



You can write to us at:

Scottish Water

PO Box 8855
Edinburgh, EH10 6YQ

Alternative formats of this leaflet can be made available free of charge. Textphone users please call **0845 603 8855**. For information on Braille, large print, audio tapes and a variety of languages, please call **0845 606 8855**.

We record all calls for quality and training purposes.



your waste water services

our sewer network

If you would like to connect a drain from your home to the public sewer or to see plans of the public sewer network, please contact our **Customer Helpline** on **0845 601 8855** for more information.

We are committed to this cause and as a result we are investing millions of pounds in upgrading and building new waste water treatment works and waste water systems.

the facts

We are responsible for just under 30,488 miles of sewers across the whole of Scotland. From 2002 to 2006 we spent £94 million on replacing approximately 242 miles of sewers which help to improve the environment and contribute to protecting public health.

the facts

From 2002 to 2006 we have invested £415 million to improve waste water treatment works and £509 million to improving the environment.

the environment

European legislation has set high standards for protecting the environment especially with regards to the discharge of waste water into rivers and coastal waters.

All waste water which is returned to rivers and coastal waters must comply with quality standards set by the Scottish Environment Protection Agency (SEPA). You can contact SEPA directly for guidance, data, regulations and reports on environmental issues at **info@sepa.org.uk** or **www.sepa.org.uk**

For more information on Scottish Water, call our Customer Helpline on **0845 601 8855** or visit our website at:

www.scottishwater.co.uk

SCOTTISH
WATER 

what is **waste water**?

Every day you use water in your home, from washing the dishes to taking a bath. This used water is known as waste water and must be safely removed from your home for treatment before it can be re-used.

Waste water even includes the rainwater from your roof and gutters.

your waste water services

At Scottish Water we collect more than a billion litres of waste water every day from your homes. Your waste water passes down your drains into the main public sewer network and from here our vast network transports it to our waste water treatment works. Here we then reduce any contamination in the water to environmentally acceptable levels before returning the treated water into rivers and the sea.

We are responsible for the provision, operation and maintenance of the public sewer network, whilst private drains on your property remain your responsibility.

For more detailed information on understanding who owns and is responsible for the water and waste water pipes in and around your home visit www.scottishwater.co.uk or call our **Customer Helpline** on **0845 601 8855** and ask for a copy of our **'your pipework responsibilities'** leaflet.

the facts

We currently operate just over **1900 waste water treatment works** across the whole of Scotland.

this is how we typically treat your waste water:

PRE Before we treat your waste water we undertake both of the following processes to remove any debris from it:

screening

Your waste water is passed through screens to remove any large items and debris. We then take these away and bury them in approved landfill sites or burn them in incinerators.

grit removal

Next, your waste water is passed through specially designed channels or tanks to remove any grit and sand that it may contain from the rain washed into the sewers from the roads. The grit and sand falls to the bottom of these tanks and is then removed and disposed of in approved landfill sites.

1 In the first stage of actually treating your waste water it is passed through sedimentation tanks to remove suspended solid matter.

The waste water is retained in these large circular or rectangular tanks for about six hours during which time the solid particles settle to the bottom and form a sludge. This sludge is collected and passed for further treatment prior to disposal or recycling.

2 In the next stage of treating your waste water we usually use one of the following main processes:
a) Biological filtration, or
b) Activated sludge.

Both of these processes use naturally occurring bacteria to break down organic substances and, if necessary, remove ammonia from the waste water.

a) Biological filtration

In round tanks, the settled waste water is sprayed by moving distributor arms over a deep bed of small stones called a percolating filter. Bacteria, fungi and other organisms living in the gaps between the stones, feed on the waste water as it passes through the bed. This helps to purify the water as it trickles down to the bottom of the filter.

b) Activated sludge

In this alternative process, the settled waste water goes into tanks which contain activated sludge. Activated sludge contains the right type of micro-organisms (bacteria) in it, which feed on the waste particles. This bacteria needs a supply of oxygen to function properly, so air is fed into the tanks.

3 Finally, in the last stage of treating your waste water, the water is passed into settlement tanks, called **humus tanks**. These tanks allow any **suspended matter produced in the previous stage to settle out**.

Now, the treatment process is complete and your waste water is clean and ready to be returned safely back into the environment.

water treatment diagram

