

# Illawarra Residents for Responsible Mining Inc

## Presentation to PAC Public Hearing on Russell Vale Colliery Expansion, 8 December, 2015

The February 2015 PAC review found that they did not have adequate information and the information that they had was not of a quality that they could make a determination. The Dept of Planning and Wollongong Coal have had nine months to address this and yet they haven't been able to come up with what the PAC asked for.

### IRAP

- Why is it that an independent risk assessment panel that the PAC instructed should comprise
  - an independent Chair;
  - a representative of DSC
  - a representative of Water NSW
  - a representative of Dept of Resources and Energy
  - the proponentended up comprising *predominantly paid consultants to the mining industry?*
- This panel has NO credibility. I note certain government entities such as the Office of Environment and Heritage have also expressed concerns about the panel and IRRM supports those concerns.

### Potential for Hydraulic Connectivity to Cataract Reservoir

- The Addendum report states that "DSC staff are confident that in the unlikely event of a connection to the Mine [from Cataract Reservoir] developing, that water from the outflow could be contained for an extended period (up to 10 years) in the workings that currently exist underground and would therefore have ample time to install effective seals where required." This confidence is misplaced.
  - NRE turned up at Russell Vale Colliery about 10 years ago.
  - India NRE Minerals was listed on the Australian stock exchange in 2007<sup>1</sup>
  - A year later in 2008 this company spawned Gujarat NRE Minerals and Gujarat NRE Coking Coal which lasted about 4 years
  - "Wollongong Coal" has been around for less than 2 years
  - International media sources state that Jindall Steel and Power is already looking to divest of overseas mines at the development stage, with Wollongong Coal Ltd, Australia specifically cited as one that will go. <sup>2</sup>
  - It is highly unlikely that these people are going to be around in 10 years' time to remedy any disaster that eventuates. Moreover, Wollongong Coal's financial capacity is limited and it is highly unlikely that the company would have the financial capacity to fix such a major disaster. The DSC's confidence is unfounded.

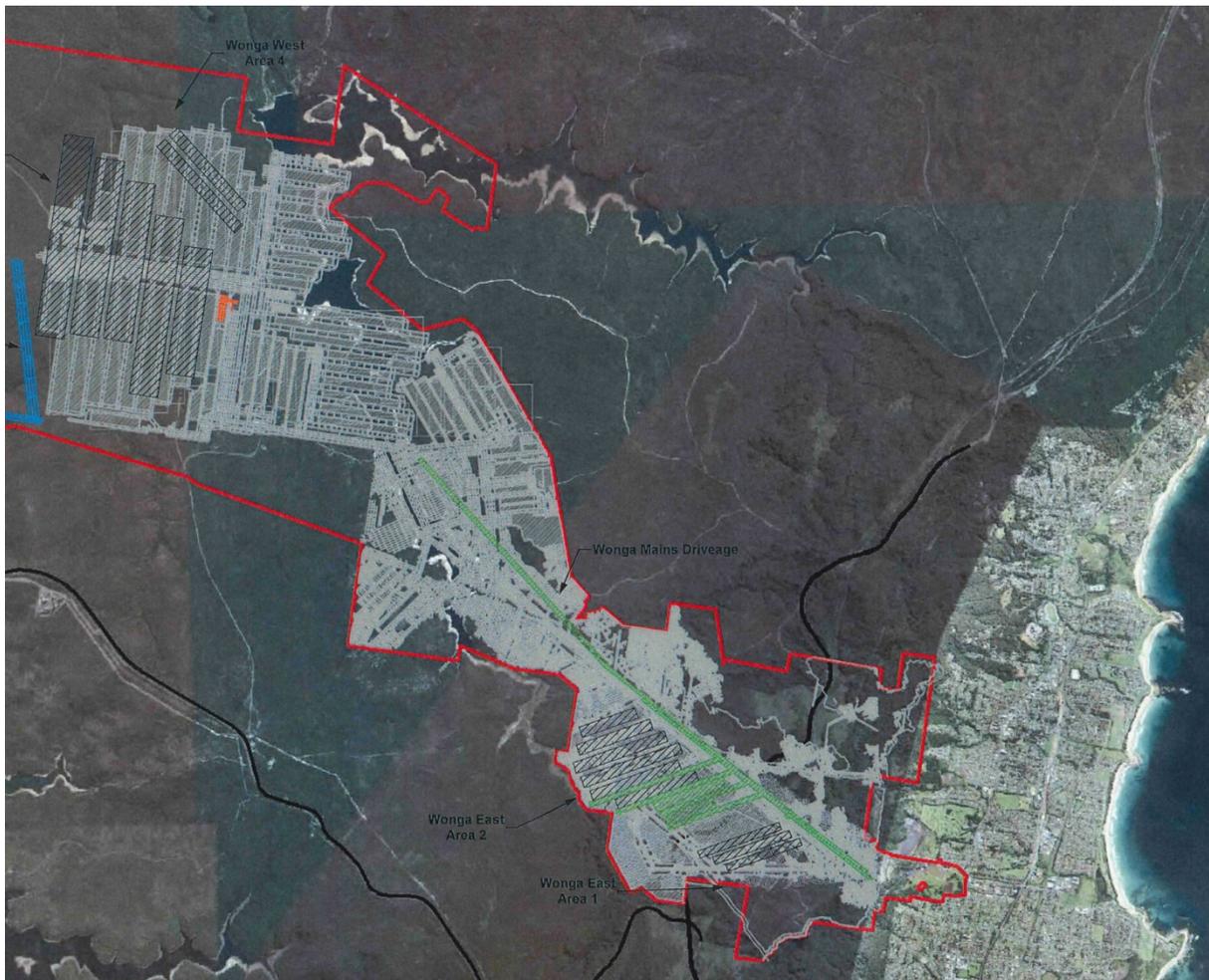
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<sup>1</sup> <http://www.investogain.com.au/company/india-nre-minerals-limited>

<sup>2</sup> <http://www.livemint.com/Companies/t31gUjZF9WluZx3qN9LP6L/JSPL-likely-to-sell-controlling-stake-in-overseas-mines.html>

## DoPE fails to consider the long term impacts on the Sydney Water Catchment Special Areas

Water NSW requested an assessment of projected impacts in 6, 50, 100 and 200 years' time. However DoPE dismisses these as not necessary. DoPE employs a circular argument saying it's difficult to project/predict because you need an actual measure of impacts. However, you can't get a measure of impacts unless you mine.



**Image source: EAR NRE No. 1 Colliery**

- The proposed new longwalls are less than 200 meters from Cataract Reservoir.
- The longwalls will be beneath two previously mined coal seams making subsidence impacts uncertain.
- The worst case scenario is a water baseflow loss of up to 7.3 ML per day.<sup>3</sup> **This represents the equivalent of the average daily water consumption for 24,580 people.**<sup>4</sup> It represents the loss of the equivalent of the water consumption for all the residents of Russell Vale, Bellambi, Corrimal and Woonona combined. Although the Department of Planning writes

<sup>3</sup> Addendum Report, *op cit*, p 12

<sup>4</sup> Based on Water NSW average water consumption of 297 litres per person per day

that this is a worst case scenario and is unlikely to eventuate, it is nonetheless affirmed as a possible scenario by the mine's own consultant so it cannot be dismissed.

**There is still no explanation for the increase in output from 1 mpta to 3 mtpa**

- Neither the mining company nor the Dept of Planning will explain why they need to have approval for 3 mtpa, when they are only applying to extract 4.7 million tonnes of ROM coal over 5 years.

## **SOCIAL AND ENVIRONMENTAL COSTS**

**In light of the 2 September amendment to the Mining SEPP, some of the social and environmental impacts of the proposal, in addition to the impacts on Sydney Water Catchment Special Areas follow:**

### **One truck every 2 minutes**

With the current 35 tonne capacity trucks, transporting 3 million tonnes of coal would take nearly 86,000 truck journeys to the Port per year and approximately 242 return journeys per day (484 in total). This represents 32 trucks per hour both ways or an average of one every two minutes. Residents are concerned about the noise, the particulate pollution and the safety implications of so many trucks on the road.

### **Noise**

The Addendum Report refers to “legacy noise issues”<sup>5</sup>. The suggestion behind this is that it has always been noisy in the vicinity of the colliery due to the noise that the colliery emits therefore its OK to have levels of noise pollution that would usually not be acceptable or legal in a residential area. Time moves on and the world develops but Russell Vale Colliery and Dept of Planning remain the same. It is reasonable and appropriate for residents to expect noise mitigation in accordance with modern standards, not “legacies”. When Jindall Steel and Power took over the colliery a couple of years ago, they surely should have expected that the colliery would need to operate to modern Australian environmental standards. This mine is in what is perhaps the most densely populated residential area of any colliery in Australia. Every improvement in noise from the colliery is important. To claim that the possible mitigation measures are too expensive is incorrect. In truth, this colliery is not profitable enough to be operating at modern standards.

The proponent has claimed in reports to shareholders both in Australia and in India, and in reports to the Community Consultative Committee, that it plans to build a coal washery and de-shaling plant on site. If this project is seeking to achieve certain noise limits then the noise limits set for the project should be low enough to enable the addition of this additional infrastructure within the allowable noise limit.

Further recommendations come from advice we have received in relation to this proposal:

- Remedial measures to mitigate noise need a timeframe. Condition 32 in particular needs a timeframe. Given the proponents previous record on complying with conditions of approvals, I suggest the time frame for completion of these mitigation measures be before the proposed mining commences.
- Low noise trucks should be used for transportation. They are currently available.
- Schedule 4, 1 noise criteria in the table refer to the noise monitoring/assessment locations. The last line of this table is “All privately owned land”. This must not include residential land because the there is a higher need for mitigation and compliance in residential areas.

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<sup>5</sup> Addendum Report: Major Project Assessment, Russell Vale Colliery Underground Expansion Project (MP 09\_0013), NSW Govt, Dept of Planning and Environment, November 2015, p 23

- Schedule 2, (i) real time noise monitoring – this is an important condition to ensure that the mine operator takes actions when there is a trigger to indicate an excess. None of the documentation has referred to where this real time monitoring is to be implemented. It requires a number of fixed noise monitoring stations that are continuously active and for which the noise signal is analysed and when pre set triggers are exceeded a warning goes back to the mine supervisor who has to take action to reduce the noise. The way this Condition is currently written, despite saying ‘comprehensive’, could be complied with by one monitoring location. It is unreasonable to require monitoring at 14 locations but a decision must be made on how many are reasonable. Statement of Commitments 3(e) refers to noise monitoring but does not pick up on the decision of the extent of the ‘real time monitoring’.

**The Underground Expansion Project does not have a proper system or area for waste disposal**

For a number of years we have been told that the Emplacement Area, known by people in my neighbourhood as “the Slag Heap” was not relevant to this Underground Expansion Project, and the Preliminary Works Project before that, because it comes under a different approval process, not these major project applications.



Source: Google maps



The Slag Heap is outside the boundaries of the Major Project application area. The major project application area itself has no waste disposal area or system.

This is no longer an acceptable response to a farcical and dangerous situation.

The disposal of waste and reject coal onto the slag heap is not working. Therefore this colliery has no proper waste disposal area or system.

In late 2014 a member of IRRM Inc brought to the attention of Wollongong City Council (WCC) this issue of the Emplacement Area and a number of dangerous and negligent practices observed in relation to this site. The response from the Council staff was inadequate. The 1991 agreement between the then Bellambi Coal and the CEO of WCC, Rod Oxley, had not been implemented. Of the 50 or so conditions of the use of this WCC owned land for a slag heap almost all were not being met. It appeared that no one really knew who was responsible for the slag heap. The 1991 agreement stipulated a bond of \$15,000 per year to be paid to WCC. The amount of bond that has been paid since 1991 to protect the Council and the ratepayers in the event that something goes wrong with the slag heap? Not even one cent! A year later we have had to go back to the Council - to the Mayor and Counsellors themselves this time - to complain again.

So what can go wrong with a slag heap?

- Slag heaps collapse - Our major fear is that there will be a major flood event as happened in the late 90's and the 200,000 tonnes of coal and mining waste that comprises the slag heap will collapse and be washed away into the residential area.
- Slag heaps self-combust - We are concerned that the temperature of the slag heap will rise to the extent that it catches fire. As the heap is not being properly monitored or managed, this is a possibility.

- Slag heaps can catch fire – the slag heap is bordered on the West by the trees of the escarpment. There is no buffer in the case of a bushfire coming down the hill. The CCC Meeting was told that this is wrong, there is a buffer of a swale, however we note that the swale is made of coal refuse so this is not comforting.
- Slag heaps emit coal particulate pollution.  
In fact the emplacement area was listed as the most polluting area of the colliery.
- A recent study estimates that Russell Vale Colliery emits 779 tonnes of particulate matter pollution (coal dust and particles) per year. Per tonne of coal extracted, Russell Vale mine's air pollution is estimated as being **165 times greater than that of Dendrobium mine**, a nearby mine south of Wollongong.<sup>6</sup>

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<sup>6</sup> Best Practice Pollution Reduction Program, PAE Holmes, 25 October, 2012, p. 10. See [Dust Pollution Reduction Program](#)  
Dendrobium emissions sourced from [Dendrobium Mine Particulate Matter Control Best Practice Pollution Reduction Program](#), 2 February, 2012

Estimated coal particulate emissions for Russell Vale Colliery

Source: Best Practice Pollution Reduction Program, PAE Holmes, 25 October, 2012, p. 10. See [Dust Pollution Reduction Program](#)

**Table 2.3: Summary of PM emissions with current controls in place**

Mining Activity	TSP (tonnes/year)	PM <sub>10</sub> (tonnes/year)	PM <sub>2.5</sub> (tonnes/year)
Wheel generated particulates on unpaved roads	11	3	0
Wind erosion of coal stockpiles	670	335	50
Trucks unloading coal	49	4	1
Graders	0	0	0
Material transfer of coal	45	5	1
Screening	3	1	0
<b>Total</b>	<b>779</b>	<b>348</b>	<b>52</b>

Estimated emissions for Dendrobium Colliery

Source: [Dendrobium Mine Particulate Matter Control Best Practice Pollution Reduction Program](#), 2 February, 2012

**Table 2.3: Estimated controlled emissions**

PRP activity	TSP (tonne/year)	PM10	PM2.5
Loading coal to the stockpile	1.5	0.70	0.10
Working the stockpile by bulldozer/loader	31.9	9.5	0.7
Wind erosion from the stockpile	40.8	20.4	3.1
Loading coal to trains	0.4	0.2	0.03
Ventilation fans	4.5	3.1	3.9
Movement of vehicles into and out of the Nebo Portal	1.3	0.2	0.06
<b>Total</b>	<b>80.4</b>	<b>34.1</b>	<b>7.9</b>

Wollongong City Council has demonstrated that it is unable to monitor and appropriately manage the slag heap as a disposal and storage site for reject coal and waste. There is no other waste disposal system or area in the UEP proposal. Enough is enough! It is not good enough to throw the waste over the fence and forget about it. It is our assertion that in the absence of a functioning waste disposal area or system, the UEP is unapprovable.

### Health impacts

Coal particulate pollution is known to cause cardio and respiratory illness. New research also links particulate pollution, such as coal particulate pollution with Autism Spectrum Syndrome. Russell Vale Colliery is in a densely populated area and yet the health impacts of particulate pollution from the colliery are not considered in the Cost Benefit Analysis.

### Particulate Pollution and Autism

A research study published in March 2015 in the journal *Environmental Health Perspectives* concluded that: "Higher maternal exposure to PM<sub>2.5</sub> during pregnancy, particularly the third trimester, was associated with greater odds of a child having [Autism Spectrum Disorder]."<sup>7</sup>

<sup>7</sup> <http://ehp.niehs.nih.gov/1408133/>

“The risk of developing autism-spectrum disorders disproportionately affects the young, especially those *in utero*. A child is particularly at risk for developing neurological disorders if its mother is exposed to significant amounts of PM, especially PM<sub>2.5</sub>, during her pregnancy. For example, one study found that a child’s risk of autism doubles if its mother lives near a freeway in her third trimester.”<sup>8</sup>

**Wollongong Coal has failed to meet requirements of its approvals to upgrade the Colliery to modern standards and DoPE has failed to enforce the conditions of its own approvals**

On 7 December, there was contamination of Bellambi Creek from coal water and sludge leaking from the mine. This is just one in a large number of coal spills from the colliery that are periodically contaminating Bellambi Creek and Fahrar Tributary 2. If the Russell Vale Colliery flood mitigation works that the NSW government stipulated in the approval for the Preliminary Works Project had been carried out when they were supposed to be, Bellambi Creek would not be in the terrible polluted state it is right now. Community members are sick and tired of fighting our own state and local governments to try to get them to enforce the conditions of their own ill-informed approvals. This mine cannot self-regulate and does not appear to have the investment capital to actually carry out the improvements to the colliery that it commits to carrying out when it applies for approvals.



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<sup>8</sup> <http://www.eesi.org/articles/view/emerging-research-finds-air-pollution-contributes-to-development-of-autism->

Image of Bellambi Creek on 7 Dec 2015 as tweeted by EPA,

Bellambi Creek is just one example of this failure. Others include:

- Wollongong Coal is still loading trucks off the stockpile with tractors. They were supposed to have a new bin loading facility so they had a loading facility with less noise and particulate pollution under the Preliminary Works Project (PWP). However they have not complied with this commitment.
- The roads remain unsealed which causes more airborne coal particulate pollution. Sealing the roads was supposed to happen under the PWP.
- The Bulli conveyer was decommissioned but the Addendum report now states that it may be required to be recommissioned. The decommissioning of the Bulli conveyer was supposed to be finalised as a condition of the Preliminary Works Project over a year ago in October 2014. WCL and DoPE just keep moving the goalposts.

***Given that the mine cannot comply with the conditions of its approvals and the Dept of Planning is unable to enforce them, I ask the PAC to conclude that this project is unapprovable.***

## Economic implications

- There are currently about 60 staff left at the mine. In a workforce of approximately 175,000 in the Illawarra, this is not a significant number. Should this proposal be rejected these people can find other jobs.

***Should this proposal not be approved there would be minimal impact on the economy and workforce of the Illawarra.***

- The February 2015 PAC Review Report noted “The Department of Trade & Investment’s Division of Resources & Energy notes that this proposal is considered small and would be ranked 50 out of 56 producing coal mines in NSW if approved (DRE, 2015). In advising the Department of Planning & Environment of the significance of the resource, the Division of Resources & Energy concluded “that the significance of the resource lies mainly in its ability to maintain coal production from the Southern coalfield and utilisation of the Port Kembla Coal Terminal” which, it goes on to confirm, is currently underutilised. (DRE, 2015).”<sup>9</sup>

It is not sound governance to approve a project that has serious health and environmental impacts and will definitely damage – whether to a greater or lesser extent – the water catchment of Australia’s largest city, in order to prop up business at Port Kembla Coal Terminal.

***This proposal should not be approved just to increase utilisation of PKCT. As the 50<sup>th</sup> ranked producing coal mine in the state of NSW, the state to NSW will continue to prosper if this expansion is not approved.***

- According to the Australian government’s Atlas of Minerals Resources, Mines and Processing Centres<sup>10</sup>, Australia ranks fifth in the world for proven reserves of metallurgical coal, after first the USA, then China, India and Russia. In Australia, all states and territories have metallurgical coal resources. Queensland has the largest identified resources of black coal (62%), followed by NSW with 24%. Therefore, while it can be argued that we currently need coking coal to make steel, that coking coal does not have to come from beneath the Special Areas of the water catchment of Australia’s most populous city.

## In summary

- The Russell Vale Colliery is not profitable enough to upgrade its infrastructure and operate to modern standards. Unless there is a huge improvement in the price of coking coal and prices return to 2011 levels, it is unlikely that it will become profitable enough to operate to modern standards in the future.
- Wollongong Coal is unable to self-regulate to meet the conditions of its approvals.
- Dept of Planning is unable to make Wollongong Coal comply with the conditions of its approvals.

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<sup>9</sup> Russell Vale Colliery – Underground Expansion Project Review Report Paul Forward (Chair) Brian Gilligan Joe Woodward PSM 2 April 2015, p ii

<sup>10</sup> [http://www.australianminesatlas.gov.au/aimr/commodity/black\\_coal.html](http://www.australianminesatlas.gov.au/aimr/commodity/black_coal.html)

- Wollongong City Council is unable to manage and monitor the slag heap and therefore the Russell Vale Colliery does not have a functioning waste disposal system.

We question whether it matters to Jindal Steel and Power Ltd (JSPL), the major shareholder of Wollongong Coal if Russell Vale Colliery is profitable or not. Even if JSPL does not divest of Wollongong Coal, Russell Vale Colliery is able to yield a benefit by providing cheap coking coal to its parent company in India. Jindal Steel and Power saves a few bucks but we pay:

- We pay in the deterioration of our health due to the particulate pollution
- We pay in the erosion of our peace of mind due to noise pollution
- We pay in increased danger of traffic accidents and also in wear and tear on the roads because of the coal trucks.
- We pay as ratepayers of Wollongong City Council because the council has left itself exposed to the risk of financial and legal responsibility if something goes wrong at the slag heap.
- We pay through the impact on our natural environment, the damage to the creeks and riparian zones through coal contamination. (All those hours, days, years of bush care work by volunteers...)
- We pay through the impacts of climate change exacerbated by the high level of methane emissions of this mining
- We pay because WCL cannot seem to pay its own way – it's chronically behind in royalty payments and it hasn't paid the bond on the emplacement area since 1991.
- We pay through damage to the Sydney Water Catchment Special Area, the swamps, the creeks, rivers and aquifers and the Cataract reservoir itself, through the loss of biodiversity in the unique ecosystems of the Special Areas. And we are charging it forward, as this damage will endure for generations, perhaps for centuries or longer.
- And we are paying today, taking time from our work and families, some travelling long distances to come here and speak out for the environment, for the affected community and for future generations.

Please don't make our efforts today be in vain.

This will never work. This project doesn't stack up. The social and environmental costs far outweigh any supposed economic benefit.

We ask you to conclude that this project is ***unapprovable***.