

Incident Assessment

Markstone Service Reservoir THM Failure 20 June 2011

DWQR Inspector:
William Byers

Summary of Incident

A series of samples taken from Markstone Service Reservoir on Orkney between June and October 2011 failed the regulatory standard for Trihalomethanes. Whilst the level of THMs was only marginally above the 100µg/l standard, an incident was declared because water quality had not been restored within 2 months.

DWQR Assessment of Cause of Incident

The treatment at Kirbister WTW is unable to adequately remove all the naturally occurring organic materials carried in the raw water and historically, with the necessary addition of chlorine to the supply to provide disinfection, this formed THMs.

DWQR Assessment of Actions Taken by Scottish Water

Scottish Water has completed a project to convert the disinfection process from direct chlorine dosing to a chloramination process. This process enables disinfection of the supply to be made whilst ensuring THMs are controlled well within the standards. The new disinfection process was brought into service on 5 April 2012. Scottish Water also cleaned the Markstone tank prior to this to ensure good water quality is maintained within the distribution system

DWQR accepts that these are appropriate steps to maintain water quality and no further actions are identified.