

### WHAT NEEDS TO BE DONE

While economic regulation and environmental permitting will undoubtedly need to be reviewed, neither can happen without the availability of good quality (and preferably long-term) data about a company's sludge assets.

A competitive market requires pricing to be known in detail and this can only come from detailed analysis of the operating costs of existing sludge treatment sites. Understanding current sludge treatment costs is, in our opinion, one of the most important first steps towards a functioning sludge market.

### HOW SHOULD THE DATA BE USED?

BWC has significant experience in this area. It is essential that every operating cost for every sludge treatment centre is quantified. This, however, can be an enormous task. Very frequently we find that procurement data is allocated to a "central" cost code, meaning it is very difficult to identify precisely which costs apply to each treatment site. Our experience in collating and analysing this data has proved invaluable for several clients.



There are over 9,000 sewage works in the UK, ranging from small package plants that treat wastewater from a few households to extremely large sites that provide treatment for perhaps one or two million people. Each of these works produces sludge, the semi-solid waste product left over after treating sewage. At the moment each water company typically treats its own sludge in its own assets for disposal in its own area. OFWAT, the body that regulates the UK water industry thinks there's a wider market for sludge and in this briefing note we explain why.

OFWAT have recognised that sludge has a value. It can be used to generate power indirectly by producing biogas in digesters that is then burned in combined heat and power (CHP) engines. Digested sludge can, subject to meeting quality criteria, be spread on land as a fertiliser. OFWAT think that creating a market for sludge to exploit this value can produce significant benefits.

For example, creating a market where adjacent water companies can sell sludge across their boundaries could lead to the more efficient use of assets. Companies that currently incur high costs transporting sludge within their own region would be able to sell sludge to the adjacent company who may have a sludge treatment centre "over the border". The hope is that this will also lead to innovation in the technical and engineering aspects of sludge treatment and disposal but also in the planning and location of new sludge facilities.

There are many things to do to make this happen, however. Economic and environmental regulation must be reviewed, detailed analysis of the capacity and performance of existing sites is also essential. Above all, ensuring the quality of the data used to define the pricing structure is essential.