

**Submission to the Planning Assessment Commission
re Russell Vale Colliery Underground Expansion
8 December 2015**

From Keith Tognetti BE Mining Engineering (Coal)

This submission is based on my previous submission in January, which I append below,

IN that I gave details of the catastrophic consequences if the proposal to extend workings under the Cataracct dam resulted in a direct hydraulic connection between the workings and the dam .
If this were to happen the community would be faced with a major disaster with flooding down Russell vale and into a girls high school at the bottom together with massive landslides caused by the fact that it is slip area .

I will not comment on the fact that this is the only coal mine in Australia which intrudes onto a city suburb. distressing and polluting the living conditions of families by noise, toxic dust and truck traffic .

Neither will I point out that the local Council was incapable of applying a few simple rules to protect the local community from the pollution of the coal dump of two million tons ,

Neither will I point out that none of the Commisioners would approve this proposal if were adjacent to their homes

But I will accuse the Councillors of a serious dereliction of duty if they approve this project without making it clear that the colliery will be responsible to repair the **damage caused and offer compensation for the consequences of the proposed new development making a hydraulic connection to the Cataract dam.**

It is particularly important that the commission establish contingency plans that set up watertight financial conditions to guarantee the responsibility of the company for this disaster. Especially as this company has been reported in the local papers as experiencing serious financial problems.

Otherwise in the event of the above catastrophe the company could simply declare a bankruptcy, wash their hands of any responsibility and leave the community to finance the horrific consequences of the disaster.

**Previous Submission January 2015
to the Planning Assessment Commission re Russell
Vale Colliery Underground Expansion Project (MP
09_0013)**

The premier Neville Wran 30 yrs. ago was to open the new electrified rail to Wollongong but had to be delayed for several months because of damage to viaduct caused by closeness of tunnel from Coalcliff

mine – this cost millions to rectify and eventually after a long settlement the subsidence trust was bankrupt

Why wasn't this referred to by the present enquiry? And now we are presented with an even more dangerous proposal this time it is to extend the Russell Valley mine so that it is only a couple of hundred meters from Cataract dam.

Mr stone head of operations for the company, has had the honesty to admit that they could not guarantee that the project would not effect the dam - but be reminded that the dam wall itself subsided 3cm due to previous workings which were a couple of km from the wall.

Whilst a lecturer at the University of NSW I did studies on the stresses in cracked beams (Voussoir) and whilst these studies were reliable e.g. for the arch above a tunnel. They were very poor for predicting the behaviour of the subsidence as the surface was approached because much of this region is mixed up with rubble – that is why the swamps drain away rather than just fill up the cracks. In particular prediction of the effect of the proposed mining on the dam shores is most unreliable.

But even more difficult and important is assessing the probability that a hydraulic connection will be made to the mine- that is the water in the dam is directly connected to the mine workings.

If this were to happen we would be presented with nothing less than a catastrophe!

Firstly you should note that the pressure of the water in the mine from such a connection is not just the huge pressure at the bottom of the dam but also a pressure equivalent to a column of water of height from the top of the dam to the level of the mine!

Thus any such connection would happen explosively with much loss of life

I should point out that proposed workings will have to go through a major fault and this itself could lead to a hydraulic connection.

If this does happen and the water flows from the mine again another catastrophe as houses creeks and schools are flooded

Furthermore if the mine has this connection the whole of this part of the escarpment will be effected and have a devastating effect on stability – don't forget that this is a slip area – which means that you have rocks just held in place by clay and weak shale – saturation of this zone from within the escarpment would most certainly produce massive landslides!

What contingency plan has been presented to deal with this situation and who would pay for it and compensate the damage caused to local residents? Furthermore it should be legally binding.

