

Storr Forest WTW *Cryptosporidium* Detections Sept 2013

DWQR Inspector:
Matt Bower

Event No. 5593

Event Category: Significant

Summary of Incident

Cryptosporidium was detected in large quantities in this supply in a sample taken on 21 August 2014. This contained 57 oocysts (0.397 oocysts per 10l). Further detections continued at lower concentrations through the Autumn until clear samples were eventually obtained in November. Scottish Water liaised with Highland Health Board throughout.

DWQR Assessment of Cause of Incident

Storr Forest is a very basic treatment works consisting of disinfection of spring water. It is vulnerable to changes in raw water quality as there is no filtration process, raw water quality is generally very good. There has been a history of intermittent *Cryptosporidium* previously in the supply.

The supply is fed from three springs below the Storr hill. These have all been capped and protected to some extent, although the local geology suggests that they will be vulnerable to surface water infiltration. Recently an area of trees around the springs has been felled, and it is possible that this caused some disturbance to the springs or to the local wildlife.

Cryptosporidium detections at this supply tend not to be associated with turbidity, and sampling facilities do not enable Scottish Water to determine whether the *Cryptosporidium* is preferentially associated with a particular source.

DWQR Assessment of Actions Taken by Scottish Water

Following the *Cryptosporidium* detections Scottish Water inspected the springs and identified a comprehensive list of actions that will be taken to further improve the source protection and visibility of quality at individual springs. There is no direct evidence that the deforestation directly contributed to the recent failures, and Scottish Water feels that this process was undertaken in a responsible manner and with due consultation.

DWQR considers that these actions are helpful, but that the current treatment at the site is inadequate for the risks present and the new membrane plant planned for the supply should be constructed as quickly as possible. Following concern expressed by both Highland Health Board and DWQR, Scottish Water has agreed to install temporary filtration equipment at the site and this should be operational by Summer 2014, greatly

reducing the risk. The full treatment plant should be constructed and operational in 2015. DWQR visited the site, including each of the springs, in February 2014.

Scottish Water has identified 10 actions to be taken in response to the *Cryptosporidium* detections.

