



Mining and Industry Projects
NSW Department of Planning and Environment
GPO Box 39
Sydney NSW 2001

29th January 2025

Dear Sir/Madam,

Objection to Springvale water treatment plant SSD 7592 Mod11

Modification 11, consequences of the proposed consent amendments

Proposed deletion of Condition 6A would remove from the provision the defined term "partially treated mine water", a specified transfer volume, and a time restriction for transfers to Thompsons Creek Reservoir (TCR).

The benefit of Condition 6 would be largely forfeit by proposed Condition 6B, that could permit very large amounts of untreated mine waste to be transferred to Thompsons Creek Reservoir (TCR).

Proposed new Condition 6B to allow for Mt Piper Power Station outages does not specify a maximum volume of mine waste that may be transferred, set a time restriction on the proposed transfers to TCR or the number times that this provision may be used in a period of time. The Condition proposal describes "transfers of water", without water quality limits. It may be arguable that the water quality of transfers is regulated by salinity concentration limit of 650EC for the TCR (proposed Condition 6B(c)), but such transfers may contain unacceptable levels of unfiltered dirt and toxic metal precipitates. Proposed consent condition 6B would permit transfers of untreated mine waste directly from the Springvale and Angus Place mines that contain dirt and precipitates.

Centennial has no approval to discharge its mine waste on a regular basis, yet greater than 5GL was discharged from TCR throughout last financial year. The potential scale of future discharges under proposed Condition 6B is defined by Centennial's transfer of 104.71ML/day to the TCR during a 15 day emergency in November 2023 that was released to receiving waters from TCR by the Pipers Flat Creek outlet (EnergyAustralia, 2024). From these facts it is

concluded that the proposed consent modifications can cause very large (>100ML/day) unauthorised discharges of mine “water” (i.e. untreated mine waste).

Key Recommendations

1. The modification proposal should be refused consent as it is likely to cause a continuation of large unauthorised discharges of mine waste into Sydney’s drinking water catchment.
2. The Minister for the Environment should commission a broad inquiry by the NSW Environment Protection Authority under Part 9.6 of the Protection of the Environment Operations Act 1997 (PoEO Act) into Centennial Coal’s operations in the western Blue Mountains region to identify the most effective measures to eliminate, and/or minimise and adequately cleanse over 50 ML/day of mine water discharged from these operations.

Justification for key recommendations

1. Unauthorised mine water discharges:

Last financial year, 3,975ML (3.975GL) of Centennial Coal’s inadequately treated mine water were discharged from Thompsons Creek Reservoir (TCR) by EnergyAustralia into Sydney’s drinking water catchment without planning consent or a pollution licence. These unauthorised discharges were in addition to an approved 15-day emergency discharge of 1,549.8ML.

The above data were derived from a report published by EnergyAustralia NSW on the 26 November 2024 titled *Water Access Licence and Approval Annual Compliance Report for Mt Piper Power Station* (MPPS). Table 3-1 on page 24 of that report gives the so-called Environmental flows from Thompsons Creek Reservoir (TCR) into receiving waters as follows:

<u>Environmental Flow (ML/day) Period</u>	<u>WAL Requirement</u>	<u>Average Actual release</u>
01 July 2023 to 31 August 2023	At least 0.3 ML/day	7.45 ML/day
01 September 2023 to 30 April 2024	At least 0.8 ML/day	12.75 ML/day*
01 May 2024 to 30 June 2024	At least 0.3 ML/day	10.27 ML/day

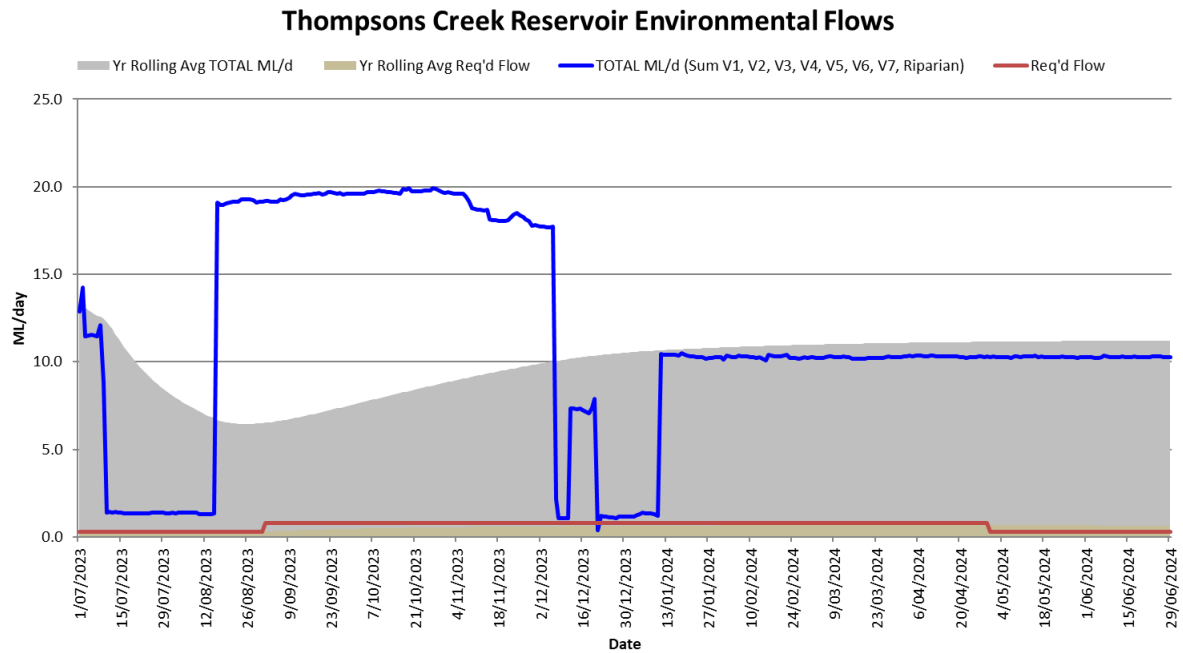
The discharge of mine water for fy 2023/24 is a simple calculation:

01 July 2023 to 31 August 2023 = 61days X 7.45ML/day	454.45ML
01 September 2023 to 20 April 2024 = (242-15*)days X 12.75ML/day	2,894.25
01 May 2024 to 30 June 2024 = 61days X 10.27ML/day	<u>626.47</u>
	3,975.17

*Plus an approved emergency release of:

1 November-15 November 2023 = 15days x 104.71ML/day	1,549.8 (measured total)
from TCR’s Pipers Flat Creek outlet.	

The total of partially mine waste discharged from TCR to receiving waters was **5,525ML** last financial year (based on the above averaged data) and is shown graphically below in Figure 3-1 extracted from EnergyAustralia’s compliance report:



The emergency discharge data corresponds with Environment Protection Licence No. 13007 that permitted an emergency release of 1,549.8ML and was permissible under planning consent (SSD 7592 condition 6). Thus last financial year, Centennial Coal discharged 3,975ML (3.975GL) of inadequately treated mine water into Sydney's drinking water catchment without planning consent or a pollution licence.

Centennial Coal claims that "Discharge volumes associated with Springvale Colliery have significantly reduced since 2017 with the cessation of discharge of up to 30 ML/day from Licenced Discharge Point (LDP) LDP007 to the Coss River" (mod 11 report, page 16). Yet last financial year, almost half (45%) of Centennial Coal's partially treated mine waste produced from its Angus Place and Springvale mines (as reported in EA's compliance report) was discharged from TCR into Sydney's drinking water catchmentⁱ. Most of this mine waste discharge was a non-emergency discharge from TCR made without development consent or pollution control licence.

Given Centennial Coals performance last year, it would be naïve to grant the proposed consent modification, as the so-called environmental flows of >3GL/y of mine waste are then likely to continue indefinitely, and most likely with a greater discharge volume if the requested removal of TCR waste transfer cap is granted (i.e. removal of condition 6A). The almost daily unauthorised TRC discharges last year were in the range of 7.45 to 12.75ML/day while the MPPS was operational. Surely these daily TCR discharges must increase towards a 42ML/day when the power plant is shut down for maintenance. On the balance of probabilities, the proposed consent modification 11 would permit large unauthorised pollution of receiving waters and must be refused because the modification proposal does not seek permission for these discharges.

2. Why a broad-ranging EPA inquiry:

To prevent avoidable adverse environmental outcomes arising from the increasingly large volumes of mine waste produced by underground coal mines in the Lithgow City Council area, a systematic review of the mine waste management system is required. The mine wastewater management system involves six major projects – the Springvale, Angus Place and Clarence mines, the Western Coal Services site, Springvale Water Treatment Plant (SWTP) and Mt Piper Power Station (MPPS). Such a review should be commissioned to determine the appropriate measures that achieve the multiple objectives of secure power generation, environmental protection and economically viable operation.

Without such an inquiry, Centennial Coal shall continue an ad hoc segway of mine water management from a zero release and containment system to a dilute and discharge system. More importantly, these proposed wastewater management changes by consent modification transform reuse in the MPPS to reuse as drinking water without a corresponding increase in required wastewater quality treatment.

The modification 11 assessment report, for example, does not distinguish current use of partially treated mine water for industrial quality reuse from an implied future reuse as raw drinking water but incorrectly treats these reuse outcomes as equivalent, with equivalent treatment standards.

This radical, currently unauthorised transformation of the water management system results from three factors. NSW energy policy reforms have resulted in declining mine water consumption at Mt Piper Power Plant, which is required to reuse this waste in its cooling towers whenever it is availableⁱⁱ. This decline in demand is coupled with an increase in supply as ever larger flows of mine waste generated by intensive coal mining under Newnes Plateau (now at >50ML/dayⁱⁱⁱ). This production of mine waste continues to increase at rates beyond predictions in various reports for these mines.

The third factor in this waste water crisis is that Centennial Coal is apparently unwilling to pay for effective and adequate mine water management for its intended change in waste reuse to drinking water. Adequate mine water treatment outcome for drinking water reuse is an outcome that has been required by NSW Parliament, as well as the NSW Court of Appeal.

In Opposition, the now Premier Chris Minns said “We can protect the water quality of New South Wales, in particular the Sydney catchment which produces water for seven million people, and we can keep the Springvale mine open and keep the power operating for New South Wales residents. It does not have to be an either/or” (Hansard - 10 October, 2017). These remarks were made in response to legislation weakening catchment protection to accommodate an earlier crisis precipitated by Centennial Coal’s toxic mine waste discharges. Perhaps somewhat surprisingly, the NSW Government of the day essentially agreed with Mr Minns’ policy. The EPA was working on a recycling project using the MPPS, “effectively eliminating future mine water discharges from the Springvale and Angus Place Coal mines to

the Upper Cocks River” (Barry Buffier, then EPA CEO, correspondence 10 Apr 2017). As a result of these pressures, Centennial Coal’s Springvale Mine Water Treatment plant proposal was then amended to a zero waste release system using Thompsons Creek Reservoir for storage of treated mine water (GHD, December 2016).

Now, the protection of Sydney’s water catchment is being compromised by a Centennial Coal program of short and medium-term actions (development consent modifications) to greatly increase the volumes of partially treated mine wastewater discharged from a management system not approved for such discharges.

Continuing the current decision making through serial consent modification proposals by Centennial Coal is likely to cause avoidable environmental impacts, with accompanying broad disaffection by Sydney’s water consumers. The planned cavalcade of development and regulatory proposals to address separate aspects of this coal waste issue are being determined in blinkered processes that must focus on the modification proposal at hand.

The increasing imbalance between mine waste production and reuse consumption, the change in end use, the unwillingness to properly fund environmental protection and narrow focus of development assessments are all factors that have played a part in the creation Centennial Coal’s current waste management crisis. And the likely increase in unauthorised discharges mine waste into Sydney’s drinking water catchment, now at >3GL/yr is a sure sign that there is a crisis.

The NSW Minister for the Environment, the Hon. Penny Sharpe, using a head of power under the PoEO Act should commission an inquiry to protect Sydney’s drinking water catchment and the World Heritage Area. The Environmental Planning and Assessment Act, 1979 apparently lacks a head of power to commission such a comprehensive inquiry into several interrelated major project activities and proposed activities related to waste management.

To enable EPA staff to give evidence at the proposed inquiry, the inquiry should be chaired by panel of recently retired senior public servants with expertise in development control and environmental protection.

Other recommendations

3. Retain in the MPPS Water Licence the obligation to reuse of mine wastewater before accessing any other water resources (unless unavailable)
4. Prosecute Centennial Coal for unauthorised exceedance of the TCR mine water transfer limit
5. Set an upper transfer limit for “treated mine” water in TCR
6. Consider prosecution of Centennial Coal for attempting to alter the approved mine wastewater reuse from a power plant to drinking water resource without undertaking a significant development proposal that requires an EIS and a public inquiry review

7. If treated mine wastewater discharges into receiving waters are permitted by subsequent regulatory processes, then the salinity discharge standard must be set in the 30 to 50EC range to reflect the change in reuse from a power station to drinking water.
8. Prosecute Centennial Coal for unauthorised discharges of partially treated mine water from TCR
9. SWTP modification 11 and unauthorised discharges of mine waste should be referred to the Federal Environment department
10. Review the environmental assessment for the modification proposal to determine if it was compromised by mine waste discharges from the TCR
11. Correctly apply the neutral or beneficial impact on receiving waters test to the likely outcomes arising from the proposed modification

Justification for these other recommendations

3. Retain in the MPPS Water Licence the obligation to reuse of mine wastewater before accessing any other water resources (unless unavailable)

The power plant has a water licence (WAL 27428) that contains a condition (MW5870-00001) requiring mine waste to be used, unless unavailable.

This MPPS water licence mine water reuse condition and SWTP mine water storage cap condition 6A are interlinked to ensure zero release of partially treated mine waste to Sydney's drinking water catchment.

Removal of the mine waste transfer limit, would encourage the MPPS to access cooling water from the Coxs River to replace mine waste, as may have occurred last financial year.

The partially treated mine water discharged from TCR in 2023/24 financial year was 3,975ML. EnergyAustralia's water licence compliance report, 2024, states that the 2023-24 total MPPS water usage was 10,885.9ML and this volume included 3,414.2 ML extracted from the Coxs River.

If the discharged mine water was instead stored in TCR, as required by the SWTP consent, then the needs of the power plant's cooling towers may perhaps have been met without recourse to extracting water from the Coxs River.

It is understood that EnergyAustralia wishes to remove the mandatory reuse of mine water condition from its MPPS water licence. Eco Logical Australia reported in its Sydney Drinking Water Catchment Audit 2019-2022 that during the transition from coal-fired power to more sustainable land uses, it is anticipated that EnergyAustralia will seek more flexible water licence conditions (page 100-101, Eco Logical, 2022).

It should also be anticipated that EnergyAustralia wishes to avoid payment for adequate treatment or being further involved with the management of mine wastewater. It would be

easier and less costly to extract more water from the Cocks River, and it appears that EnergyAustralia is already doing so.

EnergyAustralia may reasonably argue that it is unfairly paying for Centennial's wastewater treatment. Centennial should pay for adequate waste treatment to achieve an outcome that meets the neutral or beneficial outcome on receiving waters, as doing so would be consistent with the principle of 'user pays'. If these pollution treatment costs were internalised, Centennial's coal becomes expensive relative to other sources, enabling the energy market, including EnergyAustralia, to select options that are less environmentally damaging. EnergyAustralia may have to pay the NSW Government for the water it uses, but Centennial, the polluter, should pay for its treatment.

4. Prosecute Centennial for unauthorised exceedance of the TCR mine water transfer limit

At least 8,137ML of filtered mine water has been transferred to TCR, and probably much more. This figure is derived from the 5,525ML stored in 2023/24 financial year, as indicated in EnergyAustralia's water licence compliance report, and a further 2,612 ML transferred as of 31 October 2021 and reported by the NSW Department of Planning and Environment Assessment Report for the Springvale Water Treatment Project MOD 8 of October 2022. By deduction, the approved TCR transfer limit (5,760ML) was exceeded by an unauthorised transfer by at least 2,377ML (>2GL) of mine water. These unauthorised transfers to TCR may also be a further indication of unauthorised mine waste discharges to receiving waters.

Given the scale of the non-compliance and the contingent compromise of the zero-discharge waste management system, the apparent non-compliance merits consideration for prosecution.

The proposal to remove Centennial Coal's pollution storage cap is a step towards additional mine waste pollution of raw drinking water and sensitive aquatic environments in the World Heritage Area, without due process.

To save money, Centennial Coal is pushing regulatory agencies through a succession of consent modifications to relent and grant it permission to discharge many gigalitres of inadequately treated waste into drinking water supplies each year till 2040, when MPPS may close.

5. Set a TCR "treated water" transfer cap

The SWTP consent does not allow discharge of mine waste from TCR, except during emergencies. The retention of an appropriately sized cap is necessary to help ensure discharges to receiving waters do not occur without consent or at least are limited.

Perhaps if the generous TCR transfer cap of 5.76GL for “partially treated mine water” had not been consumed by major unauthorised discharges, then sufficient storage may have remained to accommodate the planned operational shutdowns, thus obviating the need for modification 11.

Perhaps an appropriately sized TCR transfer cap could be used by Centennial Coal to store “treated water” during times when either MPPS or the SWTP are shut down or partly shut down for repairs and maintenance.

Removing the “partially treated mine water” cap and not adding a “treated water” cap is likely to encourage surcharging of TCR beyond its capacity as occurred last financial year with the result of major unauthorised discharges.

An appropriately sized “treated water” transfer cap should be added to the development consent because this provision can assist in limiting the amount of mine water stored to the amount that can be reused in the MPPS.

The “partially treated mine water” limit at least restricts the volume of any unlawful releases of inadequately treated mine waste that can be surcharged into Sydney’s drinking water catchment over a period of time.

The regulatory authorities have made considerable effort to accommodate Centennial Coal’s proposals regarding the TCR transfer cap. On five occasions Centennial Coal’s zero-release mine waste treatment system was granted temporary permission to transfer up to 5,760,000,000 litres (or 2,304 Olympic swimming pools) of partly treated mine waste in TCR. Imagine the extent of unauthorised discharges that could have occurred if this cap was not in place.

6. Consider prosecution of Centennial Coal for attempting to change the approved mine wastewater reuse from a power plant to drinking water resource without undertaking a significant development proposal that requires an EIS and a public inquiry review

Centennial Coal should be warned of the potential prosecution risks of attempting to sneak through a revolutionary change in waste management reuse as a minor consent modification with likely unauthorised consequences of large discharges of partially treated mine wastewater being discharged to Sydney’s drinking water catchment.

Under state planning law a proposed change from approved zero-release of mine water to a dilute and discharge to receiving waters should require an environmental impact statement, public comment and review processes, and then a public inquiry. Surely the segway from industrial reuse of mine wastewater in a power plant to reuse in a drinking water resource consumed by five million people is a significant development. This transition of reuse is especially of concern given Centennial Coal’s history of environmental crises arising during the consideration of its major development proposals.

7. If treated mine wastewater discharges into receiving waters are permitted by subsequent regulatory processes, then a salinity discharge standard must be set at 30 to 50µS/cm EC

Water quality standards for receiving waters are an important tool to ensure mine waste discharges are either minimised or prevented altogether. If treated mine waste discharges are to be approved by planning consent and regulated by pollution licence, the salinity standard applied to the waste must reflect the major change in reuse from the MPPS to one appropriate for Sydney's drinking water.

If Centennial Coal chooses to make a development application to move from a zero-release of its mine water to one that discharges this waste, an acceptable salt concentration of 30-50EC should be applied to protect the health of Cocks River in the World Heritage Area and Sydney's drinking water contained in Warragamba Dam. The 350EC salinity guideline value for freshwater ecosystems is more appropriate for rural catchments, not those within a World Heritage Area (see Eco Logical, 2024, Sydney Catchment Audit, Table 91-1 ANZECC & ARMCANZ salinity guideline value).

Centennial Coal's water management system is in the upper Cocks River catchment. Streamwatch volunteers consistently recorded in Cocks River at Long Swamp salinity levels of 30µS/cm over a period of eight years– (Lithgow Environment Group/Blue Mountains Conservation Society Streamwatch Monitoring Results 2006 – 2014). Streams in naturally vegetated catchments in the western Blue Mountains area are generally less than 50 µS/cm (Ian Wright, 2015 submission to Springvale mine extn PAC).

Centennial Coal's treated mine water discharges to receiving waters are environmentally neutral when treated to an salinity standard of 30 – 50 µS/cm as experienced upstream of its Angus Place Mine. Such discharges would be equivalent to the natural salinity background for the Cocks River headwaters where Centennial Coal's mines operate. The modification 11 report claims background salinity readings of 99-117µS/cm in the Cocks River upstream of Angus Place Mine (page 17) but these levels are not what Streamwatch volunteers consistently recorded and should not be used to define background receiving water salinity.

The sophisticated SWTP commissioned in 2019 can, with sufficient funds from Centennial Coal, be operated, augmented and upgraded to ensure all treated mine waste has a maximum saline waste concentration of 30-50EC when discharged. It is understood that SWTP produces treated water at a salinity of 350EC, and Veolia could certainly upgrade the treatment plant to achieve an outcome of 30-50EC for all mine wastes. Recall that Sydney Water treats 250ML/day of sea water at 50,000EC to make drinking water at Kurnell. The main difficulty seems to be a reluctance of Centennial Coal to pay for an adequate cleanup of their waste for the new reuse purpose as drinking water.

Proposed consent modification 11 does not address the need to adequately treat mine waste before discharge to the receiving water environment. The salinity standard of 30 – 50 µS/cm should be the maximum permitted concentration for proposed future mine waste discharges from TCR into this sensitive receiving water environment.

Centennial Coal's modification 11 proposes to set a salinity standard at 650EC for the stored waters of TCR. This salinity standard is 150EC greater than the 500EC specified in the 2015 Springvale mine extension consent. As previously stated, 45% of water in the Centennial water management system is being discharged via the TCR. This standard is inappropriate and will harm the receiving water environment.

If approved, the proposed consent modification 11 is likely to be a backdoor means of establishing an inappropriate water quality standard for its currently unauthorised discharges of partially treated mine waste that would harm aquatic life in receiving waters.

8. Prosecute unauthorised discharges of partially treated mine water

Centennial Coal and EnergyAustralia should be prosecuted for causing or permitting the unauthorised discharge last financial year of >3GL gigalitres of inadequately treated mine waste from TCR into Sydney's drinking water catchment without either a licence to pollute from the EPA or planning consent.

EnergyAustralia is responsible for water management of the TCR but it is Centennial Coal that provides mine waste significantly beyond TCR storage capacity. Apparently without obtaining permission from Water NSW, the EPA and the Department of Planning, Centennial Coal and/or EnergyAustralia have caused or permitted the discharges of mine waste into receiving waters.

Centennial Coal's proposals to dilute and discharge mine waste from the SWTP into Wangcol Creek were rejected in 2019 and again in 2023^{iv}. Centennial Coal are instead required to operate a zero-release mine waterwaste management system.

The development consent for the SWTP contains no provisions to dilute and discharge partially treated mine waste system. Centennial Coal may have misled the Planning Department regarding its intentions. In **seven** of the development assessments, the NSW Department of Planning has described the SWTP/TCR system as a zero-discharge mine water management system when reviewing various Springvale mine water management proposals^v. Further, GHD stated in the amended DA for Centennial Coal's SWTP SSD that "The project will essentially operate as a zero discharge operation and would only require release to the catchment in the case of MPPS closure or sustained operation at less than 32% power generation capacity" (3.1.3 Treated Water Management System, amended DA, 2016). Similarly, the EPA has no regulatory framework for Centennial Coal's mine waste discharges from the TCR.

Despite these refusals and consent requirements for a zero-release system, Centennial Coal has discharged over five gigalitres of partially treated mine waste in the 2023/24 financial year, comprising 45% of its waste output, mostly without planning authorisation or EPA pollution licence. These partially treated mine water discharges had a greater salinity concentration than was permitted for Springvale mine discharges in 2015 of 500 EC under that mine's development consent. The unauthorised discharges from the TCR over the approved salinity of 500EC would also appear to be unauthorised by the Springvale mine consent, as well as the water treatment plant consent that has no discharge standards. Centennial Coal has claimed that since the SWTP commenced operation, the salinity concentration of waters stored in TCR ranged between 550 – 700EC (from notes taken at a briefing of eNGO groups by Centennial Coal at Clarence Mine 10 Dec 2024).

9. SWTP modification 11 and unauthorised discharges of mine waste should be referred to the Federal Environment department

Centennial Coal should refer this modification 11 proposal and its 2023/24 unauthorised mine waste discharges to the Federal Environment department.

The Department of Climate Change, Energy, the Environment and Water should be asked to determine whether the unauthorised mine water discharges could have caused potential harm to the Greater Blue Mountains World Heritage Area and water resources. The non-referral of last financial year's mine waste discharges could be a breach of the Federal Environmental Protection and Biodiversity Conservation Act, 1997.

As future mine waste discharges are likely if proposed modification 11 is approved, this proposal may require a controlled action review to ensure adequate assessment of the potential harm to the Greater Blue Mountains World Heritage Area and water resources.

10. Review the environmental assessment for the modification proposal to determine if it was compromised by mine waste discharges from the TCR

The claim made in the modification's assessment report that the proposed activity of storing additional mine water in TCR is unlikely to have an impact on receiving waters is in error. This claim does not account for the likely future discharges of partially treated mine waste from TCR, based on what happened last financial year.

Sampling data and modelling for the environmental assessments in the modification report may have been tainted by the large mine water discharges from TCR. The unauthorised mine waste discharges (>3GL) and the (>2GL) emergency discharge may have perverted analysis of environmental impacts on receiving waters.

Other unauthorised discharges of mine waste may be identified when the Water Licence compliance data for the financial years preceding 2023/24 are examined. If further investigations establish earlier unauthorised discharges did take place, such data are likely to have caused additional distortions of water quality assessment and modelling.

11. Correctly apply the neutral or beneficial impact on receiving waters (NorBE) test to the likely outcomes arising from the proposed modification

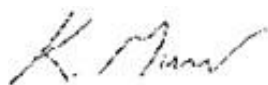
The neutral or beneficial test for regulated pollution discharges should be when mine waste discharges are compared with background levels of pollutants in receiving waters.

The NorBE test in the modification assessment report apparently did not consider the increase in salinity pollution in receiving waters arising from this modification proposal.

The proposed modification is unable to meet the NorBE test for receiving waters because the proposed stored mine waters are likely to be discharged, without authorisation, at a salinity of 150EC greater than the 500EC level permitted for the Springvale mine extension under its development consent. A test that claims to achieve a NorBE outcome for releasing partially treated mine waste more contaminated than what was approved in a mine development consent of 2015 whose releases are supposed to pass through SWTP, and not bypass it as most do, is surely in error. If a salinity standard for TCR discharges to receiving waters is greater than natural background of 30 $\mu\text{S}/\text{cm}$ for the upper Cocks River, the operation of SWTP water management could not produce outcomes that comply with NorBE. Similarly, the proposed TCR storage/discharge does not comply with ANZECC & ARMCANZ (2000) water quality guideline value for storages and streams^{vi}. The proposed salinity standard for TCR discharges is not in the “ballpark” of NorBE compliance.

The NorBE assessment in the modification report also did not consider the likely discharges of partially treated mine wastewater from TCR. These likely discharges to receiving waters are not part of the modification proposal that erroneously assumes the waste is stored (except in emergencies). The evidence from last financial year is that the stored waste is likely to be discharged from the stored waters of TCR on a regular basis if the consent modification is approved. These regular future discharges are likely to be greater than 3GL/year with the TCR transfer cap removed as proposed. Likely unapproved discharges that were unassessed in the modification report cannot produce a correct application of the NorBE test. A pollution test that assesses a proposed pollution discharge against itself, as it is already in the receiving waters, appears to be nonsensical.

Yours sincerely,



Keith Muir
Hon. Projects Officer
Wilderness Australia

End notes and useful references:

ⁱ The EnergyAustralia water licence compliance report, 2024, states that the Mt Piper Power Station used 5,958.9 ML/yr from the Springvale mine and 882.8 ML/yr from Angus Place mine in 2023/24. The amount of partially treated mine waste discharged from TCR was 5,525ML/yr last financial year. Thus $(5,525/883+5959+5525) \times 100 = 45\%$ of Centennial's mine waste was discharged to receiving waters last financial year.

ⁱⁱ Mt Piper Power Station at maximum power output can convert 52ML/day of mine waste into water vapor in its cooling towers but eliminates zero mine water when closed for maintenance. This plant is generating less electricity with every passing year due to the transition of the energy system away from fossil fuels.

ⁱⁱⁱ More than 42ML/day are produced by the Springvale and Angus Place Mines, and more than 14ML/day from the Clarence Mine.

^{iv} The Springvale water treatment Development Application of September 2016 (this DA was amended to become a zero-release proposal in December 2016); and a discontinued 2023 Western Coal Services - Angus Place Colliery proposal [MP 06_0021 (MOD 8) - SSD-5579 (MOD 5)] both proposed discharges to Wangcol Creek.

^v In relation to the Springvale SWTP SSD the Department found that "to reduce mine water discharge from LDP009 from an average of 30ML/day to zero discharge" ... is a "substantial improvement" (page 8, 2017). In relation to SWTP Modification 4 the Planning assessment quoted the Submissions Report of Centennial that "outlines there would be sufficient capacity in the reservoir to handle the additional volume proposed to be stored and the risk of spills or discharge would be very low" (page 5). In the SWTP Modification 5 assessment the Department found that "Thompsons Creek Reservoir can hold up to 27,500ML of water. Water in the reservoir is predominantly used as storage to supply the power stations demand for makeup water. With ongoing high demand for makeup water predicted, the available storage in the reservoir is more than sufficient. As such, no additional dam infrastructure would be required to support the proposal." (page 7). Modification 6 assessment makes similar reference to sufficient storage of mine waste in TCR on pages 4 and 16. Modification 7 assessment does also on page 4, and the assessment for Modification 8 on page 5 states that TCR has the capacity to store waste, without an increased risk of discharges.

^{vi} 350EC is the ANZECC & ARMCANZ (2000) water quality guideline value for storages and streams, quoted in the Sydney Drinking Water Catchment Audit 2019-22, page 225.