

Lintrathen WTW, East Region

31/10/2022

DWQR Staff Present

Andrew Kennedy, Matthew Bower

Scottish Water Staff Present

Robert Brooks, Lee Matthews, Jed Craik, Jenny Duggan, Jon Moses, Callum Walker

Summary of Inspection

Overall Summary

Lintrathen WTW is a well managed site, and Operational staff involved in the audit displayed a good understanding of the operation of the treatment works and were helpful throughout. There were high standards of general housekeeping. At the time of the audit the quality of water being supplied was good, with all measured parameters well within regulatory standards.

Raw water monitors are in place and alarms have been amended and tested following a recent water quality incident. Although the coagulant dosing is carried out manually, this appears to be well controlled by the Operators, however there is a lack of resilience in the site operability due to the reliance on typically stable raw water to give the Operators the time to react accordingly.

During the audit it was noted that, although operationing effectively, the filters require maintenance including media replacement. Individual monitors are in place for the filters and water quality trends are satisfactory. Backwash times have been optimised through the last 12months by the Process Scientist and operators, and a backwash was observed during the audit which was also satisfactory, although water was still visibly discoloured when the wash finished. It was apparent that filter log books had not routinely been kept up to date during 2022.

Filtered water is super-chlorinated with Sodium Hypochlorite and then flow proportionately dosed with SO₂ to achieve a final Chlorine target of 0.7mg/l, which telemetry trends suggest is well controlled and the verified CT = 49.

Operational monitors are well labelled and maintained across the site, although Operators are aware of a couple of monitors that are not currently fully operable and are under investigation and repair.

From the audit and discussions with Scottish Water staff onsite, it is clear that Scottish Water staff do a very good job in ensuring the quality of water from Lintrathen WTW, however there are a number of investments required including upgrades to PLC's/SCADA systems; filter refurbishment; installing auto-shutdown / run to waste / slow-start facilities; and improvements to the wash-water recovery process.