

Turriff Regulatory Supply Zone Taste and odour August 2018

DWQR Inspector:
William Byers

Event No. 9676

Event Category: Major

On 17 August, through awareness of community group comments on social media of tastes in the Turriff water supply, Scottish Water's Public Health team arranged sampling of the supply at points in the distribution system and at consumer taps. Concerns were that possible algal growth in the raw water supply may be causing tastes in the final water. Due to the warm dry conditions being experienced over the summer, abstraction from the River Deveron had been increased to meet the water demand placed on the treatment works. Concerns for possible algal activity had led to increased monitoring of the raw water entering the works in July and this indicated the presence of 2 Methyl Isoborenol (MIB). Whilst MIB is not toxic, it does cause earthy or musty type taste complaints if not removed by the water treatment process, usually by powdered or granular activated carbon. Turriff water treatment works does not have a carbon based treatment process and subsequently MIB was present in the water supplied. The first consumer contact of these tastes was received on 10th July and a further two within the following 3 weeks. At its height, during the week commencing 20th August, 20 contacts were received. The sampling arranged by the PHT on 17 August, confirmed the presence of MIB in the consumer tap samples. Tests for Geosmin and toxic algae confirmed these were not present in the supply.

Attempts were made to reduce the impact of the algal presence through the temporary application of powdered activated carbon to the filters. This measure however could not be sustained due to blinding of the filters and significant reduction in throughput. Monitoring of the supply continued and although the level of consumer contacts gradually reduced, through to October, a total of 89 contacts were received from consumers in relation to this issue.

I consider this incident to have been caused by the presence of MIB in the raw water and that this is most likely due to the increased abstraction from the River Deveron. There are no specific treatment options at Turriff to remove MIB and Scottish Water took practical steps to try and enhance the process to mitigate the impact of the taste and odour on consumers, although ultimately, these could not be sustained.

The event has been categorised as Major. Scottish Water has identified two actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made one additional recommendation.

