



The Coal  
Authority

## High density Sludge (HDS) plant design.

Open early engagement - This means that a procurement idea is currently active; it is in the early stage of development and judging interest from potential process engineering companies. - This notice is not a call for competition

The Coal Authority was established by Parliament to undertake specific statutory duties, set out in the Coal Industry Act 1994, associated with licensing coal mining operations; managing property and the historic legacy arising from the ownership of the coal reserves and underground workings; settling subsidence damage claims not falling on coal mine operators and providing access to coal mining information.

The Coal Authority operate over 75 minewater treatment schemes that remove contaminating metals from mine water prior to the treated water being discharge into a receiving watercourse.

Schemes range from complex process engineering plants, through pumped wet wells and boreholes/mineshafths, to totally natural (passive) schemes without a power source.

A number of sites require the addition of pH correcting or oxidising reagents. Flow rates range from circa 5 litres/sec to 400 litres/sec. A standard pumped treatment scheme utilizes 32 digital inputs, 8 analogue inputs and 8 digital outputs. The majority of treatment schemes comprise of aeration cascades, settlement ponds and reed beds. All schemes are subject to regulatory consents and licenses.

The Coal Authority is now considering the potential of High density Sludge (HDS) plants in treating mine water (acidic and alkaline) as well as the potential benefits that can be achieved with a sludge management system.

From a Coal Authority perspective, the sludge generated (principally ochre) would be predominantly iron oxy-hydroxides with other metal hydroxides. The characteristics of the resultant ochre from a HDS plant are a consideration for the Coal Authority, as potential markets for ochre may arise in the future.

## OFFICIAL – SENSITIVE: COMMERCIAL

Areas of interest of the Coal Authority include:

- Sample collection and preparation
- Laboratory testing
- Pilot testing (off and on site)
- Analytical Capabilities
- Plant conceptual design
- Whole life costs

We would like to invite interested companies to meet with us at our Mansfield office during September / October 2018 to better understand our requirements and offer suggestions on how we might fulfil our objectives through a future tender process.

Once the Coal Authority has assessed interest, it will advise on if meetings are to be conducted on an individual basis or as a group with multiple companies present.

If you have any queries please express your interest by contacting [peterkobryn@coal.gov.uk](mailto:peterkobryn@coal.gov.uk) no later than 18 September 2018

Participants should note that we reserve the right to use any information shared within this market engagement to develop a mature service specification for future procurement purposes. Any costs incurred by participating in this exercise must be borne by the participating organisations.

Following this exercise we shall determine if and how we will approach the market to secure the services.

Please note that any future procurement will be subject to a separate advertisement