

# facts on pesticides in water

## what are pesticides?

Pesticides are a wide variety of different chemicals including insecticides, herbicides, fungicides and algicides.

Many people automatically associate pesticides with farming, but they are also widely used by all kinds of organisations such as local authorities and the general public in their homes and gardens.

## can pesticides get into water supplies?

Although the use of pesticides is strictly controlled in the UK, residual traces can run into rivers and streams or find their way into underground sources used for public water supplies.

We use very sophisticated test equipment to monitor for pesticides; at most sources we can detect no traces of residues even in the raw untreated water. However, at those sources where trace levels have been detected, activated carbon filtration has been installed to remove them before supply to customers.

## is there a health risk from pesticides in water?

The UK standard is very stringent at 0.1 parts per billion (ug/l) for individual pesticides, with a limit of 0.5 ug/l for total pesticides. The 0.1 ug/l limit is almost twice as demanding as looking for one person in the population of the whole world. It is based on the EC Directive, which is essentially a zero limit. It is not founded on any known health criteria. All of our supplies meet this very strict standard and therefore pose no public health risk. Government advisory values for pesticides based on published health criteria for the most commonly used chemicals are well above the standards that we have to work to.

## what monitoring is carried out for pesticides?

We regularly check records of all pesticides used in our area and monitor over 70 of the compounds which are most likely to cause problems. All the samples taken from treated water and analysed using the most sophisticated monitoring equipment comply with the 0.1 ug/l limit. If any exceedance were to occur then immediate remedial action would be taken. ►

## what is Severn Trent Water doing?

For sources where pesticide levels in the untreated water may cause the treated drinking water to exceed the 0.1 ug/l standard, we have installed ozone treatment and/or activated carbon filtration.

Activated carbon removes organic pollutants, including pesticides, whilst ozone is a powerful oxidising agent that breaks down organic compounds.

One of the best ways of reducing pesticide levels is to make sure it never gets into the untreated water in the first place. So Severn Trent Water is also actively engaged in promoting better control of pesticides.

Our Spraysafe and Farmsafe campaigns are successfully spreading the control message to local authorities, other utilities and farmers to use weed killers and other chemicals that are less threatening to water supplies and the environment.