

Pateshill WTW Chlorate Failures August & September 2025

Event No. 16188

Event Category: Significant

Between 15th August and 19th September 2025, there were 6 exceedances of the standard for chlorate in the supply zone supplied by Pateshill WTW. A further four samples taken at the treatment works also failed during this period. The maximum concentration recorded was 0.36 mg/l, well below Public Health Scotland and World Health Organisation health-based guidance values.

Chlorate is a disinfection byproduct which can form from the degradation of sodium hypochlorite during incorrect storage: prolonged storage times, high temperature and poor housekeeping of old stocks all exacerbate its formation.

Scottish Water has confirmed that the batch of hypochlorite associated with this failure was delivered on 9 July and began to be used on 3 August over a 28 day period. This time period is by no means outside best practice storage times, however Scottish Water has confirmed that during this time temperatures rose well above 20°C on multiple occasions, with a temperature of 26°C being recorded on 19 August. This is well outside the recommended storage temperature for hypochlorite, and likely caused, or exacerbated, chlorate formation.

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 one additional recommendation.