

## **Technical Inspection of Scottish Water's Water Treatment Works**

## Lintrathen WTW, East Region

27/09/2018

**DWQR Staff Present** Bill Byers

**Scottish Water Staff Present** Lee Mathews, Colin Walker, Kes Juskowiak

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## **Summary of Inspection**

## **Overall Summary**

Lintrathen water treatment works produces a high quality water with only rare, minor breaches of water quality standards being recorded. This audit found the process monitor values throughout the works and SCADA system trends reflected this situation.

Water is drawn from Backwater Reservoir, which is a large body of water with a large catchment. The Catchment of heather-hill/sheep farming & forestry is largely owned by Scottish Water and this provides a significant degree of control over activities. The reservoir appeared to have held up well to the very dry summer. The works is in reasonably good condition with good housekeeping evident. Some ongoing tidying up is evident following completion of a recent site works. There was an excellent level of completion of works records for task scheduling, filter log books, instrument calibrations and control of chemicals and reagents, reflecting well on the staff there.

Notwithstanding the evident good performance of the works, I have a concern around the reliance upon key experienced local staff to maintain this. Due to the consistent nature of the raw water quality and the relatively slow change to this at times, adjustment to processes can be made gradually. These however are made manually to key processes in reference to monitor readings and operational knowledge. Whilst this appears effective, it does not demonstrate resilience against loss of key staff and sustainability over the longer term. Scottish Water should move toward provision of more automation of control of processes within the works.

It is also of significant concern that infrastructure remains in place to enable the entire treatment processes to be bypassed. The Cryptosporidium Directions 2003 set down the importance of not permitting untreated water to bypass treatment and enter into the distribution system and there should be robust measures put in place to avoid inadvertant operation of thebypass.