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# COAL MINING RISK ASSESSMENT REPORT

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# Report on a Coal Mining Risk Assessment

Location: 27 Beechfield Avenue  
Skelmanthorpe, Huddersfield, West Yorkshire, HD8 9BZ

For: Robert Simpson

Consultant: AHJ Architects

Report No. C5955/26/E/9226

Report date: April 2026

For and on behalf of **Rogers Geotechnical Services Ltd**

**Steven Hale** BSc FGS  
Geo-environmental Engineer

**Rob Palmer** MSc FGS ACIEH  
Engineering Director

## 1. Introduction

It is understood that as part of the planning application at the site, a Coal Mining Risk Assessment has been requested by the planning authority. Consequently, a desktop study was commissioned in order to assess the risk to the development from coal mining. This report presents the findings of the study.

## 2. Geological Desk Study

The geological desk study has been undertaken using the following sources of information.

- British Geological Survey (BGS) map sheet<sup>1</sup>.
- British Geological Survey *GeoIndex Onshore Viewer*<sup>2</sup>.
- Coal Authority Consultants Coal Mining Report<sup>3</sup>.
- British Geological Survey *Borehole Records*<sup>4</sup>.

<sup>1</sup> Sources: British Geological Survey (NERC) Map Sheet 86; Glossop Solid and Drift Editions

<sup>2</sup> Sources: British Geological Survey (NERC) GeoIndex Onshore Viewer [online resource from [www.bgs.ac.uk](http://www.bgs.ac.uk)]

<sup>3</sup> Coal Authority Reference: 51003561835001 dated 31<sup>st</sup> March 2026.

<sup>4</sup> Sources: British Geological Survey (NERC) Borehole Records [online resource from <http://www.bgs.ac.uk/>]

## 2.1 British Geological Survey Maps and Viewer

The appropriate map sheet for the site and the geology viewer has been examined and the following table presents the indicated geology:

<b>Table 1: Geological Data for the Site</b>			
<b>Strata Type</b>	<b>Strata Name<sup>5</sup></b>	<b>Parent Unit<sup>6</sup></b>	<b>Description</b>
Superficial Geology	None recorded	-	-
Solid Geology	Penistone Flags	Pennine Lower Coal Measures Formation	A named sandstone member of the Pennine Lower Coal Measures Formation. Flaggy and present as numerous intermittent leaves between undifferentiated strata.

On the 1:10,000 geological map, there are two dip indicators relevant to the site (i.e. within the same fault block) that suggests the solid geology beneath the site dips between 3° and 5° to the northeast. It is of note that a dip marker is present 500m to the west which indicates that the geology to the west dips 7° to the west. As such, there are outcrops of younger coal seams present to the west. It anticipated that these seams have been weathered away from the position of the itself. These seams are recorded as the Cumberworth Thin, Whinmoor and Shertcliffe seams.

Given that the site is situated on the Penistone Flags, it is difficult to differentiate which of the leaves the site is present on, mainly due to the lack of nearby coal seam outcrops. Indeed, it is difficult to determine the stratigraphic position of the solid geology beneath the site. However, given that the Cumberworth Thin outcrops a short distance to the west, the site will be assessed assuming it is present on the top leaf of the Penistone Flags and subsequently all coal seams beneath this sandstone member will be considered.

<b>Table 2: Summary of Coal Seams Within the Vicinity of the Site</b>	
<b>Seam Name</b>	<b>Seam Thickness<sup>5*</sup></b>
Penistone Green Coal (PGC)	0 to 0.1m
Lower Penistone Coal/Black Bed Coal (LPC/BL)	0 to 0.3m

\*It should be noted that coal seam thicknesses vary over relatively short distances

<sup>5</sup> Sources: British Geological Survey (NERC) Map Sheets 86; Glossop; Solid and Drift Edition, and GeolIndex Onshore Viewer [online resource from [www.bgs.ac.uk](http://www.bgs.ac.uk)]

<sup>6</sup> Sources: British Geological Survey (NERC) Lexicon of Named Rock Units [online resource from [www.bgs.ac.uk](http://www.bgs.ac.uk)]

## 2.2 Coal Authority Mines Report

As part of this study a Coal Authority Consultants Coal Mining Report has been obtained. The report is presented as Appendix 2 and for the purposes of discussion has been summarised below:

<b>Table 3: Summary of the Consultant's Coal Mining Report</b>		
<b>Has the report highlighted evidence or potential of:</b>		
<b>Mining Feature</b>	<b>Yes/No</b>	<b>Comments</b>
Underground Coal Mining	No	None recorded.
Probable Unrecorded Shallow Workings	Yes	No further details given.
Spine Roadways at Shallow Depth	No	No spine roadway recorded at shallow depth.
Mine Entries	No	None recorded within 100m of the enquiry boundary.
Abandoned mine plans	No	None available.
Outcrops	No	No outcrops recorded.
Geological Faults	No	No faults, fissures or breaklines recorded.
Opencast Mines	No	None recorded within 500 metres of the enquiry boundary.
Coal Authority Managed Tips	No	None recorded within 500 metres of the enquiry boundary.
Site Investigations	No	None recorded within 50 metres of the enquiry boundary
Remediated Sites	No	None recorded within 50 metres of the enquiry boundary.
Coal Mining Subsidence	No	<p>The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31st October 1994.</p> <p>There is no current Stop Notice delaying the start of remedial works or repairs to the property.</p> <p>The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.</p>
Mine Gas	No	None recorded within 500 metres of the enquiry boundary.
Mine Water Treatment Schemes	No	None recorded within 500 metres of the enquiry boundary.
Future underground mining	No	For further information please see section 3 of the Consultant's Coal Mining Report.
Coal mining licensing	No	
Court orders	No	
Section 46 notices	No	
Withdrawal of support notices	No	
Payments to owners of former copyhold land	No	

## 2.3 Geological Survey Borehole Records

The BGS (NERC) keeps borehole records from across Britain which are available for public viewing through their website<sup>7</sup>. As part of this study, the records in the area around the site have been reviewed in order to assist in establishing the geological conditions. The logs of the boreholes can be viewed through the BGS website however the most pertinent features are summarised below:

Borehole	Approx. Distance from Site	Depth of Borehole (m)	Notable Features
SE21SW131 <sup>8</sup>	150m W	15.0m	No coal encountered.
SE21SW130 <sup>9</sup>	150m SW	15.0m	No coal encountered.
SE21SW129 <sup>10</sup>	155m SW	15.0m	No coal encountered.
SE21SW128 <sup>11</sup>	160m SW	15.0m	No coal encountered.

It should be appreciated that there was limited borehole data within the immediate vicinity of the site that was available for public viewing. Other borehole scans were available at a greater distance from the site (within other fault blocks), however, these were felt to be of limited value to the study as they are not anticipated to present comparable ground conditions to those below the surface of the site. Nevertheless, the boreholes have indicated that no coal seams will be present within 15.0m of the ground surface within the local area.

<sup>7</sup> Sources: British Geological Survey (NERC) Onshore Geoindex [online resource from <https://mapapps2.bgs.ac.uk/geoindex/home.html>]

<sup>8</sup> Sources: BGS Borehole Scan SE21SW131 online resource from <https://api.bgs.ac.uk/sobi-scans/v1/borehole/scans/items/15622830>

<sup>9</sup> Sources: BGS Borehole Scan SE21SW130 online resource from <https://api.bgs.ac.uk/sobi-scans/v1/borehole/scans/items/15622829>

<sup>10</sup> Sources: BGS Borehole Scan SE21SW129 online resource from <https://api.bgs.ac.uk/sobi-scans/v1/borehole/scans/items/15622827>

<sup>11</sup> Sources: BGS Borehole Scan SE21SW128 online resource from <https://api.bgs.ac.uk/sobi-scans/v1/borehole/scans/items/15622824>

### 3. Risk Assessment

The risk to the stability of the proposed residential development has been evaluated from the data obtained and with reference to the following ratings and definitions:

- Low - The possibility of instability is unlikely therefore no further action is necessary.
- Moderate - The possibility of instability is likely and further investigation or remedial action may be required.
- High - The possibility of instability is highly likely and further investigation or remedial action will be necessary.

**Table 5: Development Specific Risk Assessment**

Item	Risk attributed to	Feature(s) Considered	Risk Rating
3.1	Shallow coal workings	Named coal seams within the Pennine Flags	Low
3.2	Coal workings at depth	The Coal Authority report indicates that the property is not within a surface area that could be affected by past underground mining.	Low
3.3	Mine gas	Shallow coal workings	Low

#### 3.1 Risks Posed by Shallow Coal Workings

On the basis of all of the information provided above, the site is assumed to be at the top of the Pennine Flags. There is therefore a potential for two coal seams to be present at shallow depth. Whilst historic coal mining activity is evident in the nearby area, and therefore it is considered that if coal was known to be close to ground level it could have been removed illicitly via shallow mining methods with relative ease, it of note that the named seams are recorded to be thin and therefore were unlikely to have been worked.

It may be noted that guidance available from both the NHBC and the CIRIA publication, SP32 - *construction over abandoned mine workings*, suggests that competent overburden thickness above a coal seam should be greater than 10 times the thickness of a seam plus seam thickness in order that the collapse of workings would pose a low risk to surface structures.

On this basis, assuming a maximum thickness of the coal seams, the table below suggests the thickness of competent overburden required above each seam to mitigate instability at the surface.

**Table 6: Required Thickness of Competent Overburden**

Seam Name	Seam Thickness	Required Thickness of Competent Overburden
Penistone Green Coal (PGC)	0 to 0.1m	1.1m
Lower Penistone Coal/Black Bed Coal (LPC/BL)	0 to 0.3m	3.3m

Based on the above information, it is considered that there will be more than a sufficient thickness of competent overburden above the shallowest seam in order to prevent the risk of instability posed by the presence of any illicit workings. It should be appreciated that the coal seams present within the Pennine Flags are all noted to be thin and inconsistent and are unlikely to be economically viable. Further to this, the available BGS boreholes indicate that at least 12.0m of competent overburden

are present beneath any soft residual soils. Therefore, a low risk rating has been assigned to this site and no investigation is considered to be required.

### 3.2 Risks Posed by Coal Workings at Depth

In regard to deeper mining which could affect the site, the property is not within a surface area that could be affected by past underground mining.

### 3.3 Risks Posed by Mine Gas

This assessment has concluded that it unlikely that shallow mine workings will be present beneath the site or within the wider site area. In addition, the Consultants Coal Mining Report has not reported any incidents of mine gas within the vicinity of the development. As such, the risks posed by the migration of mine gas can be considered low, such that no further action is required.

## 4. Conclusions

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In conclusion, it is not considered necessary for any intrusive investigation to be undertaken in regards to the presence of potential shallow coal workings.



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## Appendix 1

### Site Plan

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Drawn Scale 1:1250

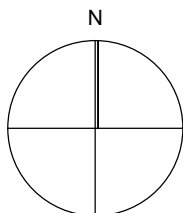


# Skelmanthorpe

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## Issue Purpose: PLANNING APPLICATION

AHJ architects  
 The Courtyard  
 12a Commercial Road  
 Skelmanthorpe  
 Huddersfield  
 HD8 9AA  
 www.ahjarchitects.co.uk



Client Mr Simpson  
 Project 2649 : 27 Beechfield Avenue : Domestic Extension  
 Title Location Plan

Issued From  
 Date March 2026  
 Scale 1:1250 @ A4  
 Drawn BH Auth BH

Drawing Number 2649 - D - 20 - 001

Revision  
 Do not scale from this drawing. Work to agreed dimensions, and any discrepancy to be reported to the Architect.  
 Refer to larger scale drawings where available.

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## Appendix 2

### Coal Authority Report

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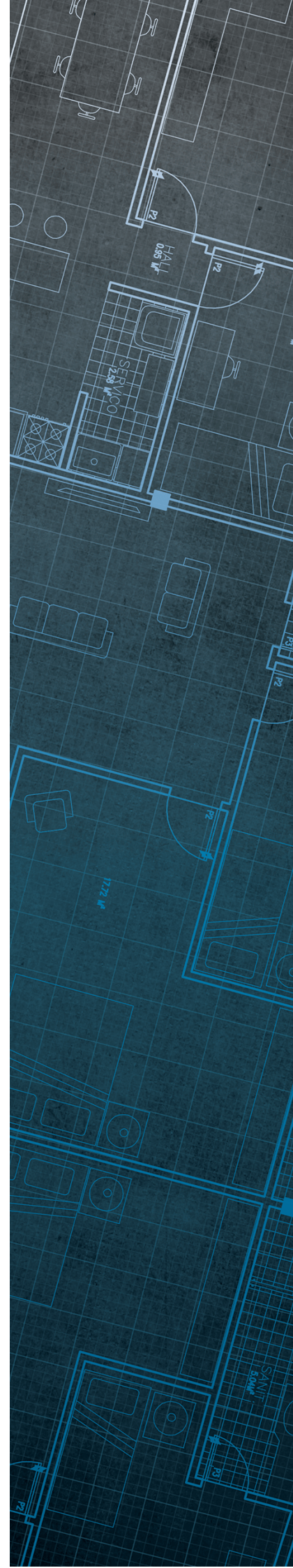
The Coal  
Authority

# Consultants Coal Mining Report

27 Beechfield Avenue  
Skelmanthorpe  
Huddersfield  
Kirklees  
HD8 9BZ

Date of enquiry: 31 March 2026  
Date enquiry received: 31 March 2026  
Issue date: 31 March 2026

Our reference: 51003561835001  
Your reference: C/5881/26/E/9134 - PO-  
3772



# Consultants Coal Mining Report

This report is based on and limited to the records held by the Coal Authority at the time the report was produced.

## Client name

ROGERS GEOTECHNICAL SERVICES LTD

## Enquiry address

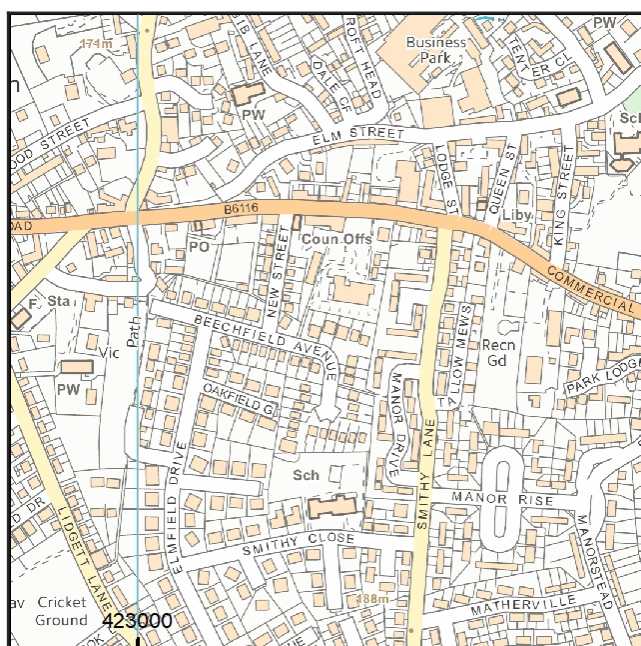
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Approximate position of property



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# Section 1 – Mining activity and geology

## **Past underground mining**

No past mining recorded.

## **Probable unrecorded shallow workings**

Yes.

## **Spine roadways at shallow depth**

No spine roadway recorded at shallow depth.

## **Mine entries**

None recorded within 100 metres of the enquiry boundary.

## **Abandoned mine plan catalogue numbers**

None available.

## **Outcrops**

No outcrops recorded.

## **Geological faults, fissures and breaklines**

No faults, fissures or breaklines recorded.

## **Opencast mines**

None recorded within 500 metres of the enquiry boundary.

## **Coal Authority managed tips**

None recorded within 500 metres of the enquiry boundary.

## Section 2 – Investigative or remedial activity

Please refer to the 'Summary of findings' map (on separate sheet) for details of any activity within the area of the site boundary.

### Site investigations

None recorded within 50 metres of the enquiry boundary.

### Remediated sites

None recorded within 50 metres of the enquiry boundary.

### Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres of the enquiry boundary, since 31 October 1994.

There is no current Stop Notice delaying the start of remedial works or repairs to the property.

The Coal Authority is not aware of any request having been made to carry out preventive works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991.

### Mine gas

None recorded within 500 metres of the enquiry boundary.

### Mine water treatment schemes

None recorded within 500 metres of the enquiry boundary.

## Section 3 – Licensing and future mining activity

### Future underground mining

None recorded.

### Coal mining licensing

None recorded within 200 metres of the enquiry boundary.

### Court orders

None recorded.

### Section 46 notices

No notices have been given, under section 46 of the Coal Mining Subsidence Act 1991, stating that the land is at risk of subsidence.

### Withdrawal of support notices

The property is not in an area where a notice to withdraw support has been given.

The property is not in an area where a notice has been given under section 41 of the Coal Industry Act 1994, cancelling the entitlement to withdraw support.

### Payments to owners of former copyhold land

The property is not in an area where a relevant notice has been published under the Coal Industry Act 1975/Coal Industry Act 1994.

## Section 4 – Further information

Based on the responses in this report, no further information has been highlighted.

### Future development

If development proposals are being considered, technical advice relating to both the investigation of coal and former coal mines and their treatment should be obtained before beginning work on site. All proposals should apply specialist engineering practice required for former mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or coal mines without first obtaining the permission of the Coal Authority.

**MINE GAS:** Please note, if there are no recorded instances of mine gas within 500m of the enquiry boundary, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded. Developers should be aware that the investigation of coal seams, mine workings or mine entries may have the potential to generate and/or displace underground gases. Associated risks both to the development site and any neighbouring land or properties should be fully considered when undertaking any ground works. The need for effective measures to prevent gases migrating onto any land or into any properties, either during investigation or remediation work, or after development must also be assessed and properly addressed. In these instances, the Coal Authority recommends that a more detailed Gas Risk Assessment is undertaken by a competent assessor.

## Section 5 – Data definitions

The datasets used in this report have limitations and assumptions within their results. For more guidance on the data and the results specific to the enquiry boundary, please **email us at [reports@miningremediation.gov.uk](mailto:reports@miningremediation.gov.uk)**.

### Past underground coal mining

Details of all recorded underground mining relative to the enquiry boundary. Only past underground workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination, will be included.

### Probable unrecorded shallow workings

Areas where the Coal Authority believes there to be unrecorded coal workings that exist at or close to the surface (less than 30 metres deep).

### Spine roadways at shallow depth

Connecting roadways either, working to working, or, surface to working, both in-seam and cross measures that exist at or close to the surface (less than 30 metres deep), either within or within 10 metres of the enquiry boundary.

### Mine entries

Details of any shaft or adit either within, or within 100 metres of the enquiry boundary including approximate location, brief treatment details where known, the mineral worked from the mine entry and conveyance details where the mine entry has previously been sold by the Authority or its predecessors British Coal or the National Coal Board.

### Abandoned mine plan catalogue numbers

Plan numbers extracted from the abandoned mines catalogue containing details of coal and other mineral abandonment plans deposited via the Mines Inspectorate in accordance with the Coal Mines Regulation Act and Metalliferous Mines Regulation Act 1872. A maximum of 9 plan extents that intersect with the enquiry boundary will be included. This does not infer that the workings and/or mine entries shown on the abandonment plan will be relevant to the site/property boundary.

### Outcrops

Details of seam outcrops will be included where the enquiry boundary intersects with a conjectured or actual seam outcrop location (derived by either the British Geological Survey or the Coal Authority) or intersects with a defined 50 metres buffer on the coal (dip) side of the outcrop. An indication of whether the Coal Authority believes the seam to be of sufficient thickness and/or quality to have been worked will also be included.

### Geological faults, fissures and breaklines

Geological disturbances or fractures in the bedrock. Surface fault lines (British Geological Survey derived data) and fissures and breaklines (Coal Authority derived data) intersecting with the enquiry boundary will be included. In some circumstances faults, fissures or breaklines have been known to contribute to surface subsidence damage as a consequence of underground coal mining.

### **Opencast mines**

Opencast coal sites from which coal has been removed in the past by opencast (surface) methods and where the enquiry boundary is within 500 metres of either the licence area, site boundary, excavation area (high wall) or coaling area.

### **Coal Authority managed tips**

Locations of disused colliery tip sites owned and managed by the Coal Authority, located within 500 metres of the enquiry boundary.

### **Site investigations**

Details of site investigations within 50 metres of the enquiry boundary where the Coal Authority has received information relating to coal mining risk investigation and/or remediation by third parties.

### **Remediated sites**

Sites where the Coal Authority has undertaken remedial works either within or within 50 metres of the enquiry boundary following report of a hazard relating to coal mining under the Coal Authority's Emergency Surface Hazard Call Out procedures.

### **Coal mining subsidence**

Details of alleged coal mining subsidence claims made since 31 October 1994 either within or within 50 metres of the enquiry boundary. Where the claim relates to the enquiry boundary confirmation of whether the claim was accepted, rejected or whether liability is still being determined will be given. Where the claim has been discharged, whether this was by repair, payment of compensation or a combination of both, the value of the claim, where known, will also be given.

Details of any current 'Stop Notice' deferring remedial works or repairs affecting the property/site, and if so the date of the notice.

Details of any request made to execute preventative works before coal is worked under section 33 of the Coal Mining Subsidence Act 1991. If yes, whether any person withheld consent or failed to comply with any request to execute preventative works.

### **Mine gas**

Reports of alleged mine gas emissions received by the Coal Authority, either within or within 500 metres of the enquiry boundary that subsequently required investigation and action by the Coal Authority to mitigate the effects of the mine gas emission. Please note, if there are no recorded instances of mine gas reported, this does not mean that mine gas is not present within the vicinity. The Coal Authority Mine Gas data is limited to only those sites where a Mine Gas incident has been recorded.

### **Mine water treatment schemes**

Locations where the Coal Authority has constructed or operates assets that remove pollutants from mine water prior to the treated mine water being discharged into the receiving water body.

These schemes are part of the UK's strategy to meet the requirements of the Water Framework Directive. Schemes fall into 2 basic categories: Remedial – mitigating the impact of existing pollution or Preventative – preventing a future pollution incident.

Mine water treatment schemes generally consist of one or more primary settlement lagoons and one or more reed beds for secondary treatment. A small number are more specialised process treatment plants.

### **Future underground mining**

Details of all planned underground mining relative to the enquiry boundary. Only those future workings where the enquiry boundary is within 0.7 times the depth of the workings (zone of likely physical influence) allowing for seam inclination will be included.

### **Coal mining licensing**

Details of all licenses issued by the Coal Authority either within or within 200 metres of the enquiry boundary in relation to the under taking of surface coal mining, underground coal mining or underground coal gasification.

### **Court orders**

Orders in respect of the working of coal under the Mines (Working Facilities and Support) Acts of 1923 and 1966 or any statutory modification or amendment thereof.

### **Section 46 notices**

Notice of proposals relating to underground coal mining operations that have been given under section 46 of the Coal Mining Subsidence Act 1991.

### **Withdrawal of support notices**


Published notices of entitlement to withdraw support and the date of the notice. Details of any revocation notice withdrawing the entitlement to withdraw support given under Section 41 of the Coal Industry Act 1994.

### **Payment to owners of former copyhold land**

Relevant notices which may affect the property and any subsequent notice of retained interests in coal and coal mines, acceptance or rejection notices and whether any compensation has been paid to a claimant.

The map highlights any specific surface or subsurface features within or near to the boundary of the site.

**Key**

Approximate position of the enquiry boundary shown 

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