

Incident Summary

Carron Valley WTW Geosmin Taste and Odour July-Sept 2019

DWQR Inspector:
Colette Robertson-Kellie

Event No. 10395

Event Category: Serious

Analytical data from 5 July 2019 showed that geosmin levels in the raw water supply for Carron Valley WTW were increasing and on 18 July they were found to be elevated in the final water. Carron Valley WTW has a history of issues with taste and odour complaints caused by geosmin, so enhanced monitoring is routinely carried out by Scottish Water on the supply. Consumer contacts for taste and odour started on the 22nd July, and on the 29th July, Scottish Water's laboratory reported an odour detection from a sample taken from a consumer's property supplied by Carron Valley. Dosing of powdered activated carbon (PAC) at the treatment works, added to adsorb geosmin related taste and odour causing compounds, was increased and optimised, with careful monitoring on the performance of the coagulation and filtration processes. Rezoning of the network was carried out to reduce the flow through the treatment works. The dissolved air flotation (DAF) units were cleaned, and the desludging of these units was optimised. Filter performance was also checked. Previous experience had shown that recirculating supernatant water from sludge and washwater processing on the site had significantly added to the geosmin load on the treatment works, so on the 24th July, this process stream was diverted to waste after consultation with SEPA. By mid-September, geosmin levels in the raw water started to reduce. Between 29 July and 28 September 2019 there were 185 consumer contacts reporting taste and odour concerns.

The cause of the incident was an increase in geosmin in the raw water feeding the water treatment works and a lack of adequate treatment processes to remove it.

The event has been categorised as Serious. Scottish Water has identified eight actions which DWQR accepts are appropriate and will monitor to ensure they are completed prior to signing off the incident. DWQR made no additional recommendations.