

Facts on

Nitrates

What is nitrate?

Nitrate is found in many foodstuffs and is a normal part of our diet. It is a natural compound of nitrogen and oxygen.

Nitrate in water mainly results from intensive farming when farmers boost productivity by adding fertilisers. These include both manufactured fertiliser and organic manure. Nitrate can percolate through the ground entering the groundwater resource or running off into rivers, and can result in a raw, untreated water resource with an unacceptable level of nitrate.

What is the standard for nitrate?

The United Kingdom and European standard for the concentration of nitrate in drinking water is 50 parts per million (50 mg/l).

What are the nitrate levels in Hafren Dyfrdwy now?

All our drinking water supplied to customers meets the United Kingdom standard. Where raw, untreated waters do not meet the United Kingdom standard, we have developed low nitrate groundwater sources and blended high nitrate water with low nitrate sources. We have also planned for the installation of modern nitrate removal plants as particular circumstances dictate to ensure that the drinking water supplied continues to meet the standard.

What are we doing to keep within the standards for the future?

Water companies nationally are concerned about the upward trend in nitrate levels in some underground sources (groundwater). We have been pressing vigorously for Government action to protect supplies from nitrate contamination for many years. The Water Act 1989 included powers to enable the Environment Agency and relevant Government Ministries to set up Nitrate Vulnerable Zones (NVZs) in which farming can be controlled to reduce leaching of nitrate into water sources. Hafren Dyfrdwy is actively involved, both locally and nationally, in promoting and supporting NVZs which have now been designated for all catchments, surface and groundwater, of affected waters. These are reviewed every four years. Action programmes for NVZs (England and Wales) 1998 were enacted in all zones by 31 December 1999. We continue to monitor our supplies and use models to predict nitrate trends so that we can plan our investment to ensure that we continue to comply with the standards.