Submission to the PAC concerning unacceptable choices made by the EIS and the insignificant return to the public purse afforded by the POSCO coal mine

Unacceptable choices made by the EIS

POSCO wishes to run a profitable business and in doing so needs to make decisions as to the various mining methods it chooses and to how it manages mine operations. Generally, any sensible business will make decisions that are least costly to itself. The EIS does this and makes choices that are clearly in the mine's financial interests rather than in the interests of the environment.

The EIS makes this particularly clear with regard to how it has chosen to treat mine waste and how it has chosen to treat the polluted water the mine produces. The EIS resolves these two important issues by choosing to do nothing at all. The EIS chooses, quite deliberately not to treat the mine waste and the EIS also chooses, quite deliberately, not to provide a water treatment plant and not to clean the water it pollutes.

Cleaning and disposing of almost a million tons of mine waste and cleaning many Giga Litres of polluted water every year are very significant costs and if these can be reduced, or even eliminated, then substantial financial benefits will apply to the mine. The problem with the EIS is that they have chosen an operational method which will certainly save them the most costs but in doing so they massively increase their pollution footprint and have failed to properly discuss the other options available to them. The EIS needs to properly consider, explain and justify why it has not chosen other more environmentally acceptable choices of treating mine waste and water and has instead opted for the cheaper do nothing option. The trouble is that the do nothing option might well be cheaper for Hume Coal but it is all the other stakeholders such as the community and the environment who will bear the long term detriment and cost.

To my mind the EIS places undue weight on financial benefit to the mine and not enough weight on the costs to the environment. The EIS does this by seeking to save money by choosing the less costly option in two important methods of operating the mine. First, the mine proposes to store all of its mine waste underground. Second, the mine proposes to do this by using already polluted water as the transport medium by which the mine waste will be returned underground in the form of a slurry (the EIS uses the term "Paste" but the use of this descriptive term is disingenuous as a paste cannot be pumped any distance whereas a loose watery slurry can be pumped many hundreds of meters.)

It was open to the mine to establish a water treatment plant and return clean water to the environment but they have chosen not to do so. It was also open to the mine to remove mine waste from the mine site and to find more environmentally acceptable ways of disposing of their mine waste but, here again, they have chosen not to do so.

The treatment of mine waste

Mine waste can be removed easily from the mine site. Good rail and road communications exist and the waste can also be stockpiled in various locations not only back underground. If stored underground the waste can also be returned as dry fill underground and not as wet fill. Mine waste can be used if treated and mine waste is already used as clean fill. The Dendrobium mine which is similar in size and output to the Hume Coal mine, and is closer to Port Kembla and on the same rail network as Hume Coal, already reduces their mine waste by last year recycling 935,575 tonnes of mine wash reject as engineered fill for road base and civil construction. (Vis. Annual Report Illawarra Coal Dec 2016). This choice costs the Dendrobium mine money but is better for the environment. The Hume Coal EIS has chosen not to accept this type of cost and the EIS is deficient to a fault in not disclosing and discussing in full why they chose the do nothing option and why they made a completely different choice to that made by Dendrobium mine.

The treatment of polluted water

Hume Coal has also chosen the financially cheaper but far more environmentally costly approach of not treating their waste water. This waste water, according to their EIS will be many thousands of millions of litres every year and, according to the EIS this water, once polluted, will always remain polluted. This 'pollute and ignore' approach by Hume Coal shows an unacceptable and cavalier attitude to the water I and other stakeholders need. My bore is so pure it is drinkable. Hume Coal's proposed actions of first draining the water table and then pumping Giga Litres of polluted water back underground, into permeable voids touching the aquifer, will pollute the aquifer and is unacceptable.

There are many other options to treating, handling and storing mine waste and water clearly does not need to be used to pump mine waste back underground. Conveyor belts and trucks are to be used to bring the good coal mixed with waste rock to the surface and these self- same conveyor belts and trucks can also be engineered so as to return the waste rock back underground without the use of coal wash water. Of course, returning underground the water already polluted by the coal washing facility at the mine head, conceals the fact that, rather than cleaning the water used to wash the coal and then returning it safely to the environment above ground, it is far simpler and less costly not to clean the water but to use it to form the slurry that is to be pumped back down the mine. This smacks of an attitude of out of sight out of mind and it creates an environmental time bomb which can never be fixed once the aquifer is polluted. This is also unacceptable.

It has already been established that mine waste can be successfully cleaned and recycled usefully into civil engineering projects. This option is not discussed in the EIS and major difficulties are presented by the EIS when other more environmentally suitable solutions to the management of mine waste are not even discussed let alone costed. The EIS is seriously deficient in not only failing to properly discuss other options to how mine waste can be disposed of without permanently damaging the environment but also in choosing a quick, dirty and low cost option without any form of comprehensive dialogue or proper consideration of other options. There is no good reason for the omission of this discussion in the EIS and the only conclusion I can draw is that the EIS seems to

wish to avoid the costs of establishing a water treatment plant and would rather return water the mine has already polluted back down the mine untreated and in circumstances where the polluted water will mix with the existing clean water. Nowhere in the EIS does it say that this mixing will not occur. It also seems from the whole tone and tenor of the EIS that pumping coal waste and dirty water back down the mine was a course of action decided upon quite early in the planning process for the mine and that once this method of operation had been chosen then it was the job of the EIS to justify the preferred solution. In farming terms this is putting the cart before the horse.

Simple economics

The Southern Highland Coal Action Group who met with the MD of POSCO in Australia were asked to "Please understand that Korea considers the assured supply of coal to be a matter of national security". The actual cost of securing reliable supplies of coal therefore seems to be irrelevant in terms of assuring national security of supply. This proposed mine is already known to be a very high cost mine and any future profit is highly unlikely. If there ever is a profit this will also most likely be offset by interest payments due to the overseas parent. Thus, talk of taxing company profits as a future profit to Australia is simply not realistic. It is quite clear that there will be no income tax paid by the mine as it needs to first account for the A\$1Bn in capital that is to be expended in establishing the mine. In my view POSCO is persisting with this mine, not for economic reasons, but for reasons to do with the security of supply to their steelworks in Korea at almost any price.

It is concerning to also note that the prospective value of the Wingecarribee Shire rate base has already been adversely impacted by the reduction in value of properties across the Southern Highland due to the Valuer General reassessing land values downwards. Some by as much as a reported 30%. Regardless of the capital and other costs to private landholder, which is already acknowledged by the valuer general as considerable, the losses to the Council in rateable value forgone, and to the State in stamp duty forgone should be factored into the economic case. A study has not been conducted to show, on the one hand, the value contributed to the rate base where the rateable value of properties, land tax and stamp duties are maintained at normal (pre mine devaluation of land) levels over 30 years and on the other hand, to compare those results with the depressed returns that would be available where the mine proceeds and values and the rate base are depressed for 30 years. My calculations, even on the back of an envelope, show that losses to the Council, the State and the community over the life of the mine greatly outweigh a future and paltry royalty. I use the word paltry deliberately as while the mine will pay a small royalty, when it is operational, this royalty will always be very small and according to the EIS will be as low as \$6m a year.

There is also much talk by Hume Coal of 300 full time jobs for 20 year. These jobs would be very nice but there is no talk of the jobs the mine will cost in tourism and lack of amenity. Without being balanced by the number of new jobs that will also not occur because the mine depresses the region the prospective new jobs are a spurious and selective benefit. The Southern Highlands is already famous for its tourism, agriculture, wines, lifestyle and equestrian facilities. These create jobs that exist today and more will follow if the area expands but expansion will be crippled by the coal mine. For the EIS to talk only of prospective new jobs and not to talk at all of jobs already lost and jobs forgone because of the mine is neither a fair nor reasonable approach yet this is the approach taken by the EIS.

The EIS does not develop, analyse or even consider any of the above arguments and yet economic benefit to Australia is the only basis on which this DA could proceed. As there is, in my view, only a selective, highly subjective and inadequate economic analysis in the EIS, I would like to ask that a proper economic analysis be completed by a genuine third party in order to resolve the issues I draw attention to above. Also, and as no one thus far has placed a value on the water taken by the mine and subsequently returned polluted and untreated to the water table, I would also like to see a realistic value placed on the value of destroying a pristine aquifer by injecting it with Giga Litres of polluted water every year for 30 years.

I conclude that this mine imposes unwanted and very severe long term costs on the community for no net benefit and yet with significant long term detrimental costs in both money and to the environment. None of the hundreds of landholders in the proposed mining lease gain any benefit and yet all must bear the costs in diminished land value and polluted water. Neither the Council nor the State obtain any net benefit that I can establish or that the EIS can reasonably sustain.

In terms of net economic benefit to Australia the costs are so high in financial, human and environmental terms that this mine should never be allowed to proceed.

Thank you for the opportunity to make this submission.

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