

Badentinan WSZ Taste and Odour Complaints 18 August 2014

DWQR Inspector:
Matt Bower

Event No. 6253

Event Category: Significant

Summary of Incident

Between 15th August and 3rd September 2014, Scottish Water's contact centre recorded 39 calls from consumers in the Elgin area reporting an unusual taste and odour to the water. The predominant description given was of an earthy / musty type taste. Such tastes and odours are usually associated with algal blooms in the raw water, but none were evident on this occasion.

Staff attributed the taste and odour to the supply from Glenlatterach WTW, which blends with Badentinan WTW to supply the area. Exceptionally heavy rainfall in the catchment had resulted in a sudden deterioration in raw water quality. This raw water change was reported as presenting a challenge to the treatment process, although no regulatory standards were breached in the treatment works final water during his period. A sample of final water taken on 21 August was reported by the laboratory as having an earthy / musty taste. No unusual tastes or odours were detected in the investigatory samples taken in the water supply zone.

DWQR Assessment of Cause of Incident

Continued investigations by Scottish Water identified the cause of the taste and odour to be *Actinomyces* bacteria which are naturally present in soils and were washed out by the exceptionally heavy rainfall in the catchment. This bacteria produces taste causing compounds, geosmin and 2-Methylisoborneol (MIB) and although algal blooms in reservoirs is the more usual cause of these compounds, this potential cause was excluded by the investigation. The two compounds cannot be removed by the treatment process at Glenlatterach. Concentrations of these substances subside of their own accord over time and they present no implications for public health.

DWQR Assessment of Actions Taken by Scottish Water

By the time Scottish Water had positively identified the source of the taste complaints, the issue had been resolved. The treatment process at Glenlatterach was continually optimised throughout the period in response to changes in raw water quality.

A thorough catchment investigation was undertaken by Scottish Water in October 2014 both in response to the incident and extensive activity that was known to be going on in the catchment. This has identified a number of actions to ensure that catchment activities are managed to minimise the impact on water quality. Such actions include the investigation of additional raw water quality monitoring and the improvement of communications between catchment stakeholders and the water treatment works.



DWQR considers that Scottish Water's actions in response to the incident were generally appropriate, although no mention is made of actions at the water treatment process to enhance removal of the taste and odour causing compounds. Had the incident been more protracted or should it recur, DWQR would expect Scottish Water to consider such measures.

The event has been categorised as significant.

