

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

# Amlaird WTW, Ayrshire

8 December 2009

### **Inspection Report**

#### Overall Summary

Amlaird is an extremely well run works, with many examples of best practice in terms of process control and optimisation. The site was well managed and generally, appropriate monitoring of the treatment process was in place. There was some historic evidence that the treatment process does not always cope with the exceptionally high concentration of naturally occurring organic matter that is sometimes found in the raw water, although the operational team are working hard to maximise the performance of the works.

Number of Findings:

3

Score (out of 6)

Quality of Water Produced

3 Adequate

Water quality on the day of the audit was excellent. Historically, iron exceedences in distribution caused by the treatment works and Trihalomethane exceedences have been an issue, although work has been done to optimise the treatment process. It may be that the current treatment processes are not fully able to deal with the exceptionally high organics that are sometimes present in the raw water.

#### **Robustness of Treatment Asset**

Good

The treatment works structure and processes are all highly robust, although as highlighted above, the plant does not always manage to deal completely with naturally occurring organic material in the raw water.

Operational Practices

Very good

Staff are highly knowledgeable about the plant and diligently carry out appropriate checks and monitoring. Especially impressive are the numerous examples of optimisation and minor process improvements that have been made by the operational team at the site.

Maintenance of Asset

4

5

Good

Generally, all equipment was very well maintained, especially where operational staff were directly responsible for this aspect.

## Safeguards and Procedures

4

Good

Appropriate procedures were present and these seemed to be being followed by staff. Appropriate monitoring and alarms were in place, with the exception of the raw water which for a site of this nature would benefit from enhanced in-line monitoring.

## Water Safety Plan Development and Implementation

4

Good

Good progress has been made in taking forward the water safety plan interventions for this site, although completion of many of them hinges on work on the raw water main.