

# **Submission in Opposition to the Hume Coal Sutton Forrest Coal Mine Application**

**SSD 15\_7172**

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Looking North East across the proposed site of the surface coal processing and loading facility covering 117 hectares including rail maintenance yards, huge coal stockpiles and a vast sludge and waste water dam.

## **Introduction**

Thank you for the opportunity to submit a response to the Hume Coal EIS about this project.

My wife and I have a property located at 67 Sutton St. Berrima, which is the closest part of the Berrima township to the proposed site of the Hume Coal mine. Our house

is 2 km from the northern boundary of the mine area and the surface infrastructure associated with the processing and loading of the mine output. The property is relatively secluded with boundaries on the Wingecaribee River to the east, and crown land on two sides (north and west).

It is my submission that the proposed mine is incompatible with the other existing uses of land in the vicinity of the Hume Coal mine site. In particular, the storage and loading terminals combined with the associated rail movements will have significant impact in terms of air quality in the region generally and also noise and vibration, plus light pollution for a more limited range around the storage and transfer terminal.

The mining will occur in an area of over 4000 hectares. This is huge compared to any other activity in the region. Further, the surface works including coal crushing plant, storage and loading facilities will occupy 117 hectares. This is far, far bigger than the nearby townships of Berrima, Medway and Sutton Forrest. The operation will dwarf the towns and the height of the coal stockpiles and associated machinery will be a landscape feature in the vicinity. Other commercial activity within 10kms is nestled in valleys and/or not obtrusive or visible from the towns of Berrima, Sutton Forrest or Medway.

Some of the positive assertions contained in the EIS are not supported by publicly available data about prevailing winds in the region (some of which is even detailed in the actual EIS) which will blow toxic coal dust towards and into residential areas and onto food and wine producing land.

There are other potential concerns relating to air quality, including the possibility of a fire in the mine or in the coal stockpile. This occurred recently in Morwell in the Victorian Gippsland coal fields. The Morwell fire is reported to have caused up to 700 premature deaths due to the pollutants and particulate emissions given off during the fire event. The Hume Coal mine has the ability to cause similar damage to the local population in the event of a similar fire.

Our property is one of the closest to the surface works including the coal stockpile and we are very concerned about the potential health impact of dust from normal day-to-day 24 hour operations of the mine, and the devastating impact of the emissions from a fire at the mine.

The biggest concerns are the effect on surface and ground water and air quality from amongst other sources, coal dust pollution. This region is a very important food production area and a high value tourist region. It is clean and pure. A coal mine with its dust output is simply not compatible with such a valuable tourist asset and water catchment area. This view is supported by the local Wingecaribee Shire Council and its environmental officers and experts.

On these aspects alone the mine should be refused approval.

My specific responses are as follows:

#### **Surface water. (Intro 4.1.1)**

Berrima and surrounds has a number of high rain-fall events every year. In 2016, the Wingecarribee River flooded twice. It is difficult to accept the assumption that it will be possible to retain runoff in the dams and in the underground mine. The underground water supply has already been established to be very high and the mine is below the water table. According to coal mining specialists, "this is a very wet mine".

Additional water from the high Southern Highland natural rainfall will likely not be retained onsite and will contaminate the water catchment for Sydney. The nearby Wingecarribee River leads directly to Warragamba Dam.

#### **Ground Water (intro 4.1.2)**

Our property is approx 2 km from the above ground, mine operating and loading area. It seems unlikely that our bore will not be effected. The Wingecarribee Shire Council water experts expect many more bores than have been identified in the EIS to be damaged by the mine operations.

It is unacceptable that the stated recovery time for ground water levels is to be at 75% of original levels within 23 years after first impact. In this part of Australia, water is precious. We rely on ground water for food production. A drop in ground water levels will result in significant additional electricity costs for pumping. This will be the case on all effected properties. The authorities should not be contemplating any activity which could effect either the quality or availability of local water supplies.

#### **Employment Opportunities.**

I note that the total additional employment revealed in the various EIS documents is 400 during construction, reducing to only 300 during the life of the project. It seems pathetically small a possible benefit given the other problems associated with both projects (mine and railway). I also note the project has been declared state significant presumably due to the potential employment benefits which at page 467 of the EIS are acknowledged to be overstated.

Here, the EIS for reveals that the mine proponents expect that 80% of the people employed at the mine would have attained a job elsewhere (p467 of EIS 15\_7172). That means that even at peak operating capacity, only 60 incremental jobs will have been created by the project.

During construction, with 90% of the employees living in the "temporary village" on site, there is virtually no local employment created and the project will be providing no benefit to the region during that part of the mine's life.

To put it in perspective, my own company employs approximately the same number of staff. We don't get any special treatment and pay tax both as a company and as individual Australian shareholders. There is no guarantee that POSCO will pay proper company tax in Australia and its Korean and US shareholders certainly will not be paying income tax in Australia on dividend earnings. (The fact that POSCO shareholder are located only in the US and Korea is acknowledged in the finance section of the EIS).

### **Economics (Intro 4.14)**

The assertions about the benefits of the mine are spurious. The EIS does not examine any possible negative impact of the mine on tourism and hospitality in the region. The minimal job growth from the mine could easily be outpaced by damage to these other sectors which are very important employers in the region.

Simple analysis shows the main supposed benefit is the royalty payments to the State of NSW. However it is surprising that it is so low at \$114 million NPV over the life of the mine. That is less than \$5 million a year!

Is it worth risking the wellbeing of the region and its residents for such a small financial gain? 2017 must be a turning point for decision making about this kind of project. Surely it should be a requirement there be more benefit than revealed in this EIS to justify the risks associated with a mine project in such close proximity to a happy rural community?

### **Damage to the Forest (Chapter 3.2.4)**

Downcast ventilation shaft. There is a ventilation shaft proposed to be built in the Belanglo State Forest which is zoned RU3. This is an inappropriate use of a significant forest. The activity is prohibited in the forest and should not be approved.

This section also makes an assertion about the "temporary" use of the surface works area. This area comprising 117 hectares, will be converted from a passive rural farming activity zoned RU 2 Rural Landscape and E3 Environmental Management to a huge, overbearing industrial landscape comprising coal crushing factory, 3 large stockpiles of coal (2 types) and discarded reject mined material, coal rail loading facility and large amounts of associated machinery. There will also be a maintenance facility and rail siding for coal trains and a busy rail corridor constructed over land zones RU2. And all this will take place for the 23 year life of the mine.

23 years is hardly temporary. 6 months is temporary. **The use of the expression "temporary" to describe the high impact, large scale surface works for the mine is misleading and should be called out for that.**

### **Ecological Sustainability? (Chapters 3.2.4 and 24)**

On page 55 and again in chapter 24, the EIS discusses the mine as being appropriate for classification as Ecologically Sustainable Development. The Commonwealth Government's 1992 National Strategy for Ecologically Sustainable Development defines ESD as "using, conserving and enhancing the community's resources so that ecological processes, on which life depends, are maintained, and the total quality of life now, and in the future, can be increased".

The construction of a mine in the Southern Highlands should never be described as "enhancing the community's resource". If ESD involves exploiting a finite resource for the profit of a foreign shareholder, then yes, this is an ESD. However, paying a tiny royalty and employing a small, statistically insignificant number of people is not enough to be described as "increasing the total quality of life" as required by the commonwealth ESD definition. **This is not an Ecological Sustainable project. It is profit driven exploitation of a publicly owned resource.**

### **Export Earnings (Chapter 3.6.3 (iv))**

On page 70 of the EIS, the applicant attempts to equate NSW export industries with this mining application. However, it should be emphasized that this project differs from other mining projects in a very important aspect. The mine will be operated by the end user of the coal in Korea. Accordingly the market price of the coal is unlikely to be repatriated to Australia. I accept that the operators will be required to pay mining royalties to the state, and some payroll tax on employment costs, but the potential earnings from the export of the actual coal will not flow back into the State of NSW in the same way as normal export earnings do.

To put it simply, the export of coal with a value of say \$100 million, does not necessarily result in export earnings of that amount unless the end user pays the market price for the coal in cash and that cash is repatriated to NSW. So I note that the terminology used in the EIS is about the "value" of the coal exported, not the amount of money paid for that coal.

Coal mining in general may create export income, but not if the foreign end user of the coal is also the operator of the mine. The Hume Coal mine will not be an export earning development and it is extremely misleading for the proponents of the mine to describe it as such in the EIS and elsewhere.

### **Community and Stakeholder interaction. (Chapter 4)**

The EIS goes to great lengths to give the impression that the local communities near the mine have been extensively consulted and informed of the mine's impact on them.

However, our household has never received anything from Hume Coal despite having been in the region for the last 3 years. I have spoken to the owner of a property that directly borders the mine site and rail line. He has received nothing

from Hume Coal. What little stakeholder interaction has occurred, has been through unsatisfactory town meetings. Companies should not be allowed to use superficial so called "stakeholder meetings" to substitute for proper face-to-face meetings with affected neighbours.

If the community reaction is to be gauged properly, look no further than the extensive door-knock research conducted by local residents and Battle for Berrima in the Sutton Forrest and Berrima districts. Nearly every resident in the region was personally approached and the result was that more than 85% of the community opposes the mine. This does not equate with the false positive spin set out in the EIS about community consultation.

Make no mistake, there is almost no support for the mine in the region.

### **Hydrology (Chapter 5.2.5)**

The proposed mine seam is below the aquifer! There is a substantial aquifer comprising Wianamatta Shale and Hawksberry Sandstone above the coal seam. Water will constantly be pouring into the mine.

It is insane to be doing anything to the geology of the region that could jeopardize the availability of ground water for food production for NSW.

The EIS submission acknowledges that ground water levels will drop on properties surrounding the mine site. This is simply not acceptable. The mine application should be rejected because of this risk to water alone.

### **“Temporary” reject mound (Chapter 6.3)**

This section mentions sound and dust mitigation to include dozing the shape "temporary reject stockpile". To describe the reject stockpile as "temporary" is misleading. Like the coal stockpiles, the reject stockpile will be in place for the entire 20 year life of the mine. Only the individual grains of dirt and coal will be temporarily in the stockpiles. There will be nothing temporary about the actual stockpile sites.

The review board should not be misled by the use of this term.

### **Reject Emplacement (Chapter 6.4)**

As discussed elsewhere, there is an unacceptable risk to ground water posed by the use of mine reject material and other material brought to the site to fill the mine voids after mining. The areas will be flooded and effectively become a part of the aquifer and hence provide serious contamination possibilities.

As is canvassed in the Wingecarribee Shire Council, there is considerable doubt about the ability to make the seals in the mine water-tight. Accordingly, there should be no certainty that the technology proposed for the mine actually works and that

additional contaminants will not find their way into ground water through the use of “reject material” to fill the mine after the coal is removed.

Any threat to the quality of water in food producing rural areas like this should result in approval for the mine being withheld.

### **Water Management (Chapter 6.5 and also 7.2.3)**

There is not enough focus on the potential release of pollutants and toxic material into surface and ground water reserves. Any escape of surface water will flow to the Wingecarribee River which leads directly to the Warragamba Dam - Sydney's main drinking water supply.

I also dispute the proposition that mixing air and the coal seam and combining that with pumped in mine tailings will not result in pollution of the aquifer. Other mine experts refute the assertions by Hume Coal that the mining and back filling of the voids is safe for water supplies.

Both of these points add up to huge and unacceptable risks for the project. It should not be approved on these grounds alone.

### **The “Do Nothing” Alternative. (Chapter 6.8)**

There are very few people in the area who agree with the proposition that this mine is better than the "Do Nothing" alternative.

The social cost and potential damage to the amenity of the Southern Highlands from a mine in such a prominent position cannot be outweighed by small royalty payments amounting to approximately \$5 million per annum and 300 jobs (amounting to 60 incremental jobs). Many more than those 300 jobs will be at risk in the region in the hospitality and tourism sectors alone.

Further, elsewhere in the EIS report, Hume Coal makes the point that unemployment in the area is particularly low - well below the state average. Accordingly new jobs are less needed, leading to more workers coming from outside the immediate area of the mine. This reduces any positive impact of the mine to the region.

**I submit the "Do Nothing" Alternative is far more attractive than the mine. Very few locals would disagree.**

### **Groundwater (Chapter 7.2.4)**

Our bore is identified in table 7.3 as being a registered bore within the area effected by the mine.

Further in chapter 10 at page 268, it is acknowledged that some plants including old trees will be "impacted" by the drop in the ground water table. In other words the old

trees in an area totaling over 6000 hectares will likely die. How is this acceptable?

There is no justification for jeopardizing the quality and level of the groundwater supplies in a regional area where people rely on it for agricultural purposes and to supplement rainwater.

At our property, we do not have access to town water and 100% of our water comes from either rainfall and bore water. The quality of the rain water will likely be effected by coal dust from the mine which the prevailing wind will blow directly to our collection surfaces. Our other supply is the bore water - levels for which will fall. We are told it could also effect flow rates. Either way, we may be faced with extra costs associated with pumping and sinking deeper bores. This is also like to effect quality of the water. Our water quality is presently very high.

Add to the ground water drop, the risk of contamination from the mine, and it is simply not worth the risk to the region of proceeding with the mine. There are simply not enough benefits to outweigh the negative impact of the mine on water supplies.

It is chilling to read the detached assessments contained in the EIS in relation to both surface and ground water issues associated with the project. When expressions such as "impact is expected to be negligible" or "...insignificant" the question which immediately comes to mind is what happens if they are wrong. Even when a problem is identified, it is presented as unimportant. For instance, this on page 173: "**Half of the affected bores recover from the project impact by 43 years after the start of mining.**" Forget about the weird grammar in this sentence - 43 years for only half of the affected bores to recover! That is 20 years beyond the life of the mine.

Is it worth the risk to the water supplies as well as the wellbeing of the local farming and other communities for the State to pocket a tiny royalty income in return for possible existential risk from the Hume Coal mine project?

## Noise (Chapter 11)

It is clear from table 11.19 and the associated maps, that in addition to the properties with severe noise impact, the homes in Medway and Berrima townships will be subjected to 24 hour a day noise from the nearby surface operations of the mine. These are quiet rural towns, and residents do not expect as yet undetermined levels of mechanical noise to interrupt their peace. This is a serious diminution of the amenity of the region.

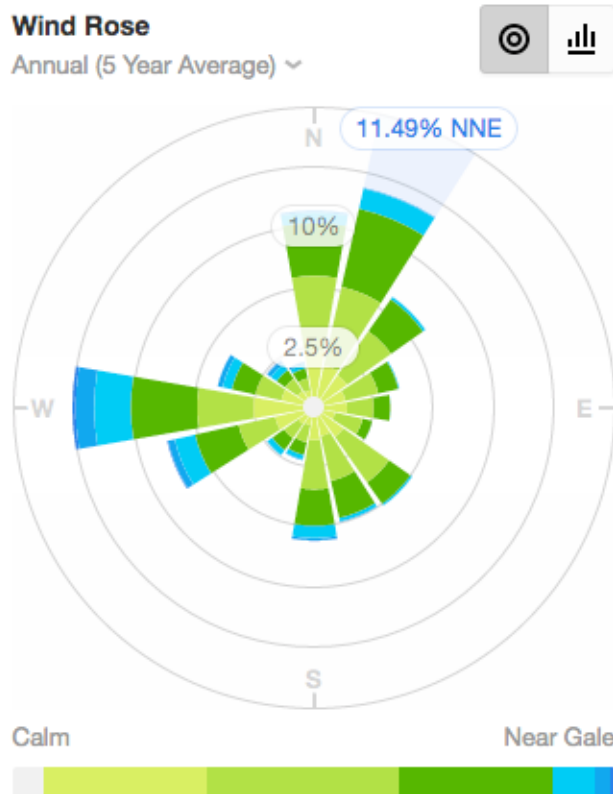
I am unclear on the limitations proposed for underground blasting activities. But clearly given the proximity to dwellings and towns, these activities should be limited to daytime only.

## Air Quality (Chapter 12)

It is difficult to understand that the EIS reports that so little dust will escape the mine site when the experience at other coal mines is the opposite. We are expected to

believe that there are almost no health risks posed by the mine.

In order to ensure that the mine does not have any health effect from small particulate pollution, the mine should as part of any approvals granted, be required to cease above ground materials handling operations when the wind direction is blowing in the directions of Sutton Forrest, Medway and Berrima.



The Berrima Wind Rose, showing that prevailing winds will blow mine dust NNE to Berrima Village 11.5% of the time. The most prominent wind direction is directly towards Medway to the West.

## Greenhouse Gas Emissions (Chapter 13)

Over the life of the project, the mine will emit 2,034,000 tonnes of greenhouse gas from mining operations and another 5,902,000 tonnes from burning the coal actually mined. What is surprising is the sheer amount of greenhouse gas emissions during mining operations compared with the emissions from coal burning. The mine itself has a huge greenhouse footprint.

For example in a typical year when 3.1 mega tonnes of coal is mined, the mining operation generates 113,010 tonnes of greenhouse gas [year 5 data from figure 13.3]. The coal mined in that year produces another 370,477 tonnes.

At a time that the world is attempting to reduce greenhouse gas emissions it seems to be madness to create a new coal mine with such huge local greenhouse gas emissions. A large proportion of the emissions is from the electricity used to run the mining and coal loading operations. This, at a time when there is unprecedented pressure on the electricity generation and distribution network. No wonder the project

requires the installation of a new high voltage supply line.

The known downside of increasing greenhouse gas emissions means that the project should be rejected because it will increase the state's greenhouse gas output. In 2017, governments should not be contemplating increasing our share of CO<sub>2</sub> output when the project has so little positive social impact to offset the damage done to the landscape and atmosphere and the globe.

### **Traffic (Chapter 15)**

15.5.3 relates to the management of the intersection between Mereworth Road and the Hume Highway. The proposal is that the intersection would remain a T intersection, but with priority given to the mine vehicle traffic along Mereworth Road.

This is a dangerous proposal. The intersection should be converted to a large roundabout to temper the speed of large vehicles. A similar intersection at Medway Road/Old Hume Highway works well for large vehicles going to the cement works and provides comfort and protection for small vehicles at the point where they have to mix with trucks.

This is very important for danger mitigation, since many of the users of the Mereworth Hume Highway exit will be used to having right of way, or alternatively will not expect large vehicles to be traveling on Mereworth Road. The installation of a roundabout at this intersection is a simple requirement that will greatly increase the safety of local and tourist private vehicle traffic.

### **Visual Impact (Chapter 16)**

The surface works area is in the wrong part of the mine site.

Due to the size of the surface works for the storage, handling and loading of coal and reject material, and the scope and height of the facilities, if the mine proceeds, the area for these surface activities should be moved south past the Mereworth homestead and above the actual mine workings. Given the assurances about low levels of subsidence, there should be no risks to the project and relocating the surface facilities would mitigate visual and other pollution from the mine's operations.



Photograph looking north on the mine surface works site. The massive waste water and sludge pond will be on the left and foreground and the loading facility and 3 huge extraction stockpiles will be on the right in place of the stand of trees.

## Economic Benefits (Chapter 19)

The detail in this chapter reveals that the main "benefit" of the Hume Coal Mine Project is the royalties payable to the State of NSW. These amount to NPV of a total of only \$114 million over the life of the mine. **That is less than \$5 million a year at current values.**

How on earth is this paltry amount of money worth jeopardizing the quality of the Southern Highlands' landscape, water supply and amenity.

\$5 million per annum is a pathetic income stream. It is not worth the risk of removing coal from the ground.

The EIS also tries to play down the importance of tourism to the region. It talks about the lack of "tourism establishments". However in reality, local tourism is made up day trippers visiting shops in the historic Georgian township of Berrima, local wineries' cellar door shops, pubs, restaurants etc. All these are "tourism establishments" disregarded by the EIS. The Wingecarribee Shire Council estimates visitor numbers to Berrima alone at 200,000 per annum.

The Southern Highlands and particularly Berrima is relatively close to Sydney. The 125km trip can be made in 1 hour 20 mins from the central suburbs of Sydney - less from the western suburbs. This makes the region an important rural destination. To dismiss this use in the EIS, is incorrect and offensive to the businesses which employ many more than the 300 people who will be employed at the proposed mine.

A large proportion of those jobs will be at risk if the prominence of the mine and the potential dust pollution, damages the image of the crisp and pristine Southern Highlands landscape. Even without actual damage, the reputational damage to the region outweighs the benefits of the mine.

All that heritage is apparently to be put at risk for \$5 million a year in royalties and a tiny handful of jobs.

## **Conclusion.**

We have seen the devastating impact of mining in other regions. We have seen the underpayment of projected royalties to state governments from other export focused mining projects and we have seen multinationals rot the taxation system to deprive Australia of taxes, which locally owned operations have to pay.

Why would we expect a different outcome with foreign owned Hume Coal. Indeed, as I have discussed elsewhere, the fact that Hume Coal's owner POSCO is also the intended end user of the mine's output makes it easy for taxes and some royalties to be avoided altogether. This is not an export earning mine. It's simply an exporting mine with no incentive to earn one dollar. And it is a small employer.

So under the criteria for assessment of the public good of the project, it is entirely possible that there will be no net benefit to the region, NSW or Australia. It still confuses me why the project is still being allowed to plan ahead. It does not fit the criteria as a Ecologically Sustainable Development and it should not be categorized as a State Significant Project.

The mine will be a small employer with limited benefit to local businesses but with the potential to harm other nearby industry such as farming, wine growing and tourism and with the potential to devastate the surface and ground water resources of the area and reek havoc on the health and well being of the nearby communities of Sutton Forrest, Berrima, Medway, plus the Moss Vale and Bowral districts.

There is nothing that can justify this risk.