Drinking Water Quality Regulator for Scotland

Incident Summary

Clatto WTW
Loss of disinfection
2025

Event No.16036,16451& 16492

Event Category: 16036 and 16451 Serious and 16492 Significant

During Events 16036 and 16451 chlorine dosing ceased for extended periods (7 hours 50 minutes and 3 hours 45 minutes respectively). During Event 16492, chlorine dosing was intermittently below Emergency Action Levels (EALs) for approximately 3 hours.

During these events, disinfection of water was not conducted within site-specific operating requirements and due to the prolonged loss of dosing, the efficacy of disinfection cannot be appropriately verified. Nevertheless, due to mixing of treated water within the clear water tank(s), a free chlorine residual was always maintained at the point of supply, albeit at a very low concentration (>0.2mg/l).

Appropriate liaison with the Health Board was undertaken during each incident to review the public health risk assessment, concluding that restriction of use was not required. Samples collected following each incident did not identify a microbiological deterioration in water quality and no consumer contacts were made following these incidents.

Event 16036 (02 August 2025): This event was caused by an airlock to the chlorine dosing pump and a failure within the control system to automatically transfer to the standby pump. In addition, the associated alarm did not activate as expected. This airlock may have been

linked to the use of a temporary chemical storage tank which was removed from service on 13 August 2025.

The event was exacerbated by incorrect configuration of alarm signals from the treated water chlorine monitor, which prevented receipt by the Intelligent Control Centre (ICC) and this delayed the operational response. The assessment notes that Scottish Water does not have a testing regime that regularly confirms the functionality of such critical alarms.

Event 16451 (01 November 2025): The incident was caused by a failure of the carrier-water pumps associated with chlorine dosing. Investigations found that the pumps received an inappropriate control-system command that stopped them and then immediately attempted to restart following a filter backwash. Under normal conditions this would have had minimal impact; however, two of the Clear Water Tanks were offline for maintenance and this impacted the motive water supply and necessitated a manual restart. There was a delay in resuming dosing as the standby operator was not aware of the steps required.
This event highlighted the need for improved operational risk assessment prior to planned activity, including the briefing of operational personnel.

Event 16492 (13 November 2025): This event was caused by the failure of suction demand valves on the hypochlorite tanks resulting in an airlock, at this single point of failure, which affected chlorine dosing.

The event has been categorised as serious and significant. Scottish Water has identified zero actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made three additional recommendations.