Non-Technical Summary

INTRODUCTION

West Cumbria Mining (WCM) has submitted an application to Cumbria County Council (CCC) for planning permission to build a new underground metallurgical coal mine near Whitehaven.

Coal will be mined and moved via an underground conveyor to new processing and storage buildings on the old Marchon site near Whitehaven. Processed coal will then be transported via a buried conveyor to a new rail sidings in the Pow Beck valley for loading onto trains for transporting to our shipping port and UK steel makers.

The new mine buildings and the rail sidings will be called Woodhouse Colliery.

Woodhouse Colliery represents a completely new design for a coal mine in the UK. The mined coal is processed and stored in fully enclosed buildings on the surface. Conveyors will move the coal and it will be loaded into trains in a covered loading building.

The thoughtful design of Woodhouse Colliery ensures that the coal remains undercover at all times. There will be no coal dust escaping from the mine and all plant & machinery operates within fully enclosed buildings, so that noise and emissions are carefully controlled.

The proposal for Woodhouse Colliery is large, and the planning regulations require that an application of this size must be accompanied by a document called an Environmental Statement.

The Environmental Statement is a technical document that sets out the findings of specialist studies to predict the effects of the development upon people, places and the environment. Over the past 3 years, WCM has liaised closely with local and national regulators to ensure the required studies have been carried out to the correct standards; these studies cover a wide range of topics.

This document provides a Non-Technical Summary of the Environmental Statement, for interested parties. It provides a summary of the Environmental Statement and is written in non-technical language. The Environmental Statement contains the full details and results of the studies undertaken by WCM.
Location Plan and Application Boundary
If planning permission is granted, Woodhouse Colliery would be the first new deep coal mine in the UK for more than 30 years. West Cumbria has extensive quantities of coal underground and WCM has undertaken a range of investigations into these coal resources and has confirmed that this coal is highly suitable for use in steel making plants.

Metallurgical coal is used in blast furnaces as part of the steel making process. This coal is not the same as that is used in power stations, as it is much higher quality than power generation coal. The UK has no mines producing metallurgical coal, and domestic steelmakers currently rely upon imports from overseas.

A new metallurgical coal mine would provide valuable UK jobs and reduce the quantity of coal to be imported. This helps both the local and UK economies. It also helps the environment by not relying upon the shipping of coal from American mines several thousand miles away.

There will be no significant environmental impacts from Woodhouse Colliery. This is because the Colliery has been designed to ensure that any impacts are minor. This document demonstrates how this would be delivered.
**Project Description**

Woodhouse Colliery is expected to be operational for around 50 years. The area of the planned mine workings, buildings, underground conveyors and rail sidings are shown on the drawings on page 3 and 4.

The underground coal mining area is 302 hectares and this is where mining will commence in the first 5 years, before progressing offshore and under the sea. The target coal seams are around 350 metres below surface.

**How will the coal be reached?**

To reach the coal, the entrances to the old Sandwith anhydrite mine, on the Marchon site, will be refurbished and re-used. The old anhydrite mine has flooded since it closed in the 1980s. This water will be pumped out early in the mine construction phase, and will be discharged to sea under a Permit from the Environment Agency.

**Marchon – the Main Mine Site**

The Main Mine Site is 23 hectares and located on the southern part of the Marchon site. This site used to be a large chemical works, employing up to 2,500 people; it is now derelict except for concrete slabs from the old buildings and security fencing.

The Main Mine Site will house the coal processing & storage buildings, office, gatehouse and supporting plant & equipment. Photomontages 1 and 2 show how this will look.

About 18 acres of earth mounds will be created around areas to the north, east and south of the Main Mine Site. These will provide visual and acoustic screening and will be planted with more than 700 trees and shrubs as well as grasses and wild flowers. Footpaths will be created for members of the public to use (although the public will not have access to the mine site itself).

Once the buried conveyor from the main mine site to the Pow Beck valley is installed, it will be completely invisible.

Coal loading onto trains will take place at a new rail sidings, with the coal trains passing beneath coal hoppers located within a rail loading building. Photomontage 3 shows how this will look.

**How will the mine be built and operated?**

Building Woodhouse Colliery will take around 2 years. Full production levels of coal will be reached around 5 years after the mine is built.

At full annual production the mine will extract:
- 2.43 million tonnes of metallurgical coal;
- 350,000 tonnes of lower grade ‘middlings’ coal; and
- 150,000 tonnes of rock overburden

Metallurgical and middlings coal will go to the port of Redcar for export to European steel and industrial plants. Metallurgical coal will also go to steel plants at Scunthorpe and Port Talbot, supporting the British steel industry. The rock overburden will be disposed of underground within the mine voids.

At the end of the mine life, the mine will be safely closed, the buildings removed and the land restored to a mix of agriculture, ecological habitat and for recreational use.
Jobs
Over 500 people will be directly employed at Woodhouse Colliery, including apprenticeships for up to 50 people. WCM is committed to sourcing at least 80% of the workforce from within a 20 mile radius of Whitehaven.

Why Here?
The mine will be located here because this is where the coal is, this coal being found in very few locations. The Cumberland Coalfield has been worked for hundreds of years and extends far out under the sea bed.

The Marchon site has been chosen as the location for the main mine site because public consultation suggested that it would be most suitable. There are also technical advantages to using the Marchon site – firstly, it is the location where the access drifts from the disused underground anhydrite mine emerge and, secondly, the site is in need of remediation and development.

The Rail Loading Facility (RLF) location is designed as being the nearest location to the main mine site which is not close to residential properties. The line of the buried conveyor connects the main mine site and rail loading building in the straightest possible line.

WCM considered a range of alternative sites for the main mine site and rail loader, including alternative means of transporting products from the mine. The final design was chosen as the best of the alternatives for operational, economic and environmental reasons.

EXISTING ENVIRONMENTAL CONDITIONS AND PREDICTED EFFECTS
This section is a summary of the existing (or “baseline”) environmental conditions, and the predicted effects of Woodhouse Colliery upon the baseline conditions. This also includes impacts upon people and the environment.

Social and Economic
There will be significant benefits to the local economy from the mine, through the 500 jobs in the mine and local investment. It is calculated that up to 1,000 jobs will also be created through ‘indirect’ jobs, for example suppliers to the mine.

Some areas within Copeland, near the site, have been assessed by the Government as being deprived. The local wealth created by the mine, combined with the educational and training benefits of the apprenticeship scheme, have the potential for significant local benefits, including community well-being.

Road Transport
WCM recognises that the local road network is very busy in places, notably the A595. A Transport Assessment has reviewed the impact of traffic from Woodhouse Colliery on the local road networks during both the construction and operational phases.

Computer based traffic modelling showed that in future years, when the mine is operating, there are no significant impacts upon the road network. The computer modelling used so-called “worst case scenarios”, where traffic from the mine will be at its maximum.

Even with other proposed projects (for example NuGen), the computer modelling showed that the mine’s traffic would not have any significant impacts upon the surrounding junctions.

WCM intends to manage travel to and from the mine using Travel Plans. These will be agreed with CCC and Highways England.

A dedicated offsite storage and packaging facility will be used, together with a clearly defined transport route.
Rail Transport

The mine will use the nearby Cumbrian Coast line to transport coal to UK steelworks and the port of Redcar.

The Cumbrian Coast line has some sections which are subject to speed restrictions, due to old-style signaling installations and some previous landslides.

At full mine production, 6 trains per day operating up to 6 days per week will be required. Currently, there is sufficient capacity on the line to accommodate at least 4 trains per day, which would be sufficient for the first 3 years of mining operations. Signaling improvements between Wigton and Maryport would allow an additional train path of one train per hour to be created. This would be more than sufficient for WCM’s requirements from Year 4 of production onwards. Trains will only operate within defined daytime hours and there would be no trains on Sundays.

WCM has also modelled the impact of future planned projects’ rail demands, including the NuGen project. Woodhouse Colliery will be operating before the NuGen project reaches its peak construction period, and it is expected that there would be sufficient train paths for coal movements into the future.

WCM has selected its preferred railfreight partner, Freightliner, and intends to use the most modern fleet of Class 70 locos and HHA coal wagons, which are significantly quieter than other current locos, (noise assessments were completed using Class 66 locos).

Landscape and Visual Assessments

Woodhouse Colliery includes a number of large buildings which provide the processing and limited storage of coal on the Marchon site. The RLF also requires a building.

Specialists have assessed the impacts upon the landscape of the buildings and also the impacts upon views. WCM have developed measures to help reduce the impacts, including earth mounds which will be planted with trees, shrubs and wild flowers, and tree planting in the Pow Beck valley. The buildings at the Marchon site will be of modern, sensitive designs and the rail loading building will be clad in timber so that its character matches the surrounding area.

Whilst the development will bring change to the local area, it is not expected to be negative. The inclusion of earth mounds, landscaping and planting ensure that the local neighbourhood is not adversely impacted, noting that there will be some localised significant effects, as noted in the LVIA chapter.
Notes:
1) This visualisation is a planar projection panorama; View flat at a comfortable arm's length.
2) Ignores screening effects of woodland and other intervening objects.
3) All directions given as bearings relative to Grid North (BNG).
4) Location map scale: 1:25,000

Contains Ordnance Survey data © Crown copyright and database right 2017
© Crown copyright, All rights reserved. 2017 Licence number 100020565

Viewpoint Information:
Grid Reference: 297041E, 515412N
Horizontal Field of View: 53.5°
Vertical Field of View: 18.2°
Principal Distance: 812.5mm

Photography Information:
Camera: Canon EOS 5D
Lens: 50mm Fixed Focal Length
Camera Height: 1.5m
Photography Date: 07/03/2016
Photography Time: 12:16

Date MAY 2017
By DM/CTG

Image Size 820 x 260mm
QA YY
Paper Size 840 x 297mm
Rev -
WCM.L-038aG Visuals Banners.indd

Cumbrian Metallurgical Coal Project
Viewpoint 2:
View from Main Mine Site Entrance
Photomontage Visualisation 2c (Year 5)

Bearing of centre of imported images = <<WF Bearing>>°

VIEW FLAT AT A COMFOrTABLE ArM'S LENgTh
IF VIEWINg ThIS IMAgE ON A SCrEEN, ENLArgE TO FULL SCrEEN hEIghT

Photomontage Visualisation 2c (Year 5)

Cumbrian Metallurgical Coal Project
Viewpoint 3:
View from PROW west of the Main Mine Site
Photomontage Visualisation 3b (Year 1)

Bearing of centre of imported images = <<WF Bearing>>°

VIEW FLAT AT A COMFOrTABLE ArM'S LENgTh
IF VIEWINg ThIS IMAgE ON A SCrEEN, ENLArgE TO FULL SCrEEN hEIghT

Photomontage Visualisation 3b (Year 1)
Ecology and Wildlife
The Marchon site is currently a mix of concrete and asphalt slabs, some areas of grassland and small areas of low bushes, trees and taller grasses & plants. There is also a small pond.

Surveys were undertaken in 2016 to check for breeding birds, bats, reptiles, great crested newts, insects and large mammals. Plant surveys were also completed. This showed that the site has a low diversity of species, although some species of conservation significance were found.

Similar surveys were completed along the buried conveyor route and at the new rail sidings location. All of these surveys will be finished by June 2017. WCM will agree with CCC the best ways to avoid any long-term impacts. Using landscaping, planting and careful design, it is expected there will be no long-term negative impacts.

Specialists predict there will be no negative ecological impacts on international or nationally protected sites.

One Local Wildlife Site [LWS] would experience a temporary impact during the installation of the buried conveyor. WCM will reduce the impact by using carefully designed working methods.

There will also be positive impacts for some significant species, such as common toad, skylark, meadow pipit and grayling butterfly. Around 18 acres of diverse habitats will be created at the main mine site and managed for nature conservation.

Along the line of the buried conveyor, WCM will use landscaping to improve existing wildlife habitats, including new areas of tree planting. Where a hedgerow and woodland are disturbed, this will be temporary. WCM’s landscaping is designed to benefit species of bats and birds.

Assessments have shown that once construction is completed and all the landscaping, planting and ecological impact reduction measures are included, there will be no long-term negative impacts at the main mine site, buried conveyor or rail loader.
Rivers, streams and underground water
Woodhouse Colliery will extract coal from underground, with the coal being processed in buildings above ground. To understand whether there could be any impact upon rivers, streams and underground water, specialists have examined the impact of the Colliery upon water and flood risk. Drainage from the site was also studied.

The studies found that impacts on water underground are expected to be at a low level.

The studies examined the Marchon site, which is known to be contaminated due to historical site uses. It was concluded that the construction and operation of the Colliery will not result in any additional mobilisation of existing contaminants into the underground water.

A search was undertaken of any nearby abstractions, surface water areas, underground water and environmentally sensitive sites that could potentially be affected by the Colliery. Particular attention was given to the St Bees Head Site of Specific Scientific Interest (SSSI) and Cumbria Coast Marine Conservation Zone (MCZ) designated sites, aquifers and nearby water abstractions. No risks to sensitive habitats were identified. Surface water bodies near the site are not expected to be affected by the Proposal and impacts upon under groundwater are predicted to be minor. The proposals are unlikely to result in a significant impact on the environment during the mining or afterwards.

Flood Risk and Drainage Assessment
The Site is located in flood zone 1, which has a low risk of flooding. The Planning Practice Guidance ‘Flood Risk and Coastal Change’ (DCLG, 2014), states that land within Flood Zone 1 is suitable for development.
Surface runoff water from the current Marchon site (Processing Plant area) flows mainly to the south into the Sandwith Beck. The site is currently mostly covered by partially fractured concrete pads remaining from its former use. Calculated runoff for this area is already greater than runoff rates from greenfield sites. The Colliery will capture water runoff for use in the coal processing plant, with any clean surface runoff being piped to Saltom Bay to reduce future flood risk within the Sandwith Beck. This may therefore reduce flood risk within the Beck.

Drainage of the RLF is likely to use a combination of infiltration methods and controlled release to watercourses. The exact methods will be confirmed during detailed investigations of the area.

The assessment indicates no increase in flood risk to off-site areas or watercourses.

**Ground Conditions and Contamination**

The Marchon site has a long history of industrial uses, including coal mining, a coke works, an alabaster/gypsum works and a chemical and surfactant works. On the west and south sides of the site are two disused landfill sites, the Hutbank and UFEX landfill.

Records of ground investigations by previous owners show that ground conditions comprise a surface layer of ‘made ground’, generated from the former chemical works mining activities. This lies above natural clay deposits which are on top of bedrock (sandstone, shale, gypsum, breccia and coal measures).

The site was previously designated as ‘Contaminated Land’ and a ‘Special Site’ by the regulatory authorities. This was because it was considered to represent a potential risk to human health and groundwater [including the Sandwith Beck and the Irish Sea]. Previous owners worked to understand the site better and were able to agree with the authorities that the Contaminated Land designation be removed. It is now considered that limited sources of contamination may be present beneath the concrete slabs remaining on-site and in areas that had not been previously investigated.

Further ground sampling and monitoring will be completed before construction begins. The information obtained will be used to update risk assessments and the Construction Environmental Plan. This will provide details of proposed environmental control measures, including those related to the protection of land quality. During the operation of the mine, an international standard Operational Environmental Management Plan (OEMP) will be implemented.

Control measures will also be used to avoid potential negative impacts from historic land contamination. These measures ensure that impacts are ‘minor’ or ‘moderate adverse’, and therefore not classified as significant.

**Area of underground mining**

The area around the onshore mining zone ranges between 50-100 metres elevation. WCM has completed predictions for any possible subsidence arising from the underground mining works.

Different methods of mining present different risks of subsidence. WCM has carefully designed the mining method to reduce the risk of subsidence. Subsidence usually occurs slowly and over a long period of time, and WCM’s calculations show that surface subsidence is unlikely to occur due to the design of the mining method.

To further prevent any impacts from mining activities, WCM have designed the mining zone to avoid mining underneath environmentally sensitive areas and properties.

**Noise**

A noise and vibration assessment was carried out using specialist computer modelling. The assessment included construction and operational noise and vibration impacts at a range of nearby locations, including residential properties. All locations were agreed with Copeland Borough Council (CBC).
Construction noise levels to nearby receptors (properties) were calculated for several scenarios in the construction period and assessed according to the relevant standard methodology. Construction noise and vibration effects at nearby receptors were assessed as negligible.

Operational noise levels to nearby receptors were calculated for the processing site and for the rail loadout area, using the relevant standard methodology. The operational noise levels were assessed against noise limits which have been agreed with CBC. The predicted noise levels from the Colliery were found to be lower than the limits.

Noise level changes on the existing railway line, due to the coal trains, were calculated using the relevant methodology. Rail traffic noise effects at sensitive receptors were also assessed as Slight/Moderate.

The Colliery buildings and RLF will be constructed with internal noise insulation, and the earth mounds around the main mine site will significantly reduce noise levels outside.

Air Quality
Baseline surveys for air quality showed no exceedances of local limits for nitrogen dioxide (NO₂) or dust.

An assessment was undertaken to see if the mine would have a negative impact upon air quality. It was discovered that with the control measures included in the mine construction and operation, there would be no significant effects.
Another assessment was undertaken to see if vehicle exhaust emissions during the construction and operation of the mine would have a negative impact on air quality. Also included in this assessment were predictions of the occasional use of back-up generators (if there were to be a power cut) and the control measures planned. A ‘worst case scenario’ was used in this assessment (which is highly unlikely to ever occur).

Using the Environment Agency’s ‘significance criteria’, a minor exceedance was identified at the nearest residential properties on High Road and Wilson Pit Road, for short term NO₂ concentrations, and the nearest point of St Bees Head SSSI, for 24 hour nitrogen oxide (NOₓ) concentrations. Because the ‘worst case scenario’ was used, it is considered that the impacts from the mine during construction and operation will not have any significant effect upon air quality, and will not breach local or national planning policy.

Historic and Cultural Environment

There is a strong industrial history in Whitehaven and several historical sites are recorded in the area around the proposed Woodhouse Colliery. These sites are of mixed importance (for example ‘non-designated’ and ‘designated’ sites). A study was completed to assess the impact of Woodhouse Colliery upon these historical sites.

Impacts upon historic sites can range from physical disturbance to changing the view or character of their setting. To reduce impacts, WCM have included earth mounds to be landscaped and planted, which will help to screen the surrounding area. The levels of impact are assessed along with the level of how sensitive a site is.

There will be some moderate/adverse effects on sites of medium sensitivity. There will also be some minor adverse effects on sites of medium sensitivity. There will be some negligible adverse effects on sites of low sensitivity.

To help reduce impacts, and to improve the levels of knowledge, there will be some further archaeological investigations before the mine is built. This is a positive effect as it will enhance knowledge of the historic industrial mining heritage. The mine will also enhance the setting of a number of high sensitivity heritage assets including Saltom Coal Pit, Haig Colliery and Barrowmouth Gypsum and Alabaster Mine.

Marine Environment

Whilst no part of the mining activity or equipment will be in the sea, the planning regulations cover the area as far into the sea as the Mean Low Water Mark (the area down to the low tide line). The underground mine will cross beneath this part of the sea.

The environment of St Bees Head is a SSSI. The cliffs and rocky shores provide a wide range of habitats, with rich marine life. The cliffs also support nationally important populations of seabirds and specialised cliff plants.

The sea around St Bees head (and further north & south) is protected as a MCZ. This area contains a wide range of wildlife, including reef habitats, under-boulder species, peat and clay exposures and the rare Honeycomb Worm.
There will be a temporary discharge of water from the old anhydrite mine into the sea for up to 1 year, and this water will be treated before it is discharged, to ensure it does not cause any harm. WCM will obtain a Permit from the Environment Agency for this.

The only potential impact down to the low water line could be subsidence following mining works; however WCM have included a ‘no-mine zone’ beneath St Bees Head and the MCZ, to ensure that there will be no subsidence in this zone.

Community and Stakeholder Engagement
Over the last 3 years, WCM has consulted widely with the local community, local interest groups, regulators, landowners and other stakeholders.

During a series of very popular Stakeholder and Public Update Events, WCM has kept people fully informed about all aspects of the proposal. WCM has Facebook and Twitter accounts for people to keep in touch, as well as using mailings, interviews with local radio, television and newspapers.

Over 97% of the feedback received from the local community supports the proposal, and this is reflected in the high number of people who have registered their interest in coming to work at Woodhouse Colliery, with more than 90% of these living within a 20 mile radius of the Project.

WCM has also gained significant support at local and national levels. For example, Andrew Percy MP, Minister for the Northern Powerhouse, said: “We’re determined to back business growth across the Northern Powerhouse, so it’s important that we support this new mine. I’ve met with West Cumbria Mining and learned first-hand how much potential it has to create jobs and boost the economy in Cumbria. This will help drive growth across the region and I’m keen to see how the new mine progresses.”

CONCLUSIONS
WCM have undertaken a wide-ranging and detailed Environmental Impact Assessment, in accordance with the requirements of regulations and standards. It has been found that there will be no significant negative impacts from the proposal.

The positive impacts on the local economy will be significant, with the creation of long term, well-paid and skilled jobs. The local environment will benefit also from the remediation of the southern section of the Marchon site, with over 18 acres of wildlife habitats created.