

Technical Inspection of Scottish Water Treatment Works

Tullich WTW, Oban

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DWOR Staff Present

Matt Bower

Scottish Water Staff Present (& Titles)

Ross Barclay, Pamela Hamilton, Peter Ross

Summary of Inspection

Overall Summary

This treatment works supplies Oban and the communities on the West coast of Argyll between Appin and Luing. The works design is rather non-standard and is showing its age, with treatment processes struggling to cope with changes in raw water quality. Despite this, final water quality is reasonably good, although inadequacies in treatment process are reflected by disinfection by-product failures in the distribution system. Operational staff are doing a very good job under difficult circumstances and have made every effort to make the process work, especially the ozone system. The inescapable conclusion is that this works is rapidly approaching the end of its useful life and that Scottish Water should make plans to make the necessary investment to provide the area with a treatment works capable of treating the raw water to the required standard.

Number of Findings:

7

Score (out of 6)

Quality of Water Produced

3 Adequate

Water quality is mainly compliant and of good quality, however this is at the expense of considerable effort by staff. Changing raw water quality and a deteriorating asset mean that the works is unable to remove organic material the extent that is required to ensure compliance with the Trihalomethane standard in the distribution system.

Robustness of Treatment Asset

Adequate

The treatment process delivers water that is mainly satisfactory, however it could not be described as robust by modern standards, given potential risks in the catchment. The ozone system appears to be being operated as effectively as possible, although maintenance requirements are high and the system struggles to produce sufficient ozone to deliver the require dose.

Operational Practices

4

Good

Staff are trying very hard to make the asset work and manage risks, adjusting the treatment process accordingly. All staff appeared very knowledgeable about the works and highly dedicated, although plant is highly labour intensive. This is perhaps reflected in certain areas of instrument maintenance and record keeping that would benefit from additional attention.

Maintenance of Asset

3

Adequate

Elements of the plant are being well maintained in an effort to keep it going and deliver the required performance. Having said this, the plant appears to have reached and age and condition beyond which normal levels of maintenance are likely to be able to deliver consistently satisfactory water quality.

Safeguards and Procedures

4

Good

The works has quality monitors and alarms appropriate to the process that is present. Standard operational procedures are present and staff have good awareness of these.

Water Safety Plan Development and Implementation

4

Good

Good progress has been made in identifying the main risks to water quality on the site, primarily issues around asset condition. Further work is needed to ensure these issues are progressed to the appropriate solution.