

Independent Planning Commission Level 3, 201 Elizabeth St Sydney 2000

SSD 7172 and SSD 7171 - Second referral

Dear Commissioners,

For many years the people of the Southern Highlands have been fighting to stop the atrocity of the proposed Hume Coal mine owned by the Korean company POSCO.

This pristine, productive, historic and famously beautiful region of NSW would be devastated by such an operation; a small, expensive and controversial 'greenfields' mine that is unlikely to be commercially viable. It is located in an historically important Sutton Forest in the Southern Highlands, a vibrant tourism and agricultural mecca, 130 kilometres south of Sydney. The proposed mine will be within the Sydney Water Catchment.

The performance risks Hume is willing to adopt are being shared with the local community in an unprecedented fashion due to the very significant danger to the groundwater in the area. The mine safety and groundwater pollution risks associated with Hume's proposed, and unproven mining method are not properly addressed. The significant social impacts are also effectively ignored by Hume.

As the world pivots away from fossil fuels with climate change impacting on every individual on the globe, I am in particular solidarity with all rural communities that suffer from coal mining which causes immense environmental destruction both during and after it is mined.

I wish to express my opposition to Hume Coal's applications (SSD 7172 and SSD 7171). The proposed mine represents a real threat to residents of the Southern Highlands as well as those of Sydney. The project fails on a number of fronts and this has not changed.

# **RISK AND UNCERTAINTY**

Hume proposes a combination of an untested mining process that impacts a highly productive groundwater system in an environment where the underground conditions are not fully known. Approval of this project can only be made on the assumption that there are no unintended consequences emerging from an extensive list of project uncertainties that have not been fully evaluated or modeled. From an engineering execution perspective, this project is fraught with risk. The impact of getting any one of a number of critical assumptions wrong is potentially catastrophic.

#### **GEOLOGY**

Hume has failed to provide evidence to support many of its assumptions particularly relating to the geology of the area to be mined. This is particularly important in the groundwater modelling and erodes the veracity of Hume's conclusions regarding the scale of the groundwater impacts which, in any event, are still very significant.

## MODELLING ASSUMPTIONS

Groundwater modelling is an inexact science where the magnitude of the 'expected' impacts can be adjusted by astute 'modification' of modelling assumptions. This process of 'finetuning' can be seen via a close inspection of Hume's Model assumptions and how they vary from observed data and evidence.



#### **GROUNDWATER IMPACTS**

Hume admits that a large number of landowners with multiple bores will have the quantity and quality of their groundwater impacted for many decades after Hume has departed from the scene. This is unprecedented. Previous analysis, supported by PSM Consultants and the NSW Water Research Laboratory, suggests that many more landowners and bores could be affected much more significantly than Hume's groundwater model predicts. Hume's groundwater model has artificially minimised the water table drawdown impacts of the mine. The proposed 'Make Good' arrangements are impractical and unworkable in many cases.

### MINE SAFETY

There is significant concern regarding the Hume mine plan and the mining processes Hume plans to employ, in particular from the context of mine safety. This is particularly concerning given Hume's proposal to employ unproven methods of extraction in difficult geological conditions with very significant volumes of groundwater in the Hawkesbury sandstone layer directly above the coal extraction area.

In particular, the safety and reliability of the concept of installing a multitude of concrete bulkheads into potentially unstable rock to contain groundwater flowing into mined voids, 80 to 180 metres underground, has been handled in a dismissive manner. This is a vital operation for which failure could lead to catastrophic consequences.

#### **SOCIAL IMPACTS**

Hume does not realistically address the significant social impacts of this project, which has now been active for around a decade. Hume's strategy has been to divide the community, denigrate opponents and attempt to force access to land for exploration against the wishes of landowners. They have been resisted with all the force the locals can muster.

Affected landowners in Sutton Forest have survived acrimonious and bullying behavior from Hume over an extended period. There have been numerous legal battles and forced land access arbitration fights over that time. Landowners in a significant proportion of the licence area have successfully prevented Hume accessing their land for exploration and will not deal with Hume in any circumstances.

The Hume project has been roundly rejected by the Wingecarribee Shire Council, many Southern Highlands residents and many affected business owners. Without exaggeration, the impact on the community's health and well being caused by the continued aggressive and confrontational behavior of Hume plus the future uncertainty regarding the project has been very significant.

# **ECONOMIC ISSUES**

Hume's economic analysis is misleading and incomplete – it exaggerates the financial benefits that will flow from the project whilst ignoring the severe economic impacts flowing from the degredation of the region, loss of viability in agriculture, equine and tourism industries. It is debatable whether it will deliver the stated level of royalties to the NSW government, but I would be confident to say that due to the poor profitability of the project, taxes to the Federal government will be minimal at best. The implementation of routine, prudent tax minimization strategies by POSCO should ensure no company tax is paid.

The poor profitability is a result of the relatively small scale of the project, the limited extraction rate (35%), the short project life and the higher investment requirement of the Hume mine compared to larger, more efficient operators. The complex and unproven mining process will probably result in additional financial impacts.

Significant legal obstacles regarding land access and 'Make Good' arrangements which will delay and/ or obstruct the project have not been factored into Hume's economic analysis. As mentioned above, external economic impacts on the environment, local businesses and landowners will be very significant and have not been properly considered.



#### CONCLUSION

Hume Coal is still attempting to 'paper over' very significant technical, operational, social and legal issues related to the underground coal mine project.

The groundwater modelling, and the related development of the conceptual geological model, is highly questionable. Even with Hume's clear attempt to minimize groundwater 'take' in its groundwater modelling, landowners bore impacts are unprecedented for a coal mine anywhere in NSW.

Hume does not present evidence to support the geological assumptions that drive its groundwater model. In fact, Hume's assumptions fly in the face of historical bore data and local evidence. It appears that Hume's model results are intentionally 'reverse engineered' to minimize projected impacts.

The project is highly controversial in the Southern Highlands. Affected landowners in Sutton Forest are strong opposed as are many community members. Social impacts over the past decade of the project's life have been significant and will be exacerbated if the project is approved.

For patently obvious reasons, Hume requires approval of the project before land access and 'Make Good' arrangements for landowner bore impacts are put in place. The proposed process for dealing with groundwater disputes will force reluctant landowners into the courts. Many, if not all, affected landowners will categorically refuse to deal with Hume in these circumstances.

In addition, the 'Make Good' arrangements proposed to resolve groundwater disputes are impractical in a number of cases and unworkable for large irrigation licence holders.

The projects economics are also dubious at best particularly given the relatively small scale of the mine, the limited potential returns to the state and the significant impacts on local landowners and businesses.

## FOSSIL FUELS AND CLIMATE CHANGE

The unprecedented bushfires that caused such massive destruction in Australia in 2019/2020, and the current heatwaves in the northern hemisphere – leading without doubt to similar fires there in the near future – highlight the existential threat of fossil fuel driven climate change.

For years, climate scientists and environmental activists have been calling for the end of fossil fuels as the number one thing that must happen if we are to save the planet. They have fought tooth and nail to push back against the dirty energy industry's billion-dollar efforts to spread disinformation and sow public doubt over climate change, campaigned to raise awareness about the devastating health, environmental and economic consequences of continued inaction.

POSCO/Hume Coal have participated in the effort to spread disinformation in our own region, and activley threaten the lives and livlihoods of members of our community.

The global energy watchdog International Energy Agency (IEA) has spoken out clearly this time, saying in a landmark report that there must be no more new oil, gas or coal if we are to reach net-zero emissions by 2050, as outlined under the Paris agreement. From now, IEA says there should no longer be any investments into fossil fuel projects and no more sales of internal combustion engines by 2035. It followed an earlier call from the agency that renewables have proven over the pandemic to be the only source resilient to energy shocks.

The world is being shaken awake by this threat and recognising the urgent need to achieve Net Zero.

We submit that this project should be rejected.

Yours sincerely

Peter Campbell