## Submission of objection to the Wallarah 2 mining proposal Number SSD 4974

Thank you for the opportunity to submit an objection to the proposed Wallarah 2 mining proposal.

As a frequent visitor to the area, I am concerned by some of the potential risks of this mining proposal. In particular, I ask what the justification for this project, which is so close to populated and conservation areas, when there are other projects that are open cut coal mines that do not impact so many of the community.

## **Subsistence to Jilliby Conservation Area**

My family regularly stays with friends in the area and spend time in Jilliby Conservation Area most days while we are there, either hiking, horse riding or running. This is a particularly beautiful natural area; it is hilly and rocky terrain and much wild life. It is blessed with rocky ridgelines, creeks and rainforest gullies. It is a jewel in an area surrounded by farms and horse paddocks.

I am concerned about the impact of longwall mining on this conservation area and the surrounding residences, farms and animals. I am aware that longwall mining has a history of unforeseen risks associated with subsidence, which is an unacceptable risk to most areas, but even more so given the natural terrain. In particular, I note the Office of Environment & Heritage website, states that significant subsidence has occurred in the Sugarloaf State Conservation Area:

"In October 2012, Oceanic Coal Australia (OCAL) advised the NSW Office of Environment and Heritage (OEH) of a greater than predicted impact from a subsidence event within Sugarloaf State Conservation Area."

"On 12 September 2013 a cliff fall in Sugarloaf SCA was reported to OEH, involving an estimated 20-30 metres of overhang from a cliff line in the northern area of the SCA."

"In February 2015 Oceanic Coal Australia Limited (OCAL) advised OEH of the formation of a very large (approximately two metres wide in places and one hundred metres in length) crack in the SCA."

These are recent and worrying examples of unexpected and unacceptable risks associated with dry wall mining. It appears mining companies' predictions of the impact of dry wall mining are seriously ineffective.

A paper by the NSW government's Office of Environment & Heritage, on the effects on habitat of long wall mining, suggest that subsidence can occur immediately after the coal workforce leaves the area, and can be to 2.5metres deep. It is inconceivable that the Government of NSW would approve a project that could have significant consequences to public and private land. In support

of my submission, I quote extracts from the abovementioned report: *Alteration of habitat following subsidence due to longwall mining – key threatening process listing.* NSW Scientific Committee – final determination.' <a href="http://www.environment.nsw.gov.au/determinations/LongwallMiningKtp.htm">http://www.environment.nsw.gov.au/determinations/LongwallMiningKtp.htm</a>

Of most concern is that the subsidence effects are worse on hilly and rocky terrain and can extend well beyond the worked in by the seam. For instance:

"Subsidence is also dependent on topography, being more evident in hilly terrain than in flat or gently undulating areas (Elsworth and Liu 1995, Holla 1997, Holla and Barclay 2000, ACARP 2001)."

"The surface area affected by ground movement is greater than the area worked in the seam (Bell et al. 2000). In the NSW Southern Coalfield, horizontal displacements can extend for more than one kilometre from mine workings (and in extreme cases in excess of three km) (ACARP 2002, 2003)"

Should the area be destabilized from the longwall mining, and given the significant and dangerous land movements from underground voids or cavities it is surprising that that this project is even being considered. The risks to people and animals living in the area, as well as people like myself who regularly visit, appear unacceptably high. Indeed, the risks appear to be quite alarming. I note that there are large electricity powerlines running through the area, and I would be very concerned should these become unstable. In addition, "Subsidence may cause:

- structural damage to buildings and services (including pipelines, and sewers), and reduced serviceability of roads and railways;
- surface cracking, especially in areas towards the edges of subsidence zones:
- fracturing and vertical drainage of groundwater from shallow aquifers, reducing the water available to springs, peat swamps; and other ecosystems; and
- surface water diversion, reducing the water supplied to features such as streams, lakes and peat swamps (NSW DoP, 2008)." <sup>1</sup>

The immediate and long term costs associated with any such damage could be considerable. Should the Jilliby Conservation Area be destabilized it would be inaccessible for decades to come, with damage both to the landscape and wildlife. This damage and lack of public access would continue many years after the miners were gone.

## **Ouestionable Economic Benefits**

I have reviewed the Amended Development Application for the Wallarah 2 Coal Project SSD 4974, and make the following comments:

<sup>&</sup>lt;sup>1</sup> http://www.iesc.environment.gov.au/publications/subsidence-longwall-coalmining

- The royalties to the State Government over the proposed 28 years of life of the mine appear to be \$200 million (page 85), which simple mathematics would be a mere \$7million per annum. Given the public and private risks to land, roads, sewerage lines, water lines, water supplies, it seems a very poor financial outcome for the state, with the costs outweighing government income.
- Coal prices are falling at present, making the concessional rebates in the Amended Development Application appearing inflated.
- There will without doubt need to be repair and rehabilitation of the Jilliby Valley water catchment and Hue Hue subdivisions following inevitable subsistence at some (or many) parts of the area. The costs of this will be the government's.
- The job figures included in the Amended Development Application appear to be inflated. The original rail spur is now not being built. As such, the suggested 1605 direct and indirect jobs will no longer be available. The employment opportunities for the area are therefore misleading.
- As recently reported in the Korean press, the proponent, KORES, is in the process of withdrawing from a number of overseas developments due to concerns regarding its debt ratios. This raises concerns about the extent to which KORES will be willing and able to repair any damage to the nearly 250 private properties in the area (let alone any farming infrastructure), any damage to the Jilliby Conservation Area, any damage to public infrastructure, etc.

Overall, it seems that the potential risk and associated costs of the project significantly outweigh any potential benefits.

## Conclusion

In summary, I strongly object to the Wallarah 2 mining proposal Number SSD 4974. There are too many unanswered questions, the risk to the public and public purse is too high, and the long term risks to the land outweigh any benefits brought by this mine.