

Technical Inspection of Scottish Water Treatment Works

Kirbister WTW, Orkney 31 August 2009

Summary of Inspection

Overall Summary

Kirbister WTW supplies the South East of Mainland Orkney. The Water Quality produced is generally excellent and the works is well run by operational staff. Housekeeping is excellent. Some aspects of the treatment process are not adequately sized for the peak volume of water produced, and others require refurbishment or replacement if they are to continue to provide good service. The Drinking Water Safety Plan for the site is comprehensive, but needs work to ensure that it is kept updated as additional risks are identified and to ensure that interventions are acted upon promptly.

Number of Findings:

10

Score (out of 6)

Quality of Water Produced 4 Good

The quality of water produced by Kirbister WTW is excellent and is fully compliant with the Regulations for the period studied. The quality of water from some intermediate treatment stages is not quite as good as expected, but this does not affect final water quality.

Robustness of Treatment Asset 3 Adequate

The overall treatment process at Kirbister is robust and appropriate to the quality of the raw water it has to treat. Some treatment stages are not performing as well as they should, however this is compensated for by the excellent performance of the filters. One treatment process is undersized, necessitating temporary measures in order to ensure water quality is not affected.

Operational Practices 4 Good

Operational tasks are being performed thoroughly by highly trained and diligent staff. Necessary checks and instrument calibrations are being undertaken. Additional monitoring of the catchment could be beneficial.

Maintenance of Asset 3 Adequate

Smaller items of maintenance undertaken by site staff are being done well, however there are a number of significant issues that require more extensive capital maintenance.

Safeguards and Procedures 4 Good

The works has the necessary monitors and telemetry systems in place to alert operators to issues. The necessary procedures are in place to ensure essential tasks are undertaken.

Water Safety Plan Development and Implementation

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A number of risks identified in the drinking water safety plan for the site had not had required interventions completed, despite the plan having been in place for two years. Site staff did not have adequate access to and awareness of the plan. A number of issues were identified during the audit that should have been included in the plan yet were not present.