

12 April 2019

Planning Casework Unit,  
Ministry of Housing, Communities and Local Government,  
5 St Philips Place, Colmore Row,  
Birmingham B3 2PW

Dear Sir/ Madam

I am writing on behalf of Scientists for Global Responsibility (SGR) to request that the Secretary of State 'call in' the following planning application for his own consideration. Below, we set out the reasons why we think this justified.

### 1. Application details and current status

Local Planning Authority (LPA): Cumbria County Council  
Location: Former Marchon Site, Pow Beck Valley and area from Marchon Site to St Bees Coast, Whitehaven, Cumbria  
Application reference number: 4/17/9007  
Applicant: West Cumbria Mining Ltd

This planning application was approved by the Development Control and Regulation (DCR) Committee of Cumbria County Council on 19th March 2019, although our information is that the Decision Notice cannot be issued for several months. The development is a critical part of a new deep coal mine that would extend under the Irish Sea. The offshore extraction proposal will be subject to a decision of the Marine Management Organisation.

### 2. About Scientists for Global Responsibility (SGR)

SGR is an independent UK membership organisation promoting ethical concerns related to science and technology, including energy and environmental issues. Our membership currently consists of approximately 600 science, design and technology practitioners, and 150 additional supporters. We were formed in 1992. Further information about the organisation and the professional background of the staff, national co-ordinating committee and patrons can be found on our website.<sup>1</sup>

<sup>1</sup> <http://www.sgr.org.uk/>

### 3. Planning reasons to request 'call-in'

#### A. Greenhouse gas (GHG) emissions<sup>2</sup>

The application states that approximately 2.8 million tonnes (Mt) of coal would be extracted from the mine each year during the main production phase. With the mine's lifetime expected to be 50 years, this could lead to the extraction of a total of about 140Mt, with an associated level of GHG emissions from its use. As such, the application should be considered 'nationally significant'. Specifically, it is likely to:

- have significant effects beyond the immediate locality;
- conflict with national policies on important matters – in particular, the Climate Change Act 2008; and
- give rise to substantial cross-boundary or national controversy – in particular, undermining international efforts under the 2015 Paris Climate Agreement.

Using official GHG conversion factors, we calculate that the mine would lead to annual emissions of 8.3Mt of carbon dioxide equivalent (CO<sub>2</sub>e) during its main production phase through use of the coal in blast furnaces or cement production, either within the UK or Europe.<sup>3</sup> Use of standard figures for lifecycle CO<sub>2</sub>e emissions – including mining energy use, fugitive methane emissions from the mine, transportation of the coal, and coal processing – would add a further 1.2Mt per year.<sup>4</sup>

Neither the applicant nor the LPA provide figures for GHG emissions from the use of the coal. We think this is a very serious omission, especially as this impact is highly material to compliance with the aims of the national and international agreements listed above. We will return to this issue below.

The applicant did provide information on some lifecycle carbon dioxide emissions. It estimated an annual saving of approximately 0.1Mt due to reduced travel distance for coal. Its argument was that the Cumbrian coal would entirely replace an equivalent amount of US coal used in UK and/or European installations. It also argued that fugitive methane emissions from the mine would be captured. Even if all such savings were to be realised in practice, these would still only represent a few percent of the CO<sub>2</sub>e emissions from coal use, i.e. very small in comparison with the overall impacts.

Returning to the figure of 8.3MtCO<sub>2</sub>e for annual coal use, we estimate that this is equivalent to the emissions of over 1 million UK citizens,<sup>5</sup> which is obviously a very significant level, especially given the applicant's plan to operate the mine for 50 years – i.e. until about 2070. Inclusion of the lifecycle CO<sub>2</sub>e emissions of coal use would obviously increase this figure further. There is a clear conflict between this and the aim to reduce UK GHG emissions by 80% by 2050 – the current target of the Climate Change Act – or the stronger aim to reduce international emissions such that global temperature change is kept "well below 2°C" – as specified in the Paris Climate Agreement.

---

<sup>2</sup> Figures in this section are given to two significant figures which we consider to be consistent with the level of uncertainties.

<sup>3</sup> The application states that 2.43Mt of metallurgical coal (for iron and steel production) and 0.35Mt of thermal coal (probably for cement production) would be extracted per year during the main production phase (which is due to start in the fifth year after the coal mine opens). Each tonne of metallurgical coal emits 3.06tCO<sub>2</sub>e during its use. The unit emissions of thermal coal are 2.45tCO<sub>2</sub>e. Hence the use of the coal from this mine would lead to emissions of approximately 8.29MtCO<sub>2</sub>e each year. GHG conversion factors can be found in: BEIS (2018). 2018 Government GHG Conversion Factors for Company Reporting. Department for Business, Energy and Industrial Strategy. <https://www.gov.uk/government/publications/greenhouse-gas-reporting-conversion-factors-2018>

<sup>4</sup> The lifecycle ('well to tank') conversion factor for metallurgical coal is 0.45MtCO<sub>2</sub>e, and for thermal coal, 0.38MtCO<sub>2</sub>e (BEIS, 2018 – as note 2).

<sup>5</sup> The latest figures for UK emissions per head of population are 8.1 tCO<sub>2</sub>e – on a 'production' basis, including UK land-use change and international transport. This was calculated using national greenhouse gas statistics - Department for Business, Energy and Industrial Strategy (2019). Final UK greenhouse gas emissions national statistics: 1990-2017.

<https://www.gov.uk/government/statistics/final-uk-greenhouse-gas-emissions-national-statistics-1990-2017> - and UK population estimates from the Worldometers website (which is itself extrapolated from official national statistics) - <http://www.worldometers.info/world-population/uk-population/>

One argument used by the applicant concerning GHG emissions is that coal from the proposed mine will directly and completely substitute for coal from further afield (e.g. USA). This argument assumes that the substituted coal would not be burnt elsewhere in the world, i.e. that coal production elsewhere would be reduced by the same amount as that of the Cumbrian mine. In practice, this is highly unlikely to happen. Coal is an internationally traded commodity, and the expansion of supply created by the opening of a new mine would help depress coal prices – and thus it would actually be more likely to *increase* coal use internationally (at least in the short term).

## B. Demand for metallurgical (coking) coal

The applicant claims that the demand for coking coal can be assumed to follow a growing ‘business-as-usual’ pathway within the UK and EU for the foreseeable future. There are major reasons to doubt this. In the first instance, UK steel production using blast furnaces – fed by coking coal – is not secure. There remain only two steel plants using blast furnaces in the UK, at Port Talbot and Scunthorpe. The plant at Scunthorpe announced the loss of up to 400 jobs in late 2018.<sup>6</sup> Meanwhile, the Port Talbot plant is only ‘guaranteed’ until 2022. The industry has continued to find it very difficult to compete internationally.

In addition, international demand for coking coal is unlikely to rise in line with steel demand, as the applicant argues. There are two main reasons for this. Firstly, the increased demand could be met by greater use of recycled steel – produced using electric furnaces, which do not use coking coal. Recycling rates are increasing, partly driven by environmental concerns – and the EU is an above average performer in this field with a current rate of 56%.<sup>7</sup> Indeed, the UK exported 9.4Mt of scrap steel in 2017,<sup>8</sup> which could have been recycled here, had the British industry invested more in this technology. Secondly, new technologies – using, for example, hydrogen instead of coal as a reduction agent – are currently being piloted in countries such as Sweden,<sup>9</sup> with a UK research programme aiming to help make iron and steelmaking carbon neutral by 2040.<sup>10</sup> A further argument is that new, low carbon materials will increasingly be substituted for steel in certain circumstances. The Science Based Targets initiative<sup>11</sup> has developed a decarbonisation pathway for the steel industry, which projects a 54% rise in steel production while achieving a 31% cut in related carbon dioxide (and hence coal).<sup>12</sup> These figures relate to a target of limiting global temperature change to 2°C. Applying a target of 1.5°C – which is actively under consideration – would lead to a much larger cut in coal use.

## C. Planning process

We wish to raise a further concern about the process used by the LPA in relation to this project. The application under consideration by the DCR Committee was only *one part* of the proposed mine – with the offshore element to be considered separately. The Environmental Impact Assessment considered the impacts from the 4/17/9007 element, but not the potential environmental impacts of the offshore extraction – in line with planning guidance. However, the climate change elements were considered in an ad hoc way, and we consider those seriously flawed, as discussed above. Furthermore, both the applicant and the LPA decided to consider the economic and social benefits for the *whole mine* in their assessment. This is indicated by their use of data regarding, for example, the projected outputs of coal, the potential jobs created, and the planned duration of the mine’s operation. Thus, we consider the LPA’s assessment to be seriously unbalanced. A ‘call-in’ should allow a balanced consideration of *all* costs and benefits of the project to be undertaken, including compliance with national and international policy.

---

<sup>6</sup> Grimsby Telegraph (2018). <https://www.grimsbytelegraph.co.uk/news/local-news/british-steel-scunthorpe-redundancies-latest-2003962>

<sup>7</sup> Recycling Magazine (2018). <https://www.recycling-magazine.com/2018/05/29/bir-9th-edition-of-world-steel-recycling-in-figures/>

<sup>8</sup> World Steel Association (2018). Steel Statistical Yearbook 2018. <https://www.worldsteel.org/steel-by-topic/statistics/steel-statistical-yearbook.html>

<sup>9</sup> SSAB (2018). HYBRIT - Toward fossil-free steel. <https://www.ssab.com/company/sustainability/sustainable-operations/hybrid>

<sup>10</sup> The Chemical Engineer (2019). <https://www.thechemicalengineer.com/news/20m-boost-for-uk-steel-and-biotech/>

<sup>11</sup> <https://sciencebasedtargets.org/>

<sup>12</sup> These figures cover the period, 2010-2050.

#### D. Other issues

We also think that further issues related to the proposed mine should be investigated more thoroughly, not least the potential for seismic effects to adversely impact the area, including the nuclear facilities at nearby Sellafield.

#### 4. Conclusions

In summary, we have shown that the proposed coal mine would:

- have significant effects beyond the immediate locality – especially in terms of greenhouse gas emissions;
- conflict with national policies on important matters – in particular, the Climate Change Act 2008; and
- give rise to substantial cross-boundary or national controversy – in particular, undermining international efforts under the 2015 Paris Climate Agreement.

In particular, our assessment concludes that the mine would lead to additional GHG emissions equivalent to over 1 million UK citizens – at a time when the UK and the world needs to markedly reduce these emissions.

We also have concerns over the assessment process used by the Local Planning Authority, in particular, the unbalanced and incomplete way in which it compared environmental impacts and economic/ social benefits.

We look forward to hearing from the Planning Casework Unit and strongly urge the Secretary of State to 'call in' planning application 4/17/9007 for consideration.

Sincerely

Dr Stuart Parkinson  
Executive Director  
Scientists for Global Responsibility