

To: Rachel Brophy, Cumbria County Council

Dear Ms Brophy

### **Planning Application 4/17/9007: Woodhouse Colliery**

I am writing to strongly object to the above application.

About myself:

- I am an environmentalist scientist, with over 25 years' experience of research and advocacy work on climate change and energy issues. My scientific background includes: a PhD in climate change science from Lancaster University; five years as a post-doctoral research fellow in climate and energy policy at Surrey University; a year as an expert reviewer for the UN advisory body, the Intergovernmental Panel on Climate Change; and 15 years as executive director of Scientists for Global Responsibility, a UK organisation of hundreds of science, design and technology professionals, based near Lancaster.

The main grounds on which I object to the planning application for Woodhouse Colliery is that it will fuel global climate change, including undermining the UK's commitments under the 2008 Climate Change Act (CCA) and the 2015 Paris Agreement on Climate Change. Specifically, my concerns are as follows.

- The application states that a total of nearly 2.8 million tonnes of coal will be extracted per year during the main production phase (which is due to start in the fifth year after the coal mine opens). It is aimed that the lifetime of the mine will be 50 years. Coal is a highly polluting fuel, especially in terms of carbon emissions. Each tonne of coal used for steel production emits approximately 3 tonnes of carbon dioxide (CO<sub>2</sub>). For electricity generation, due to differences in the chemical properties of the coal used, unit emissions are somewhat less. Based on figures for emission factors from Defra, I estimate that the combustion of the coal from this mine will lead to emissions of about 8.3 million tonnes of CO<sub>2</sub> *each year* during the main production phase. This is about the same as the annual emissions of about 900,000 British citizens. However, because it is planned to export much of the coal, these emissions will appear in the 'environmental accounts' of other countries, not the UK – although the UK would arguably bear ethical responsibility.
- Coal mines emit significant levels of methane, a powerful greenhouse gas which further exacerbates climate change. This coal mine will be no different. Such emissions are hard to control. And, of course, there will be additional carbon emissions from the fossil fuels used to produce energy for the mining process itself. Again using figures from Defra, I estimate that this will add approximately 1.2 million tonnes to the figure above, making a total of 9.5 million tonnes of CO<sub>2</sub> each year – equivalent to over 1,000,000 UK citizens.
- In general, the steel-making industry has slowly been moving to less carbon intensive production methods and this urgently needs to be accelerated. For example, electric arc furnaces have particular benefits over coal-fired blast furnaces in both environmental

and economic performance. This new mine will do nothing to help the low carbon transition – indeed it will likely slow the process.

- Claims that coal from this mine will ‘save’ some carbon emissions because it could, for example, offset imported coal are speculative and probably misleading. Additions from this mine to the global supplies of coal are likely, in the near term, to help depress international prices (through simple supply and demand economics) and thus it would actually be more likely to increase coal use internationally.
- In the medium/ longer term, coal is very likely to be progressively phased out in order to try to meet the CCA and Paris targets – the UK’s phase-out of coal for electricity generation by 2025 being a prime example. Hence it is highly unlikely that this mine would be economically viable for anything close to its claimed 50-year lifespan. It would therefore become a ‘stranded asset’. Cumbrian authorities would do better to encourage economic activities with a more promising future, for example, renewable energy or tourism.
- The UK government has repeatedly been criticised by its advisory body, the Committee on Climate Change, for not taking adequate action to meet its carbon pollution targets. The Committee itself has been criticised by climate scientists at the world-renowned Tyndall Centre at Manchester University for being too conservative in its assessments, especially in relation to the necessary action needed by the UK to meet the global targets in the Paris Agreement. This coal mine would further undermine UK and international action, increasing the risk of ‘dangerous’ climate change, including extreme storm and flood events of the type of which Cumbria has experienced in recent years.
- In addition to concerns about climate change, I wish to raise some wider environmental concerns.
  - Working for Scientists for Global Responsibility I hear from professional ecologists and environmental scientists who are concerned that some environmental regulations are poorly enforced in the UK – not least due to inadequate staffing and an over-reliance on self-regulation. Hence, I am concerned that such regulation will not be adequate for this project.
  - Given that coal mining can lead to increased seismicity, and that this proposed project is only a few miles from Sellafield nuclear facilities, I am also concerned about the possibility of adverse effects on that site.

In summary, approving this application for a coal mine would be a major step backwards for environmental protection, especially for attempts to control carbon pollution. I strongly urge the planning committee to reject it.

Sincerely

Dr Stuart Parkinson  
Lancaster

Note: references are available on demand