scottish Water has identified ten actions from the incident and DWQR accepts that these are appropriate. Additionally, DWQR made four recommendations and will be monitoring to ensure that all are completed prior to signing off the incident.

