

Stephanie Calderaro

From: Annie Marlow [REDACTED]
Sent: Thursday, 29 January 2015 12:33 PM
To: pac
Subject: Russell Vale Colliery Underground Expansion Project Review, MP09_0013

Russell Vale Colliery Underground Expansion Project Review, MP09_0013

Thankyou for the opportunity to post a submission on the above project. I am happy for this submission to be made public on the department website, accompanied by my name & suburb only.

I take a very strong position of objection to the proposed expansion of this mine. The following are my major reasons for doing so:

1/ Threat to drinking water.

a) Immediate threats: This expansion, at the very heart of the Sydney Water Catchment Special Areas, will vastly increase the immediate threats to our drinking water catchment for the Illawarra and Sydney. The risk of subsidence will greatly increase if, as proposed, a third seam of coal is extracted from underneath the 2 that have been/are being mined. Subsidence has a potentially devastating impact on surface water storage and there is evidence that there is no/little understanding of how the hydrology works and connects in the whole system of the Sydney Water Catchment Special Areas, particularly with regard to surface water. In their Russell Vale Colliery Preliminary Assessment Report, December 2014 (p20), the Dept of Planning and Environment (DoPE) estimated surface subsidence between 1.5m to 2.6m for multi-seam extraction. There is scientific and photographic evidence of land subsidence that has already occurred in the upland swamp areas as well as methane gas escapes and iron contamination, all directly associated with longwall coal mining in the Sydney Water Catchment Special Areas. The subsidence along water courses has caused localised environmental destruction evident in vegetation die back, fish kills, contamination of water & loss of water through ground cracks (i.e. Pool N on the Waratah Rivulet). Credible scientists, as Dr Phillip Pells & Dr Ann Young, and water experts from Sydney Catchment Authority, have been making public statements, issuing reports and submissions on the adverse impacts of mining on the water catchment, particularly around the special areas for some years. It appears very clear from their evidence that given the geology of the area, loss of water or its contamination is unlikely to be contained or controlled.

b) Accumulating threats: The inability of the DoPE to see the geology, the evolved ecosystems (vegetation, micro & macro organisms etc) and the hydrology of the Upland Swamps, as well as the hydrology of their catchment areas, as a whole, integrated system, is a serious flaw in the department's assessment process for mining proposals. It takes little imagination to understand that upland swamp systems work as vast sponges for water, effectively regulating water flows in the water courses below them. Anything that interferes with the stability of these ecosystems, (underground tunnelling, vegetation change for example) can have detrimental impact on the water storage capacity of the swamps.

The Upland Swamps are listed Endangered Ecological Communities. They are renowned for their biodiversity. The higher biodiversity the better the health and hence the water holding capacity of the swamps. Whether by good design or by accident the biodiversity of the Sydney Water Catchment Special Areas has remained in reasonable health because it has mostly been protected from large scale interference, because it is Sydney's water supply. However, the on the ground evidence is now showing that this is changing because of the increased mining activity of recent years.

2/ Propose methods of ameliorating detrimental impacts:

a) Use of unscientific terms to measure impact: The recent open letter of resignation from David Paull, a senior biodiversity officer employed by the Office of Environment and Heritage (OEH) draws attention to the language used by the DoPE in official documents relating to approvals as often unscientific and unmeasurable. In its document 'Draft Conditions' (for the Russell Vale Colliery expansion proposal), under 'Environmental Conditions – Underground Mining, Table 1', p7, all performance measures are rated as 'negligible'. In another place there is mention of 'greater than negligible'. There is no measure for 'negligible', this is a subjective term. The table is qualified by a footnote instructing the proponent to supply more detailed performance measures. How can the government place the care of our drinking water catchment areas in such undefinable terms of reference and then allow the proponent to set its own terms of degree of detrimental impact?

b) Off Setting: The reliance of the DoPE on offsetting as a means to justify development in environmentally sensitive and special areas is alarming. Dr Martine Maron, (Sch Geography UQ) says in 'Replacing Lost Eco-systems – the Devil is in the Detail' "...old growth or late successional habitats can be considered effectively un-offsettable due to long lag times and large uncertainties involved." There is no human environmental rehabilitation method that can repair loss of surface water to underground, through fissures, in a few decades, a few life times or it would seem thousands of years. This is particularly the case when there is no accepted, holistic understanding of the way the hydrology works in the Sydney Water Catchment Special Areas, on which to develop rehabilitation planning. Equally there is no other place that can be considered of the same environmental value, offering the same environmental services to such a large proportion of the Australian population as the Sydney Water Catchment Special Areas. I am shocked to read in DoPE's Russell Vale Colliery Preliminary Assessment Report, ps10&11, that the department is prepared to disregard advice from OEH that offsetting is not applicable in cases of subsidence. That it is also prepared to disregard current government definition of the term 'offset' (i.e. rehabilitation of areas that are of the same environmental value), and to settle for any sort of 'trade-off' (the term used by the department) from research to tree planting as return for destruction in irreplaceable areas. Off setting is not an option that the government/DoPE should be considering in the assessment of the expansion of the Russell Vale Colliery in the Sydney Water Catchment Special Areas.

3/ Threat to public health – The toxic and carcinogenic substances associated with coal mining are well documented. Russel Vale Colliery's stockpile at the mine will be almost 5 times greater than it currently is should the expansion go ahead. Control measures to contain particulate matter from becoming airborne are never fool proof as is demonstrated by the PAE Holmes 2012 report, (NRE No 1 Colliery Particulate Matter Control Best Practice Pollution Reduction Program) which estimated 670 tonne per annum of airborne coal particulate matter coming from *the current* Russell Vale Colliery's stockpile even with protective measures in place.

The greater coal production will increase road transport, estimated to at least double, between Russell Vale and Port Kembla. This will greatly increase coal pollution, vehicle exhaust pollution and traffic noise pollution, road congestion and increase threat of road accidents. Noise pollution in the location of the mine will also vastly increase with so much increased coal production.

Lastly is a very serious health impact that the government has not acknowledged. As the carbon from the additional coal extracted under this proposal is burned and converted to atmospheric carbon gas, the threat of ever harsher climate change, pushing temperatures for Australia seriously higher becomes more likely ('State of the Climate 2014' 3rd report Bureau of Metrology and CSIRO released 27/1/2015). This outcome is real and any government authority is negligent in its duty of care to the health of the current population and future generations, both in the Illawarra, the rest of Australia and the world if it does not include it in calculations when assessing expansion of fossil fuel mining.

4/Public trust: I believe it is worth noting in the context of this submission that public trust in the decisions of government has been undermined by what are easily interpreted as official processes that are executed in an underhand manner. Changes to legislation, introduced by the current coalition government, designed to fast track development have undermined the right of appeal by communities and seriously undermined environmental protection. Many legislative changes, such as those recently proposed to the State Environment Protection Policy (SEPP), lack transparency because of their complexity. In the case of the SEPP the situation was exacerbated by the lack of explanation from the government when the changes were exhibited for public comment. The recent open letter of resignation from David Paull, a senior biodiversity officer employed by the Office of Environment and Heritage, illustrates the conflicts between the OEHL and the DoPE and particularly DoPE's disregard for the work of OEHL environmental experts. In the case of the expansion of the Russell Vale Colliery, the differences of opinion between DoPE and OEHL are also illustrated by the big variation in assessments from DoPE and OEHL of the potential detrimental impacts. (Major Project Assessment, p31). DoPE's consistent under estimation of detrimental environmental impacts, vastly different to those of OEHL, backed up by Mr Paull's insight into the relationship between the 2 government departments, reasonably provokes suspicions of deviousness in DoPE's undertakings and decisions regarding development approvals.

In conclusion it is very clear that the precautionary principal is in much need of application on consideration of any expansion of mining in the Sydney Water Catchment Special Areas. I urge the Planning Assessment Committee to err on the side of caution & rule against the Russel Vale Colliery Underground Expansion Project.

Yours sincerely, Annie Marlow, 