Attn: Executive Director, Resource Assessments and Business Systems Planning Services Department of Planning and Environment GPO Box 39 Sydney NSW 2001

Re: Hume Coal Pty Limited (Hume Coal) - State significant development project (SSD 7172)

I would like to express my concerns against the proposed Hume Coal project, and give thanks to the Department of Planning for the opportunity of open engagement with community and individuals.

I moved to the Southern Highlands with my partner and young family at the start of January this year. While I may be considered new comer to the area, I have spent considerable time learning about the region and its history, engaging with its people and becoming familiar with the varied local environments.

The Southern Highlands is a region that boasts quaint charm and idyllic lifestyle. Small and friendly communities are interlinked to larger regional centres, and only short drive or train trip into Sydney, Canberra and Wollongong. The Southern Highlands has moderate to no industrialisation which creates a green belt and adds to the country town atmosphere that is a major drawcard to the majority of people who move into the area. The current culture is sustainable. There is a large range of employment opportunities, low drug and crime rate, and easy access to various health and aged facilities. A range of schools, sporting and extra-curricular activities for students and young people. The Southern Highlands is considered an ideal place for young families and retirees alike.

The Southern Highlands is a popular destination for weekend visitors, and gives rise to further development potential as people seek to migrate out of a densely populated and overpriced Sydney. In order to maintain its charm, it is necessary to recognise elements and areas that need to be guaranteed protection or be lost forever. It is important to now look at the future of the Southern Highlands in effort to develop and implement a strategic plan that will bring the area to its full potential. Any future development of the Southern Highlands must be done in a sustainable manner ensuring natural environments and envied lifestyle are preserved and not sacrificed in the name of 'development'.

In order for any project to be given the green light, a certain protocol should be followed. The very first step in this process needs to be the identification of the operator. Just as most working people need to get police checks to gain employment, background history of companies needs to be taken into consideration. Hume Coal is owned 100% by South Korean giant, POSCO. POSCO (formerly Pohang Iron and Steel Company) is a multinational company headquartered in Pohang, South Korea. Founded in April 1968, POSCO was established as a joint venture between the Korean Government and TaeguTec, when it was concluded that self-sufficiency in steel and the construction of an integrated steelworks were essential to economic development of South Korea. Funding for the initial plant was provided by Japan who saw the national security of the Republic of South Korea as essential to the security of Japan. Finance included \$US119million in government grants and loans, and credit of US \$54million from the Export-Import Bank of Japan. POSCO began production of sheet metal in 1972.

With local demand and that of China as manufacturing ramped up, by the late 1980's POSCO had become the world's fifth largest steel producer, it had opened up a number of mills in Pohang and supplied domestic manufacturing with a range of products for car and home appliances, shipbuilding, construction and electric motors and transformers.

With a shift to privatization, shareholders and foreign investment, along with a rise in global competition, POSCO began looking elsewhere for new opportunity. South Korean wages were considered too high to support a whole range of activities and by 2006, POSCO had established 26 subsidiaries and began manufacturing steel in China to supply global auto and appliance making plants that had been established there. POSCO has since moved into a number of developing countries including Mexico, Vietnam, Cameroon and Indonesia, making the most of cheap labor.

Pohang in the 1960s was a small coastal city fishing port with a population of 50,000 and whose major industry was processing fish and marine products. It became a major industrial center with the development of POSCO's steel mills and the population swelled to more than 520,000 people. In addition to the huge integrated steel mill, Pohang became an industrial complex for the manufacturing of finished steel products. Today Pohang is possibly South Korea's most heavily polluted cities. Claims were made that POSCO's activities are responsible for high levels of airborne dioxins, although this is debatable. However, POSCO is recognized as a major contributor of South Korea's greenhouse gases, prompting the announcement that POSCO would spend \$44.1 million combating its emissions⁽¹⁾.

A background check identifies numerous human rights abuses and environmental negligence found against POSCO⁽²⁾. POSCO has been found responsible for the displacement of tens of thousands of people in India⁽³⁾ and Burma⁽⁴⁾, child and forced labour in Uzbekistan⁽⁵⁾. In 2006 POSCO was exposed as having disrespect for fundamental human rights after a South Korean union member was savagely beaten, resulting in his death during a support rally for a peaceful sit-in being held by thousands of POSCO's employees⁽⁶⁾.

POSCO, Daewoo Intl also lost investor funding over palm oil holdings in Indonesia and New Guinea⁽⁷⁾. The Palm Oil industry has not only displaced local human populations, but has forced such animals as the orangutan, Sumatran tiger and rhinoceros, pygmy elephants and sun bears to the brink of extinction due to habitat destruction. The burning of forests and mass land clearing has been identified as major cause of air pollution and contributor to localised weather and climatic changes.

Hume Coal (POSCO) has continued with its blatant display of disregard towards human values as has set about dividing the close knit community of the Southern Highlands. In attempt to try gain social licence, Hume Coal has handed out \$1.4million dollars to local sporting clubs, community radio stations and schools. It has done this under the guise of 'caring for community', but has unfortunately showed its true colours through the use of social media. Hume Coal claims its Facebook page aim is "to provide the community with the real facts about the Hume Coal Project and engage on topics important to you." However, Hume Coal continuously avoid or ignore genuine questions from concerned and informed public, while encouraging arguments from those who are for the mine, further driving a wedge between the community. Hume Coal used a demeaning manner to openly attack those who showed any opposition to the project, and failed to engage in meaningful or informative conversation. In doing so, Hume Coal has displayed its contempt for the Southern Highland's residents and business owners, and damaged the area's renowned friendly nature by causing anger and division within the immediate and surrounding community.

With any major project, especially with one that presents various aspects of risk, all areas need to be thoroughly studied prior in order to recognise and understand possible impacts. Numerous areas including environment, air quality, ground and surface water, noise, human and animal health, current and future land uses, social and cultural values, and economy, need to be studied in minute detail. It is only through the complete and thorough study that a comprehensive understanding of the region can be gained. The intimate knowledge of an area can then be used to identify all possible impacts, and only then can a protective framework be developed and implemented in order to minimize impacts.

It is unacceptable that a company be taken on its word only. Each company should be able to clearly demonstrate that they have taken in to consideration all possible elements of risk. Murphy's Law dictates that what can go wrong will go wrong. It is essential with a project such as this as proposed by Hume Coal, that the worst case scenario of the worst case scenario is looked at in minute detail in an effort to be protective and not reactive when the unexpected happens. This is a task that I believe Hume Coal has failed considerably.

A thorough internet search reveals very little information about Hume Coal's proposed method of extraction, the pine-feather technique. This technique, sometimes referred to as the modified Wongawilly method, should not be confused with Wongawilli block extraction method. The small amount of literature available on pine-feather technique hints that this is a relatively minimally used method of extraction, its use is only described in some smaller Chinese coal mines, and it is somewhat avoided due to safety issues⁽⁸⁾. Given the small amount of literature available, the safety issues can not properly be identified, and Hume Coal's word of 'innovative technique designed to minimise impacts' cannot (and should not) be taken on face value.

It should be recognised that water is in fact our most precious resource and should be protected at all cost. Water is essential for all life. Despite the common misconception that 'it will rain and replenish', water is a finite resource. Localised weather and climatic changes mean that continued rainfall patterns cannot be guaranteed making it essential that water be protected above all. It cannot be wasted, contaminated, or removed from the natural system, without impacting existing and future generations. People have lived in Australia for at least 40,000 years, and it is up to the people now to ensure there is adequate clean fresh water for the next 40,000 years or more.

Hume Coal project poses risk to water in a various forms:

- Creeks, rivers and important water catchment areas are at risk from toxic waste water spills. Spills can occur through acts of nature such as flood or earthquake, failed or faulty infrastructure, human error, accident and negligence.
- Land subsidence can result in fractures and resultant water flow diversions within creek beds, and impact groundwater systems resulting in loss of aquifer.
- Changed hydrogeological conditions which resulting loss of moisture within soil, impacts trees and other vegetation, and slows recharge of aquifers.
- Pumping and draining of groundwater can lead to over extraction of aquifers resulting in reduced water levels and in some cases total loss of water.
- The process of acid mine drainage can take place on the surface and below ground when the exposed coal and rock minerals come into contact with air and water. This process can

impact surface and ground water quality by lowering the pH. Upon entering surface water, acid mine drainage can have adverse health impact on aquatic animals, insects and plants.

- Hume Coal plans to bury its waste ash, rock and water in mine tunnels which are then sealed with cement. Toxic water can escape from these tunnels and enter groundwater systems if the cement plugs and seals are compromised through either accident, human error or natural processes such as corrosion, or integrity failure and cracking due to natural pressures and earthquakes.
- Greenhouse gas emission from mining processes, including the release of methane into atmosphere, the burning of thermal coal and steel making processes will all add to rapidly changing climate in which we have no guarantee of continued rainfall patterns, and increased evaporation from rising temperatures.

Despite Hume Coal's suggestion that pine-feathering will prevent subsidence, there is no actual proof that this is true. All underground mines are subject to subsidence. Underground coal mining in China has been directly linked to land subsidence and water contamination^(9,10), at the detriment of the country's ability to grow and supply enough food for its ever growing population. It is vital that we do not let Australia follow the same path. Already in Tahmoor we can see the impacts of land subsidence from underground coal mining, with sunken land, damaged houses and the draining of 15,000 million year old World Heritage Thirlmere Lakes⁽¹¹⁾.

Ongoing monitoring of all buried waste, water quality and land subsidence needs to be perceptual, and at a cost to Hume Coal and not to the Australian tax payer. Any future remediation or remuneration costs, for damaged infrastructure, homes, or business caused by water quality or quantity loss and land subsidence, must be paid for by Hume Coal. A perpetual and increasing insurance bond against any damages, he held in eternal trust.

Hume Coal's main draw card for this project is the 300 promised jobs for locals. Hume Coal states that these are real jobs for real people, keeping young people in the Shire. However, at recent presentation to Wingecarribe Shire Council, Hume Coal confirmed already there been 450 expressions of interest for jobs mainly by existing miners. This is simply a job transfer for those already employed, and not creating new jobs. Despite Hume Coal's claims that there will be jobs created, consideration has to be taken for the jobs that will be lost in other industries including farming and tourism should water or landed be effected in a detrimental manner. Consideration for the Australian steel manufacturing industry which is currently under threat from falling coal prices and cheaper Asian supply. Hume Coal may provide work transfer for 300 miners, but will have impact on many thousands of jobs across the Southern Highlands and Illawarra region.

Considering the amount of risk that is presented, and the very limited benefits that will be returned, I urge the Government to reject this project. I ask the Government protect the Southern Highlands from the impacts of coal mining, and work towards development of a sustainable future which encourages long term industries that create jobs for locals and benefits other Australian industries.

Yours sincerely,

Charmaine Roth

- 1. The Korea Bizwire http://koreabizwire.com/posco-makes-additional-investment-to-counter-air-pollution/80924
- 2. Business and Human Rights Resource Centre: POSCO search results https://business-humanrights.org/en/search-results?langcode=en&keywords=posco&pagenum=0
- The Price of Steel: Human Rights and Forced Evictions in the POSCO-India Project International Network for Economic, Social and Cultural Rights https://www.escr-net.org/resources/price-steel-human-rights-and-forced-evictions-posco-india-project
- 4. Recommendation on the exclusion of Daewoo International Corporation, Oil and Natural Gas Corporation Ltd., GAIL India, Korea Gas Corporation and POSCO from the investment universe of the Norwegian Government Pension Fund Global http://etikkradet.no/files/2017/02/Recommendation_Burma_2012.pdf
- POSCO Daewoo Investors withdraw due to severe human rights abuses in the supply chain RepRiskESG Business Intelligence https://www.reprisk.com/content/5-publications/4-case-studies/5-poscodaewoo/reprisk-case-study-poscodaewoo.pdf
- 6. Striking POSCO worker dies: https://business-humanrights.org/en/so-korea-striking-posco-worker-dies-after-beating-by-police
- 7. Mongabay: Norway's wealth fund expels POSCO, Daewoo Intl over palm oil holdings https://news.mongabay.com/2015/08/norways-wealth-fund-expels-posco-daewoo-intl-over-palm-oil-holdings/
- Introduction to linear mining underground coal https://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&ved=0ahUKEwigxePehOXUAhXEwL wKHTF1DdEQFggoMAA&url=http%3A%2F%2Fwww.undergroundcoal.com.au%2Facarp_dev%2FFiles%2520for%2 520testing%2520MINI%2520GOOGLE%2FLinear%2520Mining%2FElectra%2520Mining%2520presentation%2520 on%2520linear%2520mining.doc&usg=AFQjCNE8-p7jXoac2itXkAqEDheaPfHyzA
- 9. Environmental impacts coal mining in China http://www.sciencedirect.com/science/article/pii/S1674526409601873
- Homes and farmland swallowed by subsidence in coal mining regions Global Times: 2017/2/13 http://www.globaltimes.cn/content/1032689.shtml
- 11. Thirlmere Lakes

ABC News May 2016 https://www.google.com.au/url?sa=t&rct=j&q=&esrc=s&source=web&cd=1&cad=rja&uact=8&ved=0ahUKEwi1x 5rQheXUAhVCu7wKHRvXA1gQFggmMAA&url=http%3A%2F%2Fwww.abc.net.au%2Fnews%2F2016-05-29%2Fcoal-mining-to-blame-for-poor-state-of-thirlmere-lakes%2F7455320&usg=AFQjCNFIfl-4NcpI-8DyX_6PAEf0jBqcWg