

Balmore WTW Loss of coagulation 13th January 2026

Event No. 16672

Event Category: Serious

A loss of coagulation control at Balmore WTW resulted in the re-solubilisation of aluminium coagulant which passed through filtration to final water. There were three Prescribed Concentration Value (PCV) breaches of the aluminium standard from tests undertaken on final water on the 13 January 2026, however, health-based thresholds were not exceeded. There were no failures of the aluminium PCV from tests taken from downstream consumer property samples. Disinfection was maintained throughout with online trends demonstrating that preliminary treatment had maintained a turbidity level of less than 1NTU post-filtration. The lowest post-chlorine contact tank chlorine was 0.89mg/l with an Effective Concentration Time (ECT) of 29.9mg.min/l. The lowest final water chlorine was 0.63mg/l. There were no positive Cryptosporidium samples following these aluminium failures, however, water was not sampled for Cryptosporidium preceding these breaches.

The incident occurred due to a failure to maintain optimal coagulation pH conditions. This was most likely due to the quality lime used for pH correction. The incident was exacerbated by a slight deterioration in raw water quality (Turbidity 0.25 to 1.6NTU, Colour 23 to 30Hz), the incorrect control of a standby lime pump and an increase in plant flow on 12 January 2026 in preparation for a planned plant shutdown.

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

