



ILLAWARRA RESIDENTS FOR RESPONSIBLE MINING

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Wollongong Coal's Revised Preferred Project Report to the Russell Vale Underground Expansion Project:

We object to the Wollongong Coal's Revised Preferred Project Report (PPR) to the Russell Vale Underground Expansion Project 09-0013.

Some of the reasons for our objection are listed below.

CLIMATE CHANGE

The tide has turned on coal. The 2015 Paris Agreement sent a clear signal that the era of fossil fuels (in particular coal) is coming to an end. Around the world, evidence grows of the coal industry's steep and irreversible decline.

Worldwide proven coal reserves would allow us to burn it for 110 more years. Yet if even a small fraction of this dirty, polluting ore is mined and burned, we have no chance to stay within 1.5 degrees Celsius of temperature rise. Beyond this level of warming, many impacts of climate change become severe in some regions, including our own.

The coal industry would have us think we need this dirty product to meet growing demand for steel and energy. This is simply untrue. We can no longer listen to or believe these incumbent industries.

We can't wait any longer to break free from this coal addiction. We know that to prevent catastrophic climate change we need to move away from coal now and that climate policy requires that much of the world's reserves of coal remain unmined. The science is clear and action is needed now!

Australia needs to take responsibility for its mined and exported coal regardless of whether it is thermal or metallurgical coal.

The NSW Government has released the NSW Climate Change Policy Framework, which commits NSW to the aspirational objectives of achieving net-zero emissions by 2050 but does not offer any policy regarding transitioning from GHG emitting industries. While all over NSW Councils are declaring Climate Change Emergencies our State and Federal Governments appear to be sitting on their hands. We need a policy that addresses kerbing GHG emissions rather than reacting to its aftermath.

Carbon dioxide and other greenhouse gases are produced in NSW by the following top three activities or sources: stationary energy sources, such as coal-fired power stations (47 per cent); transport (18 per cent); and coal mines (12 per cent). All three can be attributed in some degree to the Russell Vale mine. Not to mention the emissions from the steel making industry.

Also on top of these GHG emissions from this mine, Russell Vale's mining area is under the Sydney Water Catchment and threatens our vital water resource.

It is time the NSW Government and the planning approving authorities started to act with determination and urgency.

GHG EMISSIONS

Scope 1- 1,419,000 t CO₂-e emissions from the Revised PPR relate primarily from the combustion of diesel and release of fugitive emissions.

Scope 2- 105,000 t CO₂-e emissions are those emissions associated with the production of electricity used.

Scope 3- 9,624,000 t CO₂-e emissions will be generated by third parties who transport and consume coal products.

Total- 11,624,000 t CO₂-e

The employment of 200 people at Russell Vale potentially produces 11,624,000 t CO₂-e, can you imagine what would happen if every employee generated 58,120 t CO₂-e of GHG emissions over a 5 year period.

Scope 3 emissions accounts for about 86% of the total emissions and Wollongong Coal has totally discounted it or given it any consideration. I believe that that miner has to take some responsibility for the ore they dig out of the ground and the pollution that it can produce. They are directly accountable for its presence in the global market and its inevitable inclusion in the GHG global inventory.

Wollongong Coal's document states that *"the Revised Preferred Project, in isolation, is unlikely to influence global emission trajectories"*. When it comes to climate change nothing can be taken in isolation. What arrogance on the part of the proponent to think they are beyond the cumulative effect of GHG emissions from Russell Vale. I don't think 11.6 million tons of total CO2 produce from this mine is negligible

The ongoing approval of these minor insignificant mines is hindering the transitioning away from coal and antiquated manufacturing methods of steel production. It inhibits those mechanisms that would drive the rapid up-take of alternative technologies for steel production - technologies which currently exist at commercial scales even though they haven't been widely implemented.

It should also be noted here that this coal will never benefit Australia or maintain any steel manufacturer in or region. All the coal is exported to India for use by the major shareholder of Wollongong Coal. It will not support jobs beyond those few extracting it from the ground. None of the steel produced from this mine will ever be used in Australia. It is not beneficial in any way to regional steel manufacture and will in fact produce steel that is detrimental to the current manufactures.

There is no mention in the Revised PPR of the purchase of green energy. This type of acquisition brings about change to more sustainable energy production and to some degree may achieve carbon neutrality of the project.

The original Underground Expansion Project Statement of Commitments states *"NRE will investigate opportunities to capture and/or use methane, 2015 onwards"*, this commitment has not brought forward or continued on to the Revised PPR. This is something positive that Wollongong Coal could do to reduce GHG emissions or even investigating flaring the fugitive methane.

NO RISK TOLERATED FOR OUR DRINKING WATER CATCHMENT

I believe that no level of risk is acceptable in Sydney Water Catchment Special Areas. Water is our number one priority and will become more so in the future. Our forefathers had the prudence to setting aside 16,000 hectares of land in the south to secure the Greater Sydney's water. This vision has proven fortuitous as drinking water around the planet becomes more scarce and valuable with the passing years. But this water catchment area for the greater Sydney area is constantly being threatened by climate change, drought, evaporation and now coal mining. I believe that nothing should threaten the Sydney Water Catchment Area, that this water catchment area should take precedence over everything else.

There is no necessity to find another industry to coexist in the Sydney Water Catchment area. The NSW Government seems insistent on finding a dual purpose for the catchment area when the prime purpose of drinking water collection is the most crucial use and should be the only purpose for this land. The purpose that the Government is promoting is underground coal mining that damage and pollutes this pristine vital area. The SWC already serve many very important functions. An important function is habitat for flora/fauna/microbiota, one that with the current global (and national) extinction crisis, we need to protect even more.

CURRENT DRINKING WATER SITUATION

Current overall dam levels currently stands at 49.5% and the Cataract Dam (that Wollongong Coal intend to mine under) is currently at 28.9%.

NSW is currently in drought and more than 85% of the Greater Sydney's water supply relies on rain. The Kurnell Desalination Plant can provide up to 15% of our current water supply needs (or 250ML per day) but it comes at a cost; a cost of \$87 per Sydney Water customer per year in hibernation and \$125 per customer per year when operating. The Desalination Plant was switched on 27 Jan 2019.

The Greater Sydney area is currently on Level 1 water restrictions and will be increased to Level 2 when the dam levels go below 40%. These restrictions include both residential and businesses.

How much of this current situation can be attributed to coal mining with billions of litres of water a year being draining into mines under the Sydney Water Catchment and their resultant damage and impact being felt way into the future.

LOSS OF WATER

Wollongong Coal told the community that their proposed non-caving first workings mining system would produce no water loss from the catchment.

Now the Revised PPR is saying that large volumes of water will be drained from adjoining mines

The Revised PPR suggests the water flowing into the mine is from the adjoining mines only and that subsequently the flow of water into the Russell Vale workings should not be required to be licensed by Wollongong Coal. But then they go on to say in Table 5.3 that the Total Licensable Inflow into the mine at the end of Longwall 6 was 157 ML/year and that after the proposed First Workings under the Revised PPR it would be 288 ML/year, which is a gain of 131 ML/year. If that licensable water is not coming from the adjoining mines then it must be drain from the water catchment.

The revised PPR says that if the *“Balgownie and Bulli Seams are required to be drained as an inrush control measure then this may alter the current groundwater flow paths underground. Any changes to flow paths are not expected to increase the overall quantity of groundwater entering the mine”*. The decision to drain the two seams above the Wongawilli seam should be made now and the consequences determined before this project is approved. Any changes or dewatering in the mine should be taken into consideration upfront.

Wollongong Coal currently holds a Water Access Licence (WAL) under the Water Management Act 2000 for 515 ML/year, Licence No. WAL36488. WaterNSW is responsible for managing access to water and ensuring water is shared equitably between the environment, people of NSW and industry. But a water licences doesn't give the holder the right to permanently damage the catchment. That water will be lost from the catchment for ever. We are not talking short term, like the life of the mine. The mining companys' water allocation isn't being drawn out of the reservoir or pumped up from a bore. They are physically damaging the vessel that the water is captured in and they don't take responsibility for that damage because they think they are blameless because they have a licence. No one has ever held them to account and when this foolishness is realised the mining companies will be long gone.

When will mining companies be held responsible for that perpetual loss of water?

I think it is time for a review of the whole water licence process and not tolerate permanent damage. We are only the custodians of this water catchment; it is not up to this generation to decide what amount of damage, if any, is tolerable.

It appears that when the mining companies exceed their water allocations they simply apply for an extended licence. There is no compunction on their part to operate within their allocation as it will be so easily extended. This process is not to the advantage of the people of NSW.

Water entitlements from licensed water extractions in the catchment in the Hawkesbury-Nepean and Woronora in 2010 were 11,351ML/yr but grew to 31,147ML/yr in 2016.

CONSIDERATION OF PROJECT ALTERNATIVES FOR RUSSELL VALE

The Revised PPR consideration of project alternatives stated, *“Withdraw the UEP application and close Russell Vale Colliery. The option was not considered a feasible alternative due to the significant investment in the UEP from WCL to date and the extent of valuable coal resources remaining in the colliery holding”*.

The option however should be considered by the approving authority. Why should the community or the authority consider Wollongong Coal's poor significant investment option in the Underground Expansion Project? This coal resource has no value compared to the value lost by the damage to the water catchment and of lost and polluted waters.

PROPOSED MINING LAYOUT

In this Revised PPR the area shown to be mined has increased dramatically in size from the previous layout. The layout extends closer to the Cataract reservoir than previously. This extension now encroaches far into the Dam Notification Area and goes right up to the full supply level of the Cataract reservoir. This is a very risky proposal as it is a three seam mining method, making subsidence predictions and behaviour complicated. The mining layout should be redesigned to stop short of the Cataract reservoir and at least allow for the 35 degree angle of draw.

The proponent states that it is not proposing to mine under the Cataract reservoir, yet the Wonga Central Development Main clearly passes under the reservoir. Wollongong Coal insist that this driveage is covered under their previously PWP but this approval has expired and now this driveage needs to be addressed and included again under this Revised PPR approval.

Some areas of mining in the Bulli seam are unknown in regard to layout and stability. Mining under these areas should be avoided at all cost or a thorough investigation and analysis should be undertaken. The risk of mining under these areas unstable areas is to great considering Wollongong Coal are talking up this development as no or negligible impact. The pylons for the four power transmission lines are located in this area and all precautions should be taken.

The Revised PPR says that in a few small areas where the Bulli Seam pillars are narrow and the voids between them wide enough that stability appears marginal irrespective of any further mining there is some potential for pillar instability to lead to additional subsidence, potentially of the order of 1m to 2m should the pillars collapse over a large enough area. These areas should be investigated and analysed or steered away from in the mine layout.

PROPOSED MINING METHOD

Wollongong Coal is investigating an alternative mining method under the Sydney Water Catchment area that has no subsidence and no loss of water. If this is the case then clearly it is an acknowledgment that coal mining damages the water catchment.

Wollongong Coal is proposing a non-caving first workings mining system. This is clearly a Bord and Pillar method and will be discussed as such. Wollongong Coals consultant GEOTERRA/GES refer to the mining method as Bord and Pillar. The proponent has stated that the Bord and Pillar proposed mining system produces NO subsidence. But now terminologies like small, imperceptible, negligible and low levels of subsidence are now mentioned. This needs to be clarified as to what this terminology means. They are not included in the Revised PPR definitions.

To state NO subsidence is deceptive; all mining methods have the capacity to produce or induce subsidence, even without failure.

The mining proposed at Russell Vale is not simple Bord and Pillar; it is actually three tier mining. That is they are mining in the bottom seam under two previously mined seams. This method of mining is not simple and has cumulative impacts. The seams above have previously been mined by using Bold and Pillar, Pillar Reduction, Pillar extraction and Longwall mining. They all add a complication to the subsidence predictions and all overly stress the ground. Russell Vale has been mined for over 100 years and the proponent is now mining a third seam at the mine. When will it be determined that enough is enough?

Simple Bord and Pillar mining also has its problems. Bord and Pillar was done at Russell Vale in the Bulli seam over 100 years ago and yet some of the retained pillars that support the roof and ground above have become so degraded that they are almost non-existent. These deteriorated areas could collapse at any time or under any additional loading or movement and cause subsidence or a catastrophic pillar. This simple Bord and Pillar mining could cause subsidence and problems long after the mine has closed. No mining method is failsafe or 100% predictable.

There is mention in the Revised PPR that second workings will not be used under some of the built infrastructure. Is the proponent saying that there will be second workings in other locations when they have previously stated that it is only proposing a non-caving first workings mining system?

The Revised PPR states *“the proposed first workings mine plan has been specifically re-designed to avoid any secondary extraction beneath Cataract and Bellambi Creeks or Cataract River and their associated swamps, as well as Cataract reservoir”*. Is the proponent saying that there will be second workings in other locations when they have previously stated that it is only proposing a non-caving first workings mining system?

Wollongong Coal has stated that they will be only using a non-caving first workings mining system but for the removal of longwall equipment they want to drive it forward 25m to the next gate-road. This should not be allowed even if it was approved under their expired modification MOD2. Wollongong Coal has stated that this Revised PPR is for first workings only and if they want to retrieve their longwall equipment they should find another method using first workings. It should be remembered that Wollongong Coal made the decision to not finish LW6 and retrieve their mining equipment in 2014. This is just one of the many poor decisions they have made in their short chequered history. Why should the community

and the approving authorities risk the damage to the swamp CCUS4 just because the proponent made another poor decision? Their right to use the longwall miner has lapsed, the approval is finished.

SUBSIDENCE

The proponent has stated that the Bord and Pillar proposed mining system produces NO subsidence. But now terminologies like small, imperceptible, negligible and low levels of subsidence are now mentioned. This needs to be clarified as to what this terminology means. They are mostly not included in the Revised PPR definitions.

The Revised PPR does state that there is *“however a low risk of the proposed mining destabilising remnant pillars in historical Bulli Seam workings above the proposed workings”*. And *“If these areas of marginally stable pillars are destabilised for any reason there is some potential for additional subsidence movements, however this potential generally exists irrespective of the proposed mining”*. If there was a pillar failure in this area it could easily induce a catastrophic pillar run.

It goes on to say *“The potential for additional subsidence from destabilised pillars in the upper seams is considered low, however cannot be eliminated. Therefore, a suitable engineered solution or alternative method of reducing uncertainty regarding the Bulli seam layout will be outlined in a Built Features Management Plan for the powerlines to be prepared in consultation with the asset owners prior to undermining of the lines”*. Surely it is not only the built environment that requires protecting and if there is going to be additional subsidence it should be dealt with in this approval process and not left to a later date.

The Revised PPR also states, *“A number of areas within the UEP Application Area are currently in limiting equilibrium (on the verge of moving) because of previous mining, including Longwalls 4-6 in the Wongawilli Seam. Some ongoing low-level ground movement, mainly horizontal movement associated with previous mining including the Wongawilli Seam longwalls, may not yet have ceased completely. This low-level movement related to previous longwall mining operations has potential to continue to cause low-level impacts to Mount Ousley Road and valley closure across Cataract Creek that may be perceptible. This movement is a legacy of previous mining and is not expected to be influenced by the proposed mining. Movement may continue irrespective of any further mining in the Wongawilli Seam”*. This appears to insinuate that Wollongong Coal are no longer responsible for the subsidence caused by their previous mining operations and that somehow the approving authority has to estimate how much subsidence will occur from past mining and how much subsidence will be caused by the proposed mining. This should not be the case as all subsidence will be caused by Wollongong Coal and should be their responsibility and taken into account in this planning application.

FIT AND PROPER

Wollongong Coal and their parent company Jindal Steel and Power, are currently involved in an ongoing investigation by the Resources Regulator into whether or not this company is ‘fit and proper.’ We are of the view that this is relevant to any decision made under the Environment Planning and Assessment Act 1979 regarding Wollongong Coal’s development application for the Russell Vale Underground Expansion Project and its Revised PPR.

PROPONENTS PLANNING HISTORY

It has been shown that the proponent of Russell Vale mine historically amends their approval to include other undesirable aspects.

They modified the Preliminary Works Project to allow them to Longwall mine under an approval that was initially only approved for first workings.

They are currently proposing a modification to remove a condition of realigning Bellambi Creek and not fulfil their obligation under the Preliminary Works Project approval.

They have been criticised by the community and Government Agencies for obtaining approvals in a piecemeal manner. One of their modifications only allowed for mining work for 1 month.

They obtain approval incrementally or by stealth. They are now, under this revision to the PPR, attempting to include coal processing at the Russell Vale site. This is another incremental shift in their approval process and should not be allowed. There is no guarantee that Wollongong Coal will not apply for additional modifications to allow secondary workings or amendments to conditions or statement of commitments.

PROXIMITY TO RESIDENTIAL AREAS

The colliery site at Russell Vale is closer to dense residential areas than any mine in Australia. It is bound by Russell Vale to the north and east and Corrimal to the south. These residential areas have suffered the impacts from this mine over many years.

The Revised PPR states *“The site has a long established history of mining activity, with mining having been undertaken at the Russell Vale Colliery since 1887. Over time, urban development has encroached on the Russell Vale Pit Top and these facilities are now bordered by residential land uses. Russell Vale Colliery has therefore coexisted with these neighbouring land uses over an extended period with a degree of impact on the amenity of these residential land uses”*. Wollongong Coal makes this coexistence sound harmonious, whereas residents hate it and would prefer the mine gone. The mine has been limping along for almost two decades with very little continuous extraction of coal.

The mine has been in care and maintenance for 5 years and this Revised PPR should not be seen as a continuation of mining at Russell Vale, it should be approached as a whole new mine and the authorities should reconsider the impacts on the surrounding residential areas. What may have been acceptable 20 years ago is not acceptable today. This mine can no longer be tolerated to operate in a residential area.

Relevant land zonings under each of the LEPs are shown in Figure 3.1. Zoning map Page 33 shows zoning of land around the mine site. It fails to show any residential west of Princes Hwy. It doesn't show the WCC LEP environmental zonings along the escarpment. The map is very misleading.

THERMAL COAL

The proponent extols the virtues of metallurgical coal but does not mention that 25% of the ROM coal extracted at Russell Vale is thermal coal.

With the Revised PPR now proposing to process coal on site, this means that 33% of the product coal will be thermal coal.

This thermal coal component will be burnt, no doubt for electricity. Burning coal emits toxic and carcinogenic substances into our air.

Coal pollution is linked to the development of potentially fatal diseases and studies show severe health impacts on miners, workers and local communities.

DUST

The dust monitoring at Russell Vale will only be 10 microns not 2 microns. The realtime monitors on site can register down to 2 microns but they will only have to record 10 microns.

2 microns particulate matter is the most dangerous for respiratory and heart disease.

This is the closest mine to any residential area in Australia but they only have to monitor 10 microns, what are the authorities thinking?

This mine should not be seen as a continuation of mining at Russell Vale, it should be approached as a whole new mine and authorities should reconsider the impacts on the surrounding residential areas.

UNMET COMMITMENTS

Truck loading facilities: The Preliminary Works Project included approval and commitment to load trucks out of the old loading bins but this never been met. The proponent kept saying that work was being done to operate the bins but it never actually happened, it was just talk. They have only ever loaded the trucks off the stockpiles with tractors. This is archaic and a considerable dust and noise generator. Now WC is offering this again for the first 2 years. How can we now believe that they will commit to constructing the infrastructure that they have promised? The only sure ways is to have all the infrastructure in place at this mine prior to the extraction of any coal. If this isn't done it will be another 10 years before they up to date facilities at this mine.

Covering conveyors: The proponent is again offering to cover all conveyors to minimise dust and noise. We have been through this scenario before with this mine proponent. They informed everybody at the information sessions that all conveyors would be covered and even the diagrams in their EA clearly showed the extent of conveyors.

The most prominent section of conveyors has never been covered. This section of conveyors has now been called a “tripper” and so does not need to be covered. This tripper is one of the most problematic areas in to sound generation at night. Under the new Revised UEP the tripper will be locked in place and only discharge at one point but Wollongong

Coal still refuse to cover it to reduce noise and sound. We have been told that the tripper will be locked in place and does not move. If this is the case then it is no longer a tripper and surely it is just part of the conveyor and should be covered?

Sealed roads: The Revised PPR and WC are not considering sealing all roads for trucks. The roads thru the stockpile and working area will not be sealed and WC has no intention of even considering the option. This is curious as previous proposals have always stated that all roads would be sealed to reduce dust (and no doubt drip waste from trucks). It is even more relevant with the Revised PPR as the trucks will be going down into the stockpile working area to access their proposed loading facility. Previously the loading facility was proposed off the main sealed driveway higher up on the site.

The carpark for staff and visitors still is not sealed in this Revised PPR. This carpark's stormwater discharges into the clean water system on the site. In any other development this vast carpark would need to be sealed.

The community were told at the information session that all pit top infrastructure would be in place before any coal was extracted but now the Revised PPR states it will take 12-24 months for the entire infrastructure to be built.

This proponent cannot be trusted to deliver on any condition, commitment or order. Therefore all infrastructures should be in place prior to any coal extraction to safeguard the neighbouring residents.

STOCKPILES

Previous Russell Vale mine had, under the Preliminary Works Project, an approval for one ROM stockpile and small incidental stockpile for reject coal that would be removed at regular intervals. What was found to be stockpiled on site by Wollongong Coal was an 80,000 tonne ROM stockpile, a 176,000 tonnes of high ash coal and 200,000 tonnes of oversize coal. That is a total of 456,000 tonnes for an approved stockpile of 80,000 tonnes. Some of the coal is still on site today, awaiting overdue removal.

So when Wollongong Coal says they will now have 3 coal stockpiles on site, 30,000 tonnes of ROM coal, 14,000 tonnes of product coal and 1,500 tonnes of reject material, what are we to believe will be stored on site? Wollongong Coal have shown they cannot be trusted to self-regulate and NSW Planning compliance have shown that they cannot investigate or administer non-compliances.

It should also be noted that the reject material stockpile is a single stockpile and there is no Virgin Excavated Natural Material stockpile. There is also no processing of the reject material noted on site.

Currently when you survey the site there still appears to be stockpiles of material that look like coal. Wollongong Coal is not permitted to store or stockpile coal on site, as their Preliminary Works Project approval has lapsed. These piles of coal could not be considered to be sound walls or the like, as they have not been topped and seeded.

ROM COAL TO PROCESSED COAL

The original Under Ground Expansion project and the Preferred Project Report were only going to extract and export ROM coal from the Russell Vale mine. But now Wollongong Coal intends processing coal on site. The Russell Vale mine is the closest mine to any built up residential area in Australia. There have been numerous noise and dust issues at this site with just ROM coal, what is going to happen if Wollongong Coal is permitted to process coal on site. From their past performance they cannot be trusted to perform such complex and harmful processes.

The Revised PPR states there will be a deshaling plant on site. Wollongong Coal has stated in their End of Year Report that the coal will be further processed at a washery plant off site. The Revised PPR should include all coal processing and transport routes but does not mention this off site washery plant.

The Revised PPR states that waste material will be produced and trucked from the site. There is no mention of transport routes for this coal and number of trucks is not included in the transport study.

PIT TOP PLAN, FUNCTION AND INFRASTRUCTURE

The Revised PPR only shows the pit top plan and infrastructure in its final configuration. The coal processing plant and truck load facility won't be in place for 2 years. They state that they will be trucking ROM coal from the mine in the interim but how and where is it going to be loaded? Where are the roads going to be located? Is heavy machinery going to

cross over the Bellambi Creek pipeline? How will the pipeline be protected? Wollongong Coal needs to provide an interim pit top plan showing function and proposed infrastructure.

A better solution would be to have all infrastructures in place prior to the extraction of any coal to safeguard the neighbouring residents.

A 3D model of the pit top site should also be provided. All development applications these days have 3D modelling to aid and help the community understand exactly what is going on.

PIT TOP SURFACE WATER AND FLOODING

This site was one of the areas that caused so many problems in the Illawarra 1998 floods. The creek infrastructure running through the site blocked, the pipe overtopped, flowing into the stockpile area and washing thousands of tonnes coal and coal fines off site and down Bellambi Lane.

There is a 63ML settlement pond located on the Russell Vale mine site just west of Princes Hwy on the Bellambi Creek system. This settlement pond collects dirty polluted water from the site. Some of the sludge and pollutant matter settles to the bottom of the pond and the water on top is pumped away to be treated in the water treatment plant onsite.

This pond is proposed to be used as retard or retention basin under the Wollongong City Council flood study. Its proposed capacity is to be the top 30ML and is solely reliant on Wollongong Coals pumps to keep the capacity of the settlement pond down. This scenario is fraught with danger as it relies on Wollongong Coal being vigilant and performing a task. Wollongong Coal has a history of non-compliance. The EPA has been concerned with Wollongong Coals ability to follow even basic conditions and maintain equipment. This view was expressed at the second Planning Assessment Commission Review 2 of Wollongong Coals Underground Expansion Project. Wollongong Coal has been plagued with ongoing financial problems for many years and has ongoing problems with the pollution of Bellambi Creek.

The Russell Vale retention basin is actually the top half of a polluted stormwater settlement pond. When this retention basin/settlement pond is full during a flood event, it will flow over the spillway and down Bellambi Creek. However the settlement ponds at the Russell Vale mine historically were seldom dredged or cleaned out and caused problems in a heavy rain event. So when this polluted stormwater settlement pond has a sudden influx of water, such as a flood event, it will stir up the sediment in the bottom of the pond and flush it down the creek. The retention basin and the settlement pond should be totally separate components to protect the creek.

This polluted stormwater settlement pond has a leaky dam wall. The mining company insists it is a filter devise for some of the water but EPA is perplexed about this feature. The question needs to be asked, is the dam wall just poorly constructed and allowing the water to seep through? If this is the case this dam is unsafe and requires remediation before there is a 63ML deluge of polluted water down Bellambi Creek.

Also how well does this so called leaky wall filter water discharged into Bellambi Creek? There is no way to cleanse the leaky water so at some point it must become clogged and inefficient. This dam has been in operation for over 10 years and so the filtering properties must surely have expired.

Bellambi Creek is actually piped under Wollongong Coals stockpile and working area. This has ongoing problems and concerns due to the pipe being in the polluted area of the site and being constantly damage by heavy vehicles moving over it. This is the same pipe system that overtopped during the 1998 floods and could surely happen again.

This pipe was supposed to be replaced with an open channel in 2011 under Wollongong Coals Preliminary Works Project. The works were never carried out as they were postponed due to lack of finance. There is currently a Modification in the NSW Planning system to have this condition removed (MOD4). Under the Preliminary Works Project proposal, the clean creek water would be separated from the polluted site areas and would have a retard basin at the end of the channel to slow flood water down. This is a feature that is not designed into the MOD4 application and the reuse of the existing pipe system. This means flood water flows through the pipe system and out into Bellambi Creek unchecked. MOD4 also means the riparian zone can never be reinstated along the creek.

Wollongong Coal should realign Bellambi Creek as per their requirements under the Preliminary Works Project approval to fulfil its obligations under the approval and to protect Bellambi Creek from pollution and flooding.

The Revised PPR proposes a stormwater detention basin within the polluted stockpile and working area. Under this proposal this area is also shown to be used for the storage or parking of vehicles and equipment. Wollongong Coals MOD4 proposal has no included method of treating the stored dirty polluted water before it is discharged into Bellambi Creek. Therefore in a flood all the coal fines and pollutants in the stockpile/working area will be washed into the creek. This is not a viable option. The stored water should be detained until it is treated to an acceptable level before being discharged.

There are three coal stockpiles proposed in the working area of the site. The stockpile material has the ability to be mobile and has a consequence on pipes and culverts. If the material is washed into the creek there is a possibility of “bottom up” blockage. Also this material can be deposited in locations that could cause damming and then create serious consequences when they break. Therefore site that have working stockpiles require far more consideration.

It should also be noted that there is no plan showing the proposed pit top layout and all the proposed stormwater features including the underground piped Bellambi Creek line. This is an essential document.

MINE CLOSURE AND REHABILITATION

The Revised PPR has no further detailed assessment of rehabilitation and closure and relies on the existing management plan. This is curious because the CEO for Wollongong Coal promised that there would be water treatment provided on site when the mine closed down. However, there is no detail of this in the management plan.

The Revised PPR states *“The modelled adit drainage rate of up to 0.3ML/day is capable of being managed by water treatment systems. Appropriately treated, this water would be capable of reuse for residential or industrial purposes or discharge into local creek systems”*. Bellambi Creek could not cope with the additional 0.3ML/day and it would change the ecosystem of the creek as well as add to potential flooding problems.

Wollongong Coal believe that because they have a licences to discharge up to 2.5ML/day down the creek that they are not responsible for the environmental damage to the creek. If this is their attitude then the water discharge allocation should be re-examined and the licence taken off them, they present as caring environmental corporate citizens.

And *“As part of the mine closure process, a suitable funding arrangement will be negotiated with the relevant stakeholders to fund the ongoing monitoring and treatment of future water outflows from the adit, if required. The funding arrangement will consider appropriate water quality targets based on an agreed potential end use at the time of closure and will be sufficient for 10 years of monitoring and treatment”*. This is not mentioned in the existing Mine Closure and Rehabilitation Management Plan and the cost probably hasn’t been allowed for in the revised rehabilitation cost. 10 years is an insufficient time frame for ongoing treatment costs and should be more like 100 years. It may take 10 years for the mine to fill with water and reach the adit. The timing should start from this point forward not from when the mine is closed.

The Revised PPR also states that *“to rehabilitate the Russell Vale Colliery including the underground access points and the Pit Top facilities which is estimated at \$215million”*. To my knowledge the Resources Regulator does not hold sufficient bond to cover this estimated amount of rehabilitation. There is a necessity to be resolved immediately as Wollongong Coal is known to be experiencing financial difficulties.

Currently there is no monitoring for heavy metals discharging from the Russell Vale mine. The EPA has determined that it is not required because it discharges into an estuarine creek. At present they are only required to monitor electrical conductivity, pH, total suspended solids and turbidity. There is no requirement to monitor or test for heavy metals and yet a large number of people live on or near the creek. The proposed ongoing treatment of this water when the mine closes down should allow for the removal of these heavy metals.

The Economic Impact Assessment in Appendix 10 indicates that the rehabilitation cost for Russell Vale is \$215,000,000. This is staggering considering Wollongong Coal has only provided a security of \$5,657,000 by way of a bank guarantee and the balance of \$1,859,000 as a cash deposit (i.e. \$7,516,000 in total) for the rehabilitation bond for its Russell Vale mine. This disparity needs to be rectified immediately and a greater bond paid. There is no incentive for Wollongong Coal to rehabilitate the site with only such a small bond holding them to account. And what will happen if Wollongong Coal goes into receivership once their approval has been rejected. Who will be responsible for cleaning up the mess if they walk away?

WOLLONGONG COAL NONCOMPLIANCES

Wollongong Coal cannot comply with basic and simple conditions or orders placed upon them.

On 19 July 2018 Wollongong Coal were served a Development Control Order to remove 200,000 tonnes of oversize coal that was illegally stockpiled on the adjoining slag heap. They were given a year to remove the stockpile but it still hasn't been completed. Wollongong Coal believe the removal will be completed the end of November, 4.5 months overdue.

Final landform documents have not completed and are due in November, will they be allowed to run over time as well.

Land required to be dedicated to Council in a 1989 approval from Wollongong City Council still hasn't been transferred. That is 30 years overdue.

The proponent at Russell Vale was required to realign Bellambi Creek to protect it from pollution and flooding by Oct 2012, under their Preliminary Works Project. The work was never started and now in 2019 Wollongong Coal is attempting to modify the Statement of Commitments to remove the item and replace it with a controversial watered down version, saving the company millions of dollars. All the coal has been extracted under the Preliminary Works Project approval and sold but the company is not prepared to meet its obligations under the approval.

The Revised PPR Part A concludes with an updated Statement of Commitments. The community can never trust Wollongong Coal to deliver on any of these commitments or for NSW Planning Compliance to administer these obligations. We have lost faith in this proponent and in the planning and regulating process.

WOLLONGONG COALS FINANCIAL SITUATION

There have been numerous media stories about Wollongong Coals financial situation and the precarious position they are currently in. Their main shareholder Jindal Power and Steel in India continues to pour good money after bad into this company and is the only reason that Russell Vale continues in care and maintenance.

Wollongong Coals end of year report has some very revealing facts. This year they sustained a loss of **\$380,000,000** for the year, the assets of their mines decreased by \$274,000,000 (due to inflated assessment in previous years) and their Auditor stated "*as of that date the Group's current liabilities exceeded its current assets by \$925,496,000*".

The report continued about the going concern of Wollongong Coal "*Material Uncertainty Related to Going Concern- We draw attention to Note 3 (b) of the financial report, which indicates that the Group incurred a net loss of \$379,230,000 during the year ended 31 March 2019 and, as of that date the Group's current liabilities exceeded its current assets by \$925,496,000. These events or conditions, along with other matters as set forth in Note 3 (b), indicate that a material uncertainty exists that may cast significant doubt on the Group's ability to continue as a going concern and therefore, the Group may be unable to realise its assets and discharge its liabilities in the normal course of business. Our opinion is not modified in respect of this matter.*"

Why is a company that is so financially compromised even being considered by the NSW Government to operate a coal mine under our water catchment area and in a sensitive residential area?

STAFF NUMBERS

The Revised PPR states they will require approximately 205 staff. Surely these numbers will only be required for the maximum 1 million tonne extract period. Given that Wollongong Coal will be extracting 3.7 million tonnes over 5 years, it is unlikely they will ever extract 1 million tonnes a year. It is also stated that there will be a maximum of 3 underground shifts of 35 people at maximum production. Therefore the 205 staff is an exaggeration and brinkmanship on part of Wollongong Coal, as they have done in all previous applications and modifications.

There is no mention as to whether this staff is full time permanent or contractors? Wollongong Coal have always used contractors in the past and these contractors usually do not have receive the normal benefits of full time employment and should be considered part time or substandard positions.

We ask that you reject this application from Wollongong Coal and commence a process to close the mine at Russell Vale permanently.

Thank you for considering this submission.

Regards Gavin Workman IRRM Member