HOW WE TREAT WASTE WATER

Sewer
The used water from your home goes into a drain and then a sewer. These pipes carry the sewage to a treatment works, where the sewage is cleaned.

Screening
Sewage is treated to protect the environment. First, metal grids (called screens) remove solids such as wood, rags and paper.

Primary Treatment
The sewage flows into large tanks where most of the remaining solids settle to the bottom. This is called sewage "sludge".

Sludge Disposal
Sludge may be used as a fertiliser on farms, or burned in an incinerator (which can be used to produce energy). A small amount has to be buried.

Secondary Treatment - 1
Naturally-occurring "goodie" micro-organisms feed on the "baddies" in the sewage. One way is to trickle the liquid over stones on which the "goodies" live.

Secondary Treatment - 2
Another way is to mix the sewage with the micro-organisms in a tank. Oxygen is bubbled into the tank, so that the "goodies" can breathe and do their work.

Final Treatment
The cleaned sewage then goes to a settlement tank. Zapping the sewage with ultra-violet light also makes sure that any remaining "baddies" are killed.

Back to the river
The water is now returned to the environment and checked by Yorkshire Water scientists.