

Incident Summary

Bonnycraig WTW Cryptosporidium detections February 2017

DWQR Inspector:
Matthew Bower

Event No. 8288

Event Category: Significant

To date in 2017, Cryptosporidium has been detected in the final water of Bonnycraig WTW on at least 16 separate occasions. Repeated low level detections also occurred in 2016, resulting in an investigatory visit by DWQR. In all cases, positive samples have contained one or two oocysts and have not been considered by Scottish Water in consultation with the Regional Health board to present a risk to health.

Scottish Water has investigated the performance of the plant intensively and discovered a number of issues with the filter performance, including the condition of the media, filter structure, backwash performance and the integrity of a number of valves. Poor flow control by the filter control valves meant that flows through the filters were highly variable, further exacerbating the issues with filter condition. Additionally, the chemistry of Bonnycraig raw water means that floc formation is slow, making removal of solid material across the filters more difficult.

The event has been categorised as Significant. Scottish Water has a number of ongoing actions at the site to improve the quality of water produced. DWQR accepts these are appropriate and will monitor them to ensure they are completed prior to signing off the incident. DWQR made no additional recommendations.