

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

# Mannofield WTW, Aberdeen

06 March 2012

**DWQR Staff Present** Matt Bower, William Byers,

Scottish Water Staff Present (& Titles) Darren (Operator), Magda (Operator), Jim Cooper, Colin Napier, Derek Ogilvie, Craig Christie, Alan Brown,

Steven Wilson, Kenny Barr, Jackie Foster

#### **Summary of Inspection**

#### **Overall Summary**

Mannofield is a medium sized works supplying a large part of Aberdeen city. Improvements have been made at the inlet to the works to accommodate a rebalancing of the loading between the companion treatment works at Invercannie when it expected to increase the throughput of the works later this year. DWQR received a number of event notifications during 2011 in relation to control of different processes in the works and whilst those problems have been addressed, the Audit has revealed issues where there is scope to improve the robustness of the works to ensure production of a high quality water at increased flow rates.

Number of Findings:

0

Score (out of 6)

Quality of Water Produced

4 Good

The quality of water produced by the works is generally satisfactory although a number of exceedences of the cryptosporidium standard have occurred

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

Adequate

Staff are managing to operate the works processes to produce a good quality of final water but this masks a lack of robustness to the coagulation, pH control and filtration stages.

## **Operational Practices**

Very good

Staff are highly competent and have a good level of understanding of the works. The necessary checks and optimisation of processes were being carried out. A very high standard of record keeping in relation to instrument calibration and scheduled tasks was observed.

#### **Maintenance of Asset**

4

Good

Key maintenance tasks appeared to be being undertaken and a good level of recording of servicing works on plant and monitors was present. Some evidence of building maintenance work required.

### Safeguards and Procedures

4

Good

The treatment processes have appropriate alarms in place and a well kept site diary was in evidence. Service contracts are in place for key process monitors. Provision of monitors at the coagulation stage and better control of pH adjustment would assist operators and reduce risk within the works.

## Water Safety Plan Development and Implementation

The WSP will require updating to reflect the direct aqueduct feed to the works inlet from Invercannie. A number of source risks have been addressed and can be removed from the improvement plan in its revision.