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**Independent Planning Commission**

re

Russell Vale Underground Expansion Project

1. I reside at Otford NSW 2508 not far from Sydney Water Catchment ‘Special Areas’ and the Russell Vale Colliery. The concerns that I have raised in this submission aren’t inspired by how close the coal mine and water catchment are to where I live, but by the fact that these water resources, one of New South Wales and Australia’s most valuable assets, must be protected, preserved and secured today for use by future generations.

2. Without the availability of clean, safe and abundant drinking water resources the good future of our people cannot be sustained. No alleged financial benefit to business or government justifies placing our drinking water supply at risk. No sum of money, in fact all the money in the world, can’t make water return to where it has been lost. Should water be contaminated, the contamination most probably could not be reversed and made safe and even if it could, the cost of doing it would be prohibitive.

3. Climate change is real, it is here now and it poses an existential threat to every living thing on planet earth. Therefore this climate emergency makes the responsibility of preserving and protecting our drinking water resources even more urgent.

4. Why ever, was coal mining allowed in Sydney’s drinking water catchment areas? For the past 100 years coal has been the ‘black gold’ that produced the energy that powered the world. It also made many people rich and filled government treasury coffers. Notwithstanding, in hindsight, drinking water catchments should have been declared off-limits.

5. We now have the benefit of a large volume of reputable peer reviewed scientific evidence, gathered from around the world which irrefutably shows us that we must abandon fossil fuels and move forward with renewable energy sources of energy supply. To continue to mine coal and other fossil fuels knowing its adverse impact on world climate is madness.

**What are the threats and risks at the local level?**

6. The proposed mining expansion is located in a pristine, sensitive bushland area and it will proceed underground up to an area underneath the shores of the Cataract Reservoir.

**Triple seam mining**

7. A third seam of coal is being mined beneath two previously mined seams. Triple seam mining has little precedent and impacts are difficult to predict. Wollongong Coal admits that instability in the overlaying old Bulli seam workings may cause pillar collapse and subsidence of the surface of almost 1 metre. [1]

8. The approval of this expansion would also reactivate a lapsed approval for longwall mining, enabling 25m of longwall mining close to the upland swamp, CCUS4, to extract the abandoned longwall machine in longwall 6. This longwall mining should not be allowed to go ahead. Previous mining of Longwall 4 resulted in subsidence of 1.4 metres which was nearly five times the predicted subsidence. [2]

**Ecosystem degradation**

9. The mining expansion will drain both surface and ground water from the Cataract Reservoir catchment. This dewatering, exacerbated by drought and climate change, will impact the biodiversity in the area. As the area dries out, it loses the ability to sustain native plants, animals, birds, reptiles and insects in the area.

**Increasing bushfire risk**

10. The draining of ground and surface water caused by the mining will make the Cataract Reservoir catchment area, one of the few areas of unburnt bushland in NSW, drier and more flammable. This increases the bushfire risk, not only around Cataract Reservoir, but also along the heavily treed Illawarra Escarpment.

**Unending mine water discharge at the Illawarra Escarpment**

11. After the project is finished the mining void will fill up with water. The water will keep rising until it reaches the adit (mine portal) in the Illawarra Escarpment in about 2057. The water will overflow through the adit and the outflow will slowly increase, reaching 0.3ML (300,000 litres) per day in 2179. WCL’s modelling shows that the volume of water outflow at the adit above Russell Vale will continue to flow, even beyond 2179 **[3].** In other words, there will be escalating water discharge from the adit for at least 160 years… perhaps, in perpetuity.

12. The outflow will need to be managed and treated and Wollongong Coal is proposing a commitment to do this for 10 years. The company, as the current mining lease holder, not generations of NSW taxpayers should be responsible for all future discharge. The Planning Department’s recommendation that Wollongong Coal be required to merely “make a plan” for outflow management is ludicrous; it is indicative of the Department’s failure to protect our water through decades of mining the Greater Sydney Water Catchment.

**Greenhouse Gas emissions**

13. The coal extracted is intended to be sold to companies in India. The coal will be burned in India and the greenhouse gases that are emitted will rise into the atmosphere above India. Burning the coal in India is no different to burning the coal in Wollongong. The adverse impact of “heat trapping” gas in the atmosphere, is the same for all areas of planet earth as we all share and breathe the same earthly atmosphere, just as we share the oceans. We will all be equally adversely affected by the impending climate catastrophe. Maybe in different ways such as drought v flood v fire v cyclone v collapsed food security v water loss etc., potentially leading to wars; but the resulting devastation will be the same. All the reputable climate scientists throughout the world, in regard to fossil fuels are screaming out, “Keep it in the ground.”

And for good reason.

**Coal is now a risky investment**

14. The coal industry is a redundant industry it has been superseded by renewable energy sources of power; which are a much better product because they are safe, clean, and cheaper to construct and cheaper for the end-use customer to buy.

15. The evolving renewable energy revolution is **a multi-trillion dollar industry** and entrepreneur’s, investors, superfunds etc., are taking their money out of coal and other fossil fuel industries because (1) they pose a grave financial risk and (2) they are also threatening the planet. They are putting their investment money into renewable energy projects. India is in the process of pulling back from coal and is fast moving ahead investing in renewable energy projects, its future.

16. An article by Michael Mazengarb in Renew Economy, 21.07.2020 <https://reneweconomy.com.au/central-banks-including-rba-urge-rapid-coal-phase-out-to-meet-paris-climate-goals-38641/> reports:-

“A group of the world’s central banks has predicted a complete phase-out of coal in the Asian region before 2050 and that this could be replaced by more wind and solar, under scenarios based on what is needed to meet the goals of the Paris Agreement.

Central Banks and Supervisors Network for Greening the Financial System (NGFS) is a group of central bank representatives, including the Reserve Bank of Australia, and was established to provide guidance on how governments can adequately manage the financial risks posed by climate change.

It’s both a warning and an opportunity for Australian based investors, predicting that Australia’s exports would need to undertake a major pivot away from coal and gas exports, and to instead emerge as a leading supplier of zero emissions energy into a growing Asian region.”

17. An article by Michael Mazengarb in Renew Economy, 28.07.2020 <https://reneweconomy.com.au/governments-must-prepare-communities-for-inevitable-coal-phase-out-experts-warn-29138/> reports:-

“Governments must proactively prepare workers and communities as part of a ‘just transition’ in response to an inevitable phase out of coal mines and power stations, leading energy and climate policy experts have warned.

The international group of researchers has argued that a global phase out of coal, necessary to meet the goals of the Paris Agreement, will require governments to engage with coal-reliant communities and workers, to ensure there is a “fair” closure of the fossil fuel industries.

The new research has been published in the [journal Nature Climate Change](https://dx.doi.org/10.1038/s41558-020-0866-1), and has been authored by academics from the Australian National University working in partnership with researchers from the United Kingdom, Germany, India and the United States.

The **Australian National University’s professor Frank Jotzo** said that the global phase out of coal would have significant consequences for Australia, and it was important that governments worked to avoid the same mistakes made in response to earlier power station closures.

“In Australia, coal use is invariably on the way out, as renewable energy is now the cheaper way of producing electricity from new plants, and Australia’s coal power plant fleet is relatively old. **Coal is also being phased down quite rapidly in much of Europe and North America,”** Professor Jotzo said.

“The closure of Hazelwood and the controversies over the planned closure of the Liddell coal plant show that this transition can be difficult.”

18. An article by Michael Mazengarb in Renew Economy, 31.08.2020 <https://reneweconomy.com.au/licence-to-harm-for-coal-plants-costs-australians-2-4bn-in-health-costs-each-year-56949/> reports:-

“New modelling has detailed how Australians are being left with an annual health bill of more than $2.4 billion due to the impacts of coal pollution, with leading environmental law experts claiming that a lack of pollution controls effectively amounting to a **‘licence to harm’.**

The new analysis has been published by environment law firm Environmental Justice Australia and has assessed the impacts of coal pollution on health across three factors, which including premature deaths, low birth weight live births and additional days of asthma symptoms.

The modelling, completed by a team from the Actuaries Institute of Australia assessed each of these factors against two metrics; the direct economic costs and the costs caused by the ‘burden of disease’.”

**The renewable energy revolution**

19. Now in the year 2020, after 15 years of development and growth the renewable energy revolution has matured and has taken its place at the top of the energy heap. Our National Energy Market [NEM] in the next 5 years or so will be capable of being powered by close to 100% renewable sources such as solar PV and wind turbine, supported by energy storage sources such as utility-scale batteries, pumped hydro, virtual power plants, demand response, concentrated solar thermal [tower], micro-grids including community micro-grids, the use of electric vehicles for - vehicle to grid [V2G], grid to vehicle and home to vehicle. Renewables are distributed and controlled by fast responding digital technology. Renewables are clean and safe and cheaper than energy derived from polluting coal and gas.

20. The South Australian grid is at 50% energy from renewables and will be at 100% within 5 years. The Australian Capital Territory is now at 100% energy from renewables. New South Wales is in the process of creating three regional based Renewable Energy Zones. Queensland is moving ahead in leaps and bounds with renewable energy. The Australian Energy Market Operator [AEMO] has prepared a 20 year energy plan known as the Integrated System Plan [ISP] to guide the NEM along the low carbon path to safe, reliable, cheap renewable energy supply.

**In conclusion:-**

21. The protection and preservation of our **priceless water catchment area** should out weight the NSW Governments’ desire for royalties and the proponents desire to generate money.

22. The proposed Russell Vale mine expansion poses a massive threat to the sustainability and the good ecological future of our pristine water catchment bushland, dams and drinking water resources.

23. The proposed Russell Vale mine expansion via the sale of its coal in India, will play a big part in ensuring that we and the rest of the world do not meet our Paris emissions target commitments.

24. All investment in coal should be viewed as ‘financial high risk’ and doomed to be a loss-making venture, at least to the NSW Government and the tax-payers of Australia.

25. The call to, “Keep it in the ground”, are just five words, but today are probably the most important words ever spoken since human life evolved on planet earth. It is likely that future generations of people will utter eight desperate words in frustration, “Why didn’t they keep it in the ground?”

26. Risk is defined as the product of the *likelihood* and *consequences* of an *outcome.* It would be naive **to not examine and consider** the **worst-case scenario.** When you take a risk, you have to be prepared for the consequences, as well as any alleged rewards.

27. **Please reject this highly risky and inappropriate project.**

**References**

<[1]> <https://www.ipcn.nsw.gov.au/resources/pac/media/files/pac/transcripts-and-material/2020/russell-vale-uep/201013-meeting-with-resource-regulator-transcript.pdf>

[2] Gujarat NRE Coking Coal Ltd NRE No. 1 Colliery Longwall 4 End of Panel Report, p.15, Accessed 26.9.20 at <http://wollongongcoal.com.au/monitoring-r/>

[3] Russell Vale Colliery – Underground Expansion Project, Russell Vale East, Revised Mine Plan Groundwater Assessment, GeoTerra, p. 97 accessed 26.9.20 at <https://majorprojects.accelo.com/public/7f32dda24beaa9a6c18ea7d52be9c53d/RtPAC%20Second%20Review%20FINAL.pdf> (p. 390 of whole document)