# **Discharging Sewage Effluent**

It is important to remember that the effluent discharged from a septic tank or sewage treatment plant, no matter how well it has been treated, is not clean water. It is sewage effluent and presents a risk to people and the environment.

At the planning stage it is essential to bear in mind that establishing a practical and legal method of discharging sewage effluent if more important than the septic tank or sewage treatment plant that will be installed and it should not be view as a reserved matter.

## **Environment Agency Permits**

All sewage effluent discharges, irrespective of volume or location, must be registered with the Environment Agency. This also applies to the replacement of existing tanks and drainage fields.

The Environment Agency has three types of permit - Standard, Bespoke and Exemption.

Most domestic sites will fall under the exemption category however you must check that the site meets the required criteria. If it does not then a Standard or Bespoke Permit must be applied for.

## **Effluent Disposal Methods**

### **Type of System**

Septic Tank

A septic tank produces primary treated effluent.

Primary treated effluent has a distinct foul odour and is toxic to aquatic life and worms.

Primary treated effluent can only discharge to a drainage field constructed to BS6297:2007.

Sewage Treatment Plant

A sewage treatment plant produces secondary treated effluent.

Secondary treated effluent is cleaner than primary treated effluent and should be colourless and odourless.

Secondary treated effluent can be discharged either to ground (drainage filed) or to surface waters (streams / rivers).

## **Effluent Quality**

Strong consideration should be given to the quality of effluent that that you discharge.

Even though a septic tank can be discharged to ground via a drainage field t is often preferable to install a sewage treatment plant over a septic tank because of its effluent quality.

All drainage fields will fail over time and the worse the quality of the effluent the quicker it will fail due to blocking from suspended solids and bacterial biomass caused by the effluent BOD.

Not all sewage treatment plants are equal in terms of their effluent quality.

Effluent quality is usually described by three measures of pollutants – Biological Oxygen Demand (BOD), Suspended Solids and Ammonia. Each pollutant is measured in mg / Litre (parts per million).

Example:

BOD	15 mg/L
Suspended Solids	20 mg/L
Ammonia	15 mg/L

The lower the number the cleaner the effluent.

