

Incident Summary

Crathie WTW
Loss of disinfection
1 May 2017

DWQR Inspector:
William Byers

Event No. 8444

Event Category: Significant

A mains power failure in the upper Deeside area at 19:00 hrs on 1st May caused the disinfection process at Crathie water treatment works to fail. This power outage and a subsequent similar failure in the early hours of 2nd May caused undisinfected water to be passed into the water distribution system over a total period of almost 4½ hours. Disinfection is provided by Ultra Violet light and telemetry alarms of system failure, to the control centre, alerted staff to the problem. Attendance at the site by operators on both occasions enabled the system to be re-set. On attending the second failure, the operator put in place an emergency chlorine dosing system as a safeguard against further power interruptions. There were however no further instances at this time.

DWQR is satisfied that the cause of the disinfection failure was the power outage in the mains electricity supply. The production of water from the treatment process was also stopped by the power failure and this safeguarded the pre-treated water already stored in the clear water tank from contamination with untreated water. The disinfection process is located on the outlet from the clear water storage tank supplying the distribution system and power failure does not stop the flow to consumers. There is no alternative means of providing alternative disinfection or preventing the onward transmission of undisinfected water to consumers, which makes a speedy response to such events an imperative.

The event has been categorised as Significant. Scottish Water has identified ten actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made no additional recommendations.