

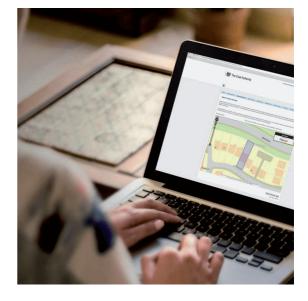
Appendix C Coal Mining Report



Resolving the impacts of mining

CON29M Non-Residential Mining Report

HARRAS MOOR WHITEHAVEN CUMBRIA







Date of enquiry: Date enquiry received: Issue date: 24 January 2017 24 January 2017 24 January 2017

Our reference: Your reference: 51001373193001 A090070-267

CON29M Non-Residential Mining Report

This report is based on, and limited to, the records held by the Coal Authority and the Cheshire Brine Subsidence Compensation Board's records, at the time we answer the search.

Client name

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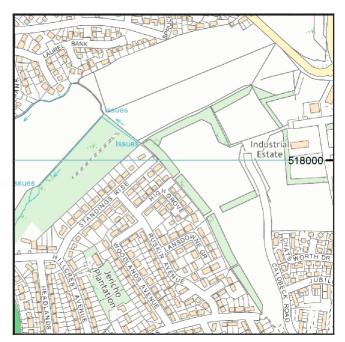
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Approximate position of property



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Summary

Has the search report highlighted evidence or potential of				
1	Past underground coal mining	Yes		
2	Present underground coal mining	No		
3	Future underground coal mining	Yes		
4	Mine entries	Yes		
5	Coal mining geology	No		
6	Past opencast coal mining	No		
7	Present opencast coal mining	No		
8	Future opencast coal mining	No		
9	Coal mining subsidence	No		
10	Mine gas	No		
11	Hazards related to coal mining	No		
12	Withdrawal of support	No		
13	Working facilities order	No		
14	Payments to owners of former copyhold land	No		
15	Information from the Cheshire Brine Subsidence Compensation Board	No		

For detailed findings, please go to page 4.

Detailed findings

1. Past underground coal mining

The property is in a surface area that could be affected by underground mining in 2 seams of coal at shallow to 190m depth, and last worked in 1961.

2. Present underground coal mining

The property is not within a surface area that could be affected by present underground mining.

3. Future underground coal mining

The property is not in an area where the Coal Authority has plans to grant a licence to remove coal using underground methods.

The property is not in an area where a licence has been granted to remove or otherwise work coal using underground methods.

The property is not in an area likely to be affected from any planned future underground coal mining.

However, reserves of coal exist in the local area which could be worked at some time in the future.

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

4. Mine entries

There are no known coal mine entries within, or within 20 metres of, the boundary of the property.

There may however be mine entries/additional mine entries in the local area which the Coal Authority has no knowledge of.

5. Coal mining geology

The Coal Authority is not aware of any damage due to geological faults or other lines of weakness that have been affected by coal mining.

6. Past opencast coal mining

The property is not within the boundary of an opencast site from which coal has been removed by opencast methods.

7. Present opencast coal mining

The property does not lie within 200 metres of the boundary of an opencast site from which coal is being removed by opencast methods.

8. Future opencast coal mining

There are no licence requests outstanding to remove coal by opencast methods within 800 metres of the boundary.

The property is not within 800 metres of the boundary of an opencast site for which a licence to remove coal by opencast methods has been granted.

9. Coal mining subsidence

The Coal Authority has not received a damage notice or claim for the subject property, or any property within 50 metres, 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.

10. Mine gas

The Coal Authority has no record of a mine gas emission requiring action.

11. Hazards related to coal mining

The property has not been subject to remedial works, by or on behalf of the Authority, under its Emergency Surface Hazard Call Out procedures.

12. Withdrawal of support

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.

13. Working facilities order

The property is not in an area where an order has been made, under the provisions of the Mines (Working Facilities and Support) Acts 1923 and 1966 or any statutory modification or amendment thereof.

14. 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.

15. Information from the Cheshire Brine Subsidence Compensation Board

The property lies outside the Cheshire Brine Compensation District.

Comments on the Coal Authority information

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In view of the mining circumstances a prudent developer would seek appropriate technical advice before any works are undertaken.

Therefore 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 good engineering practice developed for mining areas. No development should be undertaken that intersects, disturbs or interferes with any coal or mines of coal without the permission of the Coal Authority. Developers should be aware that the investigation of coal seams/former mines of coal may have the potential to generate and/or displace underground gases and these risks both under and adjacent to the development should be fully considered in developing any proposals. The need for effective measures to prevent gases entering into public properties either during investigation or after development also needs to be assessed and properly addressed. This is necessary due to the public safety implications of any development in these circumstances.

Additional remarks

Information provided by the Coal Authority in this report is compiled in response to the Law Society's Con29M Coal Mining and Brine Subsidence Claim enquiries. The said enquiries are protected by copyright owned by the Law Society of 113 Chancery Lane, London WC2A 1PL. Please note that Brine Subsidence Claim enquiries are only relevant for England and Wales. This report is prepared in accordance with the Law Society's Guidance Notes 2006, the User Guide 2006 and the Coal Authority and Cheshire Brine Board's Terms and Conditions applicable at the time the report was produced.

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Alternative formats

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Enquiry boundary

The map image is too large for this page and will be sent in a separate document

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Enquiry boundary

Key

Approximate position of enquiry boundary shown

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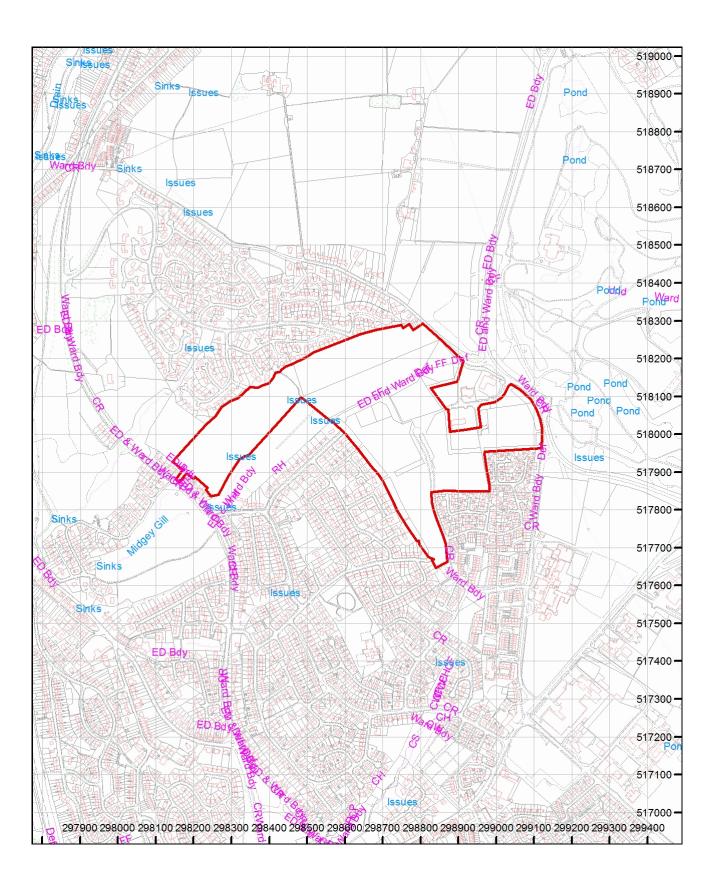
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Appendix D Preliminary Risk Assessment (Land Contamination)



The risk assessment has been carried out by assessing the severity of the potential impact to sensitive receptors arising from land contamination hazards and the likelihood of the impact occurring, based on the categories given below (Tables A.1 to A.3).

Table A.1 Potential Hazard Severity Definition

Category	Definition			
Severe	Acute risks to human health, catastrophic damage to buildings/property, major pollution of controlled waters			
Medium	Chronic risk to human health, pollution of sensitive controlled waters, significant effects on sensitive ecosystems or species.			
Mild Pollution of non sensitive waters, significant damage to building structures				
Minor	Requirement for protective equipment during site works to mitigate health effects, damage to non sensitive ecosystems or species, minor damage to buildings or structures			

The likelihood of an event (probability) takes into account both the presence of the hazard and target and the integrity of the pathway and has been assessed based on the categories given below.

Table A.2 Probability of Risk Definition

Category	Definition			
High likelihood Pollutant linkage may be present, and risk is almost certain to occur in term, or there is evidence of harm to the receptor				
Likely Pollutant linkage may be present, and it is probable that the risk over the long term				
Low likelihood	Pollutant linkage may be present, and there is a possibility of the risk occurring, although there is no certainty that it will do so			
Unlikely	Pollutant linkage may be present, but the circumstances under which harm would occur are improbable			

The potential severity of the impact and the probability of the impact occurring have been combined in accordance with the following matrix in order to give a level of risk for each potential hazard.

Table A.3 Level of Risk for Potential Hazard Definition

	Potential Severity				
		Severe	Medium	Mild	Minor
Probability of Risk	High Likelihood	High	High	Moderate	Low/ Moderate
	Likely	High	Moderate	Low/Moderate	Low
obat ik	Low Likelihood	Moderate	Low/Moderate	Low	Low
Pr(Ris	Unlikely	Low/Moderate	Low	Low	Low



Table A.4 Preliminary Contaminated Land Risk Assessment

ON SITE SOURCES							
Source	Pathway	Receptor	Justification	Severity	Probability	Risk	
	Dermal contact, ingestion and/or inhalation of vapours or dusts Human Health – Future site users (Residential) potential contaminative uses of the site be present across the site however, it is unlikely that it will be widespread, if at the manufacture of the site present across the site however, it is unlikely that it will be widespread, if at the manufacture of the site present across the site however, it is unlikely that it will be widespread, if at the manufacture of the site present across the site however, it is unlikely that it will be widespread, if at the manufacture of the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread, if at the site present across the site however, it is unlikely that it will be widespread.		The risk rating is based on the lack of historical and recent potential contaminative uses of the site. Made Ground may be present across the site however, it is considered unlikely that it will be widespread, if at all encountered.	Medium	Unlikely	Low	
Ground conditions		The risk rating is based on the above with mitigation measures in place such as good working practices and PPE, hence the minor severity.	Minor	Unlikely	Low		
(minimal Made Ground, potentially on site contaminative	Leaching, and lateral and vertical migration of surface and ground waters	Controlled Waters (surface waters)	The risk rating is based on the lack of historical and recent potential contaminative uses of the site.	Minor	Unlikely	Low	
uses).		Controlled Waters (Secondary B Aquifer)	The underlying aquifer is of low sensitivity and is anticipated to be located at depth well beneath low permeability strata. The site is not located within an SPZ. There are no groundwater abstraction points within 1km of the site.	Mild	Unlikely	Low	
		Adjacent Properties and Land Users	The risk rating is based on the proximity of residential properties on the site boundaries. There is limited evidence for the presence of mobile contaminants.	Medium	Unlikely	Low	
Ground gases (minimal sources; however, unknown	Generation and migration / accumulation of ground gases	Human Health — Future Residential site users	The preliminary risk is worst case based on unknown Made Ground within the quarry or organic deposits across the site.	Severe (Asphyxiation & Explosion)	Unlikely	Low to Moderate	
presence of Made Ground or organic soils)		Buildings and services		Severe (Explosion)	Unlikely	Low to Moderate	



OFF SITE SOURCES							
Source	Pathway	Receptor	Justification	Severity	Probability	Risk	
Soil and groundwater contamination associated neighbouring	Dermal contact, ingestion and/or inhalation of vapours or dusts	Human Health – Future onsite residents	This risk is based on the proximity of identified Holly Tree Farm located on the site's northwest boundary. Operations at the farm are unknown; however, the presence of low permeability till may limit both lateral and vertical migration.	Medium	Unlikely	Low	
farmland/residential properties	Lateral migration via the Aquifers	Groundwater beneath the site		Mild	Unlikely	Low	
Ground gases (no landfills or infilled	Generation and migration /	Human Health – Future onsite residents	The risk rating is based on the distance of potential off-site sources (mainly related to coal mining) and the presence f law parmachility (Deputying will light the and mining)	Low	Lowe to Moderate		
ground noted)	accumulation of ground gases	Buildings and services	of low permeability Clay which will limit the gas migration pathway to the site.	Severe (Explosion)	Low	Low to Moderate	