

The Coal Authority

Overall management of post-mining heritage

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Agenda

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- Mine water management
- Tip inspection & management
- Turning assets into liabilities
- Using heat from abandoned coal mines





Our story

- National coal board (NCB) former British public corporation, created on January 1, 1947
- It was renamed the British Corporation in 1987
- The British coal industry was privatized under the Coal Industry Act 1994
- It also created a Coal Authority to licence coal mining operations and manage additional powers in the Energy Act 2011, delivering a non-coal mine water programme and deal with non- subsidence legacy issues when the necessary funding is made available
- The Authority provides assistance to other organisations that can benefit from our expertise that has developed since the organisation was established



Who are the Coal Authority?

Who are we?

We're a non departmental public body (NDPB), sponsored by the Department for Business, Energy & Industrial Strategy (BEIS)

We provide expert advice and creative solutions to manage public safety and environmental issues from coal mining

Our teams work to resolve the impacts of mining by developing innovative solutions and technologies





Statutory Responsibilities & Powers

- Coal Mining Subsidence Act 1991 & Coal Industry Act 1994
- Water Act 2003
- The Coal Authority works to protect the public and environment in mining areas in England, Wales and Scotland
- We are here to manage the legacy of coal mining
- We are responsible for managing property and historic liability issues



Our work – key figures

Our work

- **11%** of the UK is occupied by the UK coalfield
- 173,500 recorded mine entries
- 9 million properties lie within Britain's coalfield
- 130,000 properties lie within 20 metres of at least one mine entry
- 825 surface hazards reported and subsidence claims assessed each year
- 2,000 permits issued each year
- 8,900 planning application responses each year
- **122 billion** litres of water treated each year



Public safety & subsidence

Public safety and subsidence

We respond to coal mining related hazards and subsidence events, and proactively undertake a mine entry inspection programme

Last year we undertook 10,858 mine entry inspections





Our work & Background



A1 2016













Glasgow 2017

























Misc











Mine water management

Environment

What is a mine water treatment scheme and why do we need them?

Last year we:

Prevented 4,500 tonnes of iron solids from entering water courses

And replaced 27,000m² of our 350,000m² reed beds





Environment

We provide expert advice at all project stages, drawing on our experience of managing over 82 treatment schemes across Britain

Our unique skills and knowledge allow us to offer a range of services relating to treating waters that have been affected by past mining activities





Tip inspection & managment

Tip inspection & management

We worked with Welsh Government, Welsh Local Authorities and Natural Resources Wales to develop a new colliery tip assessment framework, database and mapping layers to allow consistent categorisation and action planning

We also provide information and reassurance to customers on the new coal tips hotline that we operate



Turning assets into liabilities

Turning liabilities into Assets

Ochre is a by-product of the mine water treatment process

It has already been used successfully in land remediation projects

We can also use it as a replacement for ferric sulphate in waste water treatment and it can even be used as an iron oxide pigment





Using heat from abandoned coal mines

Using heat from abandoned coal mines

One quarter of the UK's populations live above abandoned coal mines that are warmed by natural geothermal processes

The water in these mines is a low carbon, sustainable heat source, which under the right conditions can also compete with public supply gas prices

In the case of a district heating network, this energy can be transferred to a pipe network using a heat exchanger, and then distributed to nearby homes





Work with our partners at BGS

Our new mapping tool, built with BSG, reveals for the first time the temperature at different depths within Britain's abandoned coal mines

Freely available to use by developers, planners and researchers

It identifies opportunities to investigate the use of mine water as a sustainable heat source







Thank you for listening

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