

Incident Summary

Kaim WTW Manganese failures and consumer contacts August 2019

DWQR Inspector: Colette
Robertson-Kellie

Event No. 10397

Event Category: Significant

Following heavy rainfall in the catchment on 29 July 2019, routine bench analysis by Operational staff at Kaim WTW showed elevated manganese levels in the raw and final water on 5 August. There is no manganese removal stage at the treatment works, so investigations were carried out by the Process Scientist on 5 August into the suitability of using a river in the catchment to dilute manganese levels from the reservoir. It was concluded that the organics load in this source was too high and the risk of generating disinfection by-products from this source too great. The following day the Process Scientist attended the treatment works to carry out interstage sampling and a full review of the performance of the water treatment works. The alum dose was marginally increased, and the works was confirmed as operating as well as it could. Kaim WTW is scheduled to be maintained out from Greenock WTW by March 2020 and Scottish Water has plans to flush the network to remove deposits of manganese as part of the project. Scottish Water has submitted four events to DWQR reporting high levels of manganese from scheduled samples from the water treatment works and two events from consumer contacts which had failures of the manganese standard. There were 32 consumer contacts in response to this incident between 16 and 26 June 2019.

The cause of the incident was a lack of manganese removal at the water treatment works.

The event has been categorised as Significant. Scottish Water has identified three 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.

