

Drinking Water Quality Regulator for Scotland

Ref: 2020/20 Alleged Illness caused by drinking water, and taste and odour complaint Date of Contact to DWQR 11th May 2020

Consumer Complaint Determination

DWQR Inspector: Colette Robertson-Kellie

Basis of complaint

Mr L contacted Scottish Water on the 3rd December 2019 to report the taste and odour of the drinking water supply to his home, and later advised that the supply was reportedly causing him a variety of health problems and had a bleach like smell. After moving house, his drinking water supply was initially satisfactory to Mr L, but then had a bleach like smell after 'a couple of months'. Both properties are supplied from the same water treatment works and are in the same Water Supply Zone.

Mr L contacted the DWQR on the 11th May 2020 to complain about the smell of his drinking water and to advise that it was making him unwell. He was also seeking advice for water treatment within his property and expressed concern that his supply was being chloraminated, which he felt could be causing him health problems.

Context of complaint

Scottish Water took drinking water samples from Mr L's property on the 10 December 2019 and then further samples from this same property for more in-depth analysis on the 17th January 2020. Analytical results show that the samples complied with water quality standards set out in the Public Water Supplies (Scotland) Regulations 2014 ('the Regulations'). The Test Report for the samples taken on the 10th December does not include a record of free or total chlorine measurements. Given that Mr L had contacted Scottish Water with concerns over a bleach like odour, this omission is inappropriate as this type of contact is most likely to be due to concerns about chlorine levels.

Mr L moved home, to another property within the same Water Supply Zone as his previous property, and he again contacted Scottish Water with concerns about his drinking water supply and its impact on his health. Scottish Water would not take a sample from this property, on the grounds that the supplies to the two properties were in the same Water Supply Zone. However, water supply networks and internal plumbing within properties can affect water quality, so I advised Scottish Water to rectify this and take a sample from Mr L's current property. This sample was taken on the 29th July 2020, and was compliant with the requirements of the Regulations.

The water supply is chlorinated, not chloraminated. I have previously carried out a routine formal audit of the treatment works so am aware of the types of water treatment at the site, and the analytical data confirms that the supply is not chloraminated.

I have examined analytical data from 132 samples taken across the Water Supply Zone over the past two years, which shows that chlorine levels have been increasing over this time period. Scottish Water has reported that a decision was taken in March 2019 to increase the residual chlorine target at its service reservoir storage tanks



from 0.25 to 0.4 mg/l in a number of its supply systems, in order to ensure microbiologically safe water at consumers' taps. This included Mr L's supply - the chlorine levels were increased at the treatment works to achieve these higher targets, and it is possible that this increase in chlorine concentrations have caused Mr L to object to the taste and odour of his water supply. From the second sample taken from Mr L's previous property, Scottish Water recorded a free chlorine residual of 0.64 mg/l, and his current supply was measured as 0.26 mg/l; while there is no maximum allowable standard for chlorine in the Regulations, these values are well under the World Health Organisation's guideline value of a maximum of 5 mg/l. However, the Regulations do place a duty on Scottish Water to ensure that the Taste and Odour standards are 'acceptable to consumers and no abnormal change'. I am of the view that while the increases in chlorine dosing have not been abnormal, and have been made to reduce the risk to the microbiological safety of the supply, which must always take priority, Scottish Water must also take into account the aesthetic properties of the supply and the potential for water being unpalatable for consumers. There is a statutory duty on Scottish Water to maintain individual risk assessments on all of its supplies, and I note that the next scheduled review for the risk assessment of the drinking water supply system feeding Mr L's property is November 2020. This particular water supply system is extensive and complex, so I recommend that Scottish Water carries out an assessment of chlorine levels, microbiological compliance and consumer contacts for taste and odour across the supply system for the previous two years for this risk assessment review, and determines whether the increase in chlorine across the system is appropriate. DWQR will attend this review.

DWQR's role is to ensure that Scottish Water complies with the Regulations, and as such I am unable to make any comment on Mr L's health, or give advice on water treatment technology for use within his property.

DWQR Assessment of complaint and the actions taken

The water quality of the samples taken at Mr L's former and current homes complied with the standards required by the Regulations.

Scottish Water did not act reasonably in initially declining to take a sample from Mr L's current property, but this has been rectified.

Increased residual chlorine levels across the supply zones which feed Mr L's properties may be the cause of the perceived bleach like odour of the supply.

DWQR does not uphold the complaint, but two recommendations are made.

Recommendations

DWQR recommends that Scottish Water:

- 1. Amends procedures as appropriate and carries out relevant staff training to ensure that chlorine measurements are made when samples are taken for taste and odour consumer contacts and when testing the microbiological quality of a drinking water supply.
- 2. Carries out a review of chlorine levels, microbiological compliance and taste and odour consumer contacts within the system supplied from the water treatment works for the risk assessment review scheduled for November 2020, to determine whether the increase in chlorine across the system is appropriate. DWQR must be invited to attend this review.

