

Invercassley Service Reservoir Trihalomethane Failures May 2011

DWQR Inspector:
Matthew Bower

Summary of Incident

A sample of water taken from Invercassley Service Reservoir near Lairg in Sutherland on 24 May 2011 failed to meet the required standard for total THMs. The sample contained 136.4µg/l of THM against a regulatory standard of 100 µg/l. Repeated resamples throughout the Summer failed to obtain a sample that met the standard, and to date compliance has still not been restored, causing DWQR to declare the failure to be an incident.

DWQR Assessment of Cause of Incident

Invercassley Service Reservoir is supplied by Bonar Bridge water treatment works, which has a nanofiltration membrane treatment process. Such a process should be capable of removing the naturally occurring organic compounds that form THMs, however Scottish Water have indicated that the membrane has integrity issues that may be allowing a proportion of the organic material to pass through to react with chlorine, forming THMs in the supply.

DWQR Assessment of Actions Taken by Scottish Water

Scottish Water is monitoring the quality of the supply while work is underway to source replacement membranes. This has been delayed due to a supplier issue. Concentrations of THMS do not present a risk to health, but DWQR expects Scottish Water to do all it can to minimise THM formation until such time as the issue can be resolved more permanently.

Invercassley Service Reservoir was removed from supply in October 2011.