

Craighead WTW, Aberdeenshire

13 March 2014

DWQR Staff Present

Matt Bower, Bill Byers

Scottish Water Staff Present (& Titles)

Colin Napier; Craig Christie; Brian Arnold; Findlay Donaldson; Beata Tschirch
Hamish McDonald; Jackie Foster

Summary of Inspection

Overall Summary

Craighead Water Treatment Works supplies the area around Huntly in Aberdeenshire. It is an old works, very much showing its age and vulnerable to changes in raw water quality. The quality of water produced is reasonable, but this is mainly due to ongoing considerable effort by operational staff. In the opinion of DWQR, the treatment process at this site is not of an acceptable standard, and investment is vital to secure the standards of quality and resilience expected from a 21st century water treatment plant.

Number of Findings: 3

Score (out of 6)

Quality of Water Produced

3

Adequate

Water quality is generally acceptable, thanks to the diligence of operation staff. Occasional *Cryptosporidium* detections and elevated manganese concentrations are of some concern.

Robustness of Treatment Asset

2

Weak

This treatment works has exceeded its working life, and the lack of resilience of the treatment process is unacceptable. Careful maintenance is sustaining production but Capital investment is urgently needed to reduce the risks at this site. The single DAF unit, the breaking away of sludge at scraper operation and the inability to stagger individual filter washes and startup present a significant impairment to the required barriers to *Cryptosporidium* Oocysts.

Operational Practices

5

Very good

Operational staff are having to work very hard to manage the treatment process at this site, and their efforts are a credit to them. A number of initiatives to better understand the raw water sources and treatment process are to be welcomed, although it is likely that there is a limit to what can be achieved with the existing asset.

Maintenance of Asset

4

Good

Maintenance of equipment and instrumentation is being undertaken to a high standard, although much of the treatment process has reached the end of its working life.

Safeguards and Procedures

2

Weak

Inadequate online monitoring, problems with raw water quality and an ageing asset combine to compromise the resilience of water treatment at this site. This requires rectification. There are plans to provide automatic shut down of the works where quality parameters may exceed appropriate levels but the proposed action completion dates are over long given the risks at the site. DWQR is concerned that the uncertainty over the future of the site may defer decisions on provision of the necessary safeguards.

Water Safety Plan Development and Implementation

The water safety plan is comprehensive and clearly outlines the many risks to quality that the condition of the asset presents, however proposed dates by which they are to be addressed (in many cases 2021) are unacceptable and should be brought forward.