

Herricks WTW *Cryptosporidium* detection 3 April 2018

DWQR Inspector:
William Byers

Event No. 9207

Event Category: Significant

A *Cryptosporidium* detection was made in a final water sample taken from the works on 3rd April 2018. Although subsequent resampling of the final water showed there to be no further detections, initial investigations identified instances of increased turbidity at stages within the treatment process but no reason could be found for these. A turbidity alarm from the combined filtered water had been generated on 2nd April but this was discounted as an instrument issue by the Control Centre staff through reference to other turbidity monitors and water quality indicators showing no problems.

The DWQR declared this event an incident due to concerns with conflicting information from instrumentation and the potential impact on raw water quality from a period of intense rainfall combining with activity to clean intake screens.

Scottish Water has carried out a capability assessment of the treatment process elements. This has identified issues in the control of flows across the filters and this has a more pronounced effect on water quality whilst any one of the three filters is removed for backwash. A further key issue is an erratic flow pattern through the clarifier process during desludging of the units. This results in an increase in turbidity of the water passing forward onto the filters. It is my view that these deficiencies in process resilience, coupled with the change in raw water quality are likely to have contributed to the presence of *Cryptosporidium* in the final water.

The event has been categorised as Significant. Scottish Water has identified seven 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.