



PRIVATE WATER SUPPLIES – CASE STUDY 2017/03

Water quality affected by external quarrying activities

In November 2014, a local authority in the north of England received complaints from consumers experiencing discoloured water from a spring fed private supply which they believed was the consequence of quarrying activities in the local catchment.

In April 2015, the local authority served both a Regulation 18 Notice (on the basis that they believed the supply to present a danger to human health) and a Section 80 Notice on the relevant persons responsible for the supply. The Section 80 Notice was served in response to sample results which demonstrated elevated turbidity, iron and aluminium levels in the water, thus indicating that the supply was unwholesome. The residents, all relevant persons, appealed this Notice, but in February 2016, the Secretary of State overturned the appeal and confirmed that the content and timescales of the Notice were appropriate. Although the residents believed that local quarrying work was affecting their water quality, the quarry operators were not thought to be relevant persons by the local authority since they neither own nor exercise powers of management or control over the land where the source is situated.

In March 2016, the consumers of the supply contacted the local authority following a sudden and rapid visual deterioration in their water quality. A subsequent visit and inspection by the local authority to the quarry confirmed that the activities of the quarry had affected the groundwater, causing it to be a potential risk to human health.

When appropriate treatment including filtration and disinfection was installed the Regulation 18 Notice was revoked, however, the Section 80 Notice was extended to February 2017 pending the outcome of negotiations between the supply consumers and the quarry operator, regarding the provision of a long-term alternative supply to replace the existing arrangements.

The quarry operator agreed to install a borehole to provide an alternative supply, which was completed in September 2017.

This case study represents an example of how industry in the catchment can cause deterioration of the quality of ground water in an area, consequently increasing the risk to consumers of local private water supplies. It shows how the powers available to local authorities can influence relevant persons to bring about effective short and long-term mitigation of the risks, but this can require considerable collaborative effort between all stakeholders involved. In this example the solution required multiple agencies including the Environment Agency and the local authority planning department to reach a solution.