

Bradán WTW Failure of Disinfection Process 24th April 2024

Event No. 14437

Event Category: Significant

On the 24 April 2024 a power trip occurred during a plant restart and there was a failure of sodium hypochlorite dosing. The emergency sodium hypochlorite dosing system designed to maintain disinfection in the event of such outages, failed to takeover automatically.

Subsequent investigations between 01 June 2024 and 19 June 2024 found that this was because the sodium hypochlorite bulk tank outlet valve was programmed to close in the event of a power outage. Final water total chlorine breached the low Emergency Action Level (EAL) for 3 hours 30 minutes.

Scottish Water did not receive any water quality contacts associated with this incident. Sampling was arranged for the 24 – 25 April 2024, covering the WTW, and from the water supply zone. Of the 11 samples taken, none failed regulatory requirements.

It is clear from Scottish Water's event outcome report that this incident was caused by a failure of the emergency sodium hypochlorite dosing system following a power trip when switching from mains to turbine supply. The commissioning process failed to identify that the bulk tank outlet valve was configured to close in the event of a power outage

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