

**PLANNING APPLICATION REFERENCE 4/17/9007/0F2**

**PROPOSED DEVELOPMENT OF AN EXISTING SURFACE MINE ENTRANCE FOR A NEW UNDERGROUND METTALLURGICAL COAL MINE AND ASSOCIATED SURFACE DEVELOPMENT LAND AT POW BECK VALLEY AND AREA FROM MARCHON SITE TO ST BEES COAST**

**Lead Officer:** Nick Hayhurst – Planning Development Manager

**To inform Members of a recent reconsultation on additional information that has been submitted by the applicant West Cumbria Mining in response to the outstanding issues raised by the Cumbria County Council relating to the major proposal to create a underground coal mine on the former Marchon site in Whitehaven.**

**Recommendation:** That Members raise no objections to the revised information subject to the comments set out in Appendix A of this report.

**Resource Implications:** Nil

## **1.0 SUPPORTING INFORMATION**

- 1.1 Members will recall considering a consultation on a planning application from Cumbria County Council relating to a major proposal for the creation of a new coal mine on land forming part of the former Marchon site in 2017. The proposal involved reusing an existing former mine entrance to extract high grade coking coal from under the sea bed off the St Bees coast. The site was to be redeveloped to provide a number of modern buildings above ground to store and process the extracted coal before it is transported away from the site by railway. A new railway siding was to be created to the south of Mirehouse and the coal was to be transported to the railway handling facilities using an underground conveyor belt which would link the main site to the railway.
- 1.2 Following a detailed consideration of the application Members agreed with the Officers assessment as set out in the report that was presented to the Planning Panel on 27<sup>th</sup> September 2017. The Officer recommendation was to support the proposal subject to mitigation measures and appropriate planning conditions and obligations.
- 1.3 The Council has now been consulted on additional details which have been submitted by the applicants following detailed and lengthy discussions with the County Council and statutory consultees. The additional information is designed to respond to all the outstanding technical issues that have been raised.
- 1.4 Officers have carried out an appraisal of this additional information and a summary of the comments and recommended actions are set out in Appendix A. None of the additional information is of any significance that would alter the original Officer recommendation to support the development subject to adequate mitigation.

**Contact Officer:** Nick Hayhurst – Planning Development Manager

**Background Papers:** Planning application file reference 4/17/9007/0F2



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**Summary of additional information submitted January 2019**

Additional information has been submitted to support the above application, a summary of the information provided is outlined below, with a note of any further action required.

West Cumbria Mining (WCM) have made changes to the application, to remove the use of the Anhydrite Mine.

WCM's initial proposal was to dewater the abandoned Sandwith Anhydrite mine which forms part of the Marchon site. Once dewatered the abandoned mine tunnels would be refurbished and extended to access the coal. The void space would also be used in the early years of the mine to deposit reject material from the coal processing which is carried out at the surface.

WCM no longer propose to dewater the mine, due to complications with the disposal process (to sea) potentially introducing contaminants to the sea.

The proposal remains to use part of the existing drift tunnels to access the coal measures, those which are not flooded, and to then dig new drifts to access the remaining deposits.

As a consequence of not dewatering the Anhydrite mine, the void space this would have created for the disposal of reject material (primarily comprising rock overburden) from the mining operation will no longer be available. In order to overcome this, WCM propose to dispose of the reject material by turning it into a paste which can be pumped underground into the spaces created by the coal mining operation itself. This would allow WCM to maintain its commitment not to dispose of this material off site. The added advantage of this is that it will provide additional support structure in the mine and reduce the likelihood of subsidence both onshore and offshore as the mine develops.

The drift access tunnels have been redesigned to pass over rather than through the flooded Anhydrite mine. The entrance to the drifts (portals) on the Marchon site are proposed to remain the same as previously presented. While this causes no change to the surface aspects of the mine in any way it does result in a minor change to the red-line boundary of the application at the point where the new drift access tunnels will access the off-shore mining areas.

In addition to the above design amendments, a number of further updates have also been provided to the council, following their request for additional information. This relates to:

- Further contamination protection details during site restoration;
- Incorporating the Marine Conservation Zone revised boundary;
- Detail on undersea subsidence;
- Disposal methods for reject materials;
- Additional detail on drainage proposals for the main site and Rail Loading Facility;
- Updated NPPF references.

An assessment of the information provided is outlined in the table below with any actions required.

Discipline	Further information	Comments	CBC Action
<b>Procedural</b>	<p>Amendment to Redline Boundary</p> <p>EIA</p>	<p>Minor alteration to the Redline Boundary in order to accommodate the proposed new underground drift access tunnels and some further drainage lagoons at the Rail Loading Facility.</p> <p>The ES was prepared to meet the requirements of the Town and Country Planning (Environmental Impact Assessment) Regulations 2011 as amended. The 2017 Environmental Impact Assessment (EIA) Regulations came into force in May 2017. However, under its transitional arrangements, where a scoping opinion had already been adopted for a project before the 2017 regulations came into effect, the 2011 regulations remain in force for that project. For this scheme the 2011 EIA regulations continue to have effect.</p>	None required.
<b>Project Description</b>	Alteration to scheme	<p>The development now includes:</p> <p>Amendments to the existing portal area and unflooded upper sections of the access drifts to the nearby former underground flooded anhydrite mine from which new tunnels will be extended to provide access to target onshore and offshore coal measures;</p> <p>The reject material will be transformed into an inert paste material and disposed of in the areas which have been mined for coal. Paste backfill is used widely in the mining industry around the world to take surplus material from mineral processing back underground and is an efficient method of disposing of reject material whilst also providing additional benefits to underground conditions by creating additional support within the voids.</p> <p>The central dome of the building would accommodate the coal processing and paste backfill plant. The coal processing and paste backfill plant would be housed within its own sound proofed building within the dome.</p> <p>To reach the initial offshore mining area, cross measure drifts would need to be developed in a westerly direction approximately 2,000 m long at a gradient of around 10-15° in order to intersect the target coal seams. The (uncontaminated) spoil created by the excavation of the new cross</p>	None required.

		measure drifts and from the refurbishment of the upper sections of the old anhydrite mine drifts is proposed to be placed within the landscape mounds which provide visual screening and noise attenuation to the site.	
<b>Amenity/ Impact on the Heritage Coast.</b>	Amendment to ES Chapter	There are a number of published archaeological research agendas that are relevant to the proposal to develop the mine portal on part of the site of the former Marchon chemical works. The existing portal is proposed to be refurbished and utilised to access the mine drifts as well as a portion of the un-flooded drifts. These are proposed to be surveyed ahead of construction.	An archaeological recording condition should be placed upon any positive planning permission.
<b>Transport</b>	Updated trip generation and forecasts provided	<p>Since preparing the estimates of trip generation and traffic forecasts, and undertaking the operational junction assessment, some changes have been identified in relation to the construction and operational phases.</p> <p><u>Construction Phase</u></p> <p>The Geo-Environmental assessment concluded that 5-15% of soils may be too contaminated for on-site remediation and re-use and may therefore need to be removed from the site for disposal at a waste landfill site.</p> <p>The 'worst case' scenario of 15% of soils being contaminated would equate to 15,977m<sup>3</sup> being removed from the site (i.e. 15% of 106,512m<sup>3</sup> = 15,977m<sup>3</sup>). At 1.5 tonnes per cubic metre, the removal of 15,977m<sup>3</sup> would weigh 24,000 tonnes (i.e. 15,977m<sup>3</sup> x 1.5 = 24,000 tonnes). Assuming use of 20 tonne 8-wheeler tipper lorries ('worst case' scenario), this would equal 1,200 HGV movements to remove the soils (i.e. 24,000 tonnes / 20 = 1,200).</p> <p>Over the 6 month remediation phase and with six days a week working, this would equate to an additional 50 HGV movements per week (one way) or 8.33 HGVs per day (one way). Assuming a 10 hour working day for HGV operations, this would yield no more than one inbound and one outbound HGV per hour.</p> <p>The estimates of trip generation, traffic forecasts and operational junction assessment did not take account of this additional one HGV inbound and outbound per hour during the construction phase, as it was not known at the time of preparing the TA.</p>	As CCC provide technical expertise to CBC on transport no further action is required.

		<p>The addition of one HGV per hour inbound and outbound to the surrounding road network and junctions is not expected to result in any material impact on traffic operations and will not change the findings and conclusions of the TA.</p> <p><u>Operational Phase</u></p> <p>An additional HGV per day is expected to be required during the operational life of the mine making deliveries to the site. The HGV will deliver bulk powder to supply a paste plant which is needed to be incorporated alongside the coal processing plant contained within the dome-roofed building on site. The paste plant will transform waste rock overburden from the mine into pumpable paste, which is then directed back into the mine for deposit in the mined-out voids. The paste requires a cementitious material which allows the paste to set once it has been deposited into the mine.</p> <p>The estimates of trip generation, traffic forecasts and operational junction assessment did not take account of this additional one HGV a day, as it was not known at the time of preparing the TA.</p> <p>The addition of one HGV a day to the surrounding road network and junctions is considered unlikely to cause any material impact on traffic operations and does not change the findings and conclusions of the TA.</p>	
<b>Water</b>	Paste backfill procedure	A water balance table is presented, including requirements for the paste backfill process. The table demonstrates that water demands associated with the process can be met.	As CCC provide technical expertise to CBC on hydrology and drainage, no further action is required.
	Anhydrite mine access and development of drifts beyond the existing drifts.	<p>Further technical detail is provided in relation to hydrology and drainage.</p> <p>The planned development seeks to access the mineral reserves within the Pennine Middle and Lower Coal Measures both on-shore and beneath the Irish Sea initially via the existing Anhydrite mine drifts at the near surface and then, where these reach a point approaching or just below the groundwater table, via newly constructed drifts to greater depths. The drifts are proposed to be lined progressively as they are advanced (effectively becoming impermeable behind the open section). Grouting techniques will be used</p>	As CCC provide technical expertise to CBC on drainage no further action is required.

		<p>to manage water inflow into the access drifts when they are driven through faults /permeable zones.</p> <p>The documents also present an updated FRA and Surface Water Management Plan.</p>	
<p><b>Air Quality</b></p>	<p>ES Chapter</p>	<p>During the operational phase, there is proposed to be an additional process undertaken at the processing site that will involve the use of a 'paste plant' for the treatment of rock overburden. The paste plant will use bulk powder, such as cement or similar, to convert the rock overburden into a paste, which will then make it easier and more efficient to pump the overburden back into the areas of mine used for its storage. The additional process will require additional HGV movement for the delivery of bulk powder to site.</p> <p>The limited number of additional HGV movements described above in both construction and operational phases is expected to have a negligible effect on local air quality and will not increase emissions associated with the proposed development, to the extent that the effects reported in the current chapter will change. The conclusions of the assessment reported in this chapter therefore remain valid.</p> <p>Potential emissions of dust and fine particles associated with the additional process described above are proposed to be controlled by embedded mitigation within the scheme design. The proposed storage tank for the bulk powder will be located within the main dome building on the Marchon site, which is proposed to operate under negative pressure. The HGV delivery of the bulk powder is proposed to be undertaken within the enclosed building.</p> <p>Additional mitigation measures include the use of controlled pressurised systems for the filling of the storage tank from the HGV, with monitoring for silo capacity and potential leakages.</p> <p>The additional process associated with the 'paste plant' will not have a significant effect on local air quality, either in isolation or in combination with other processes and emissions associated with the proposed development.</p> <p>The inclusion of this process into the assessment do not alter the effects currently reported and the level of mitigation proposed in this chapter.</p>	<p>An environmental management condition including air quality management was requested as part of the original response to CCC. This would capture any additional mitigation required as a result of the development.</p>

		The conclusions of the assessment reported in this chapter therefore remain valid.	
<b>Planning</b>	Planning Statement	<p>The Planning Statement outlines the legislative context in which the application will be determined.</p> <p>It identifies the relevant policy tests within the statutory development plan and other material considerations in relation to the new information provided.</p> <p>The Planning Statement has been updated to reflect the new NPPF. The NPPF does not introduce any new policy themes for consideration above that outlined within the Copeland Panel report dated 27<sup>th</sup> September 2017. The additional information provided does not materially impact upon the interpretation of policy or the weight given to policies.</p>	None required.
<b>Noise and vibration</b>	Updated information	The paste plant and the loss of water pumps at the site has resulted in no assessed change from the original assessment.	None required.
<b>Ground Conditions and Contamination</b>	Information updated	<p>An updated Phase 1 Geo-environmental desk study report has been undertaken, alongside a Ground Conditions Technical Memorandum.</p> <p>The assessment does not alter the effects currently reported and the level of mitigation proposed in this chapter. The conclusions of the assessment reported in this chapter therefore remain valid.</p>	An environmental management condition including land contamination was requested as part of the original response to CCC. A seismic monitoring condition was also requested. This would capture any additional mitigation required as a result of the development.
<b>Ecology</b>	ES Chapter updated on Ecology	An update survey was completed in 2018 by BSG Ecology. The survey comprised an updated walkover survey of all areas of the main mine site, conveyor route, rail loading facility and main band colliery site. This included a buffer zone of 50m in all directions of each element of the project where it was safe to do so. The survey was extended to include assessment of potential field signs for otter, badger, red squirrel and any other significant taxa.	An ecological mitigation and management plan is recommended as a condition on any positive planning permission. This should pick up

			<p>the mitigation outlined within the ES chapter and supporting documents.</p> <p>An environmental management condition was requested as part of the original response to CCC. This could include ecology.</p>
<p><b>Plans</b></p>	<p>Amended plans submitted alongside an updated drawings register</p>	<p>Alterations to plans as follows:</p> <ul style="list-style-type: none"> <li>• 869/AP/001 LOCATION PLAN &amp; PLANNING APPLICATION BOUNDARY F MINOR AMENDMENT TO RED LINE BOUNDARY</li> <li>• 869/AP/002 SANDWICH ANHYDRITE MINE ABANDONMENT PLAN-SHOWING PROPOSED WCM MAIN MINE SITE D MINOR AMENDMENT TO RED LINE BOUNDARY</li> <li>• 869/AM/001 MAIN MINE SITE-EXISTING PLAN C MINOR AMENDMENT TO RED LINE BOUNDARY</li> <li>• 869/AM/003 MAIN MINE SITE- CONSTRUCTION PHASE DRAWING 1 C MINOR AMENDMENT TO RED LINE BOUNDARY - ADDITION OF TEMPORARY SETTLEMENT LAGOONS</li> <li>• 869/AM/004 MAIN MINE SITE- CONSTRUCTION PHASE DRAWING 2 C MINOR AMENDMENT TO RED LINE BOUNDARY - ADDITION OF TEMPORARY SETTLEMENT LAGOONS</li> <li>• 869/AM/005 MAIN MINE SITE- CONSTRUCTION PHASE DRAWING 3 C MINOR AMENDMENT TO RED LINE BOUNDARY - ADDITION OF TEMPORARY SETTLEMENT LAGOONS</li> <li>• 869/AM/006 MAIN MINE SITE-SITE CROSS SECTIONS B</li> <li>• 869/AM/007 MAIN MINE SITE-EXISTING SITE TOPOGRAPHY C MINOR AMENDMENT TO RED LINE BOUNDARY</li> <li>• 869/AM/027 MAIN MINE SITE- CLEAN/RAW COAL &amp; CHPP BUILDING, PROPOSED PLAN C INCORPORATION OF PASTE PLANT WITHIN MAIN DOME BUILDING</li> </ul>	<p>None required</p>

		<ul style="list-style-type: none"><li>• 869/AM/029 MAIN MINE SITE- CLEAN/RAW COAL &amp; CHPP BUILDING, PROPOSED ELEVATIONS SHEET 2 OF 2 B</li><li>• 869/AM/041 MAIN MINE SITE - PROPOSED LANDSCAPING PLAN G MINOR AMENDMENT TO RED LINE BOUNDARY AND SPECIES LIST</li><li>• 869/AC/001 RLF CONVEYOR CULVERT- EXISTING PLAN E MINOR AMENDMENT TO RED LINE BOUNDARY</li><li>• 869/AC/002 RLF CONVEYOR CULVERT- PROPOSED PLAN F MINOR AMENDMENT TO RED LINE BOUNDARY</li><li>• 869/AO/001 UNDERGROUND MINING - ONSHORE AND OFFSHORE MINING AREAS D INCLUDES DESIGNATED SITES &amp; PROPOSED MCZ BOUNDARY</li><li>• 869/AO/002 UNDERGROUND MINING - ACCESS TO ONSHORE AND OFFSHORE MINING AREAS D INCLUDES REVISED DRIFT ALIGNMENT &amp; PROPOSED MCZ BOUNDARY</li><li>• 869/AO/003 UNDERGROUND MINING - INSEAM ACCESS ROUTES ONSHORE TO OFFSHORE D INCLUDES REVISED DRIFT ALIGNMENT &amp; PROPOSED MCZ BOUNDARY</li><li>• 869/AO/004 UNDERGROUND MINING - ONSHORE CROSS MEASURE DRIFT ZONE D INCLUDES REVISED DRIFT ALIGNMENT &amp; PROPOSED MCZ BOUNDARY</li></ul>	
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