

Background information on Nitrate reduction

Methods of reducing/ removing nitrates from a supply:

Reverse Osmosis - Reverse Osmosis systems can be used to remove the nitrates from a drinking water supply. For single dwellings with one drinking water tap and low water consumption, a point of use system provides efficient reduction of nitrates at low cost, a simple under-sink unit can be installed with a drinking faucet providing only one outlet for the treated water. (See Reverse Osmosis for further information)

For large or multiple properties, commercial and industrial applications, re-generable ion exchange systems are preferred.





Ion exchange - Ion exchange nitrate removal is a similar process to water softening, using a slightly different polymer resin. The resin removes the nitrate (and sulphate due to its chemical similarity) from the water and replaces them with chloride ions. Once the resin bed is nearly exhausted of chloride ion, the control valve carries out a regeneration of the bed. This is achieved by passing a chloride rich brine solution (made up of common salt dissolved in water) through the resin bed, which flushes out the nitrate and sulphate to drain, replacing them with

chlorides again. After a final rinse to remove excess brine the unit is automatically put back into service again. The only input required by the user is to ensure that the brine tank is kept topped up with salt. Again our engineers will advise the best system depending on the nitrate level of your supply (up to 93% removal can be achieved using this method) and the flow rate required.

