

24 March 2025

Submission to the Independent Planning Commission RE: SSD-7592 MOD 11, as amended on 4 March 2025

The Nature Conservation Council of New South Wales (NCC) is the state's peak environment organisation. We represent over 200 environment groups across NSW. Together we are dedicated to protecting and conserving the wildlife, landscapes and natural resources of NSW.

Whilst we welcome the narrowing of the proposal to transfer blended water to the Thompsons Creek Reservoir within a two-month period this year rather than for up to 15 years and to reduce discharge volumes to the riparian environment, we retain concerns on the overall proposal.

Concerns on the amended proposal

This proposal interrupts the intent of the Springvale Water Treatment Plant which was to fully treat Centennial Coal mine wastewater and prevent dirty water discharge into the catchment.

We note that the proposal to transfer blended water to the reservoir ahead of the outages assumes that mixing within the reservoir will 'dilute' pollutant and salinity levels prior to discharge to the riparian environment and through the World Heritage Area and Sydney's drinking water catchment. Such an approach may reduce the concentration of salinity and pollution of water at discharge, but the overall pollution load will increase as increasing volumes (up to 24ML/day) of filtered (untreated) water are transferred to the reservoir. Even if discharges to the the environment are restricted to 0.8ML/day in summer and 0.3ML/day in winter whilst water transfers from the treatment plant to the reservoir are occurring, upon discharge, there would be significant negative impacts on ecological communities and species in the sensitive Gardens of Stone area and on the quality of drinking water for Sydney residents.

We note that the IPC requested the Independent Expert Advisory Panel on Mining to conduct additional analysis of downstream water implications of the proposal and the panel found that downstream impacts would be moderate. However, downstream water quality has been reduced over time due to historic impacts of mine water pollution. It









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would be more appropriate to establish a baseline on which to assess the proposal for a neutral or beneficial effect (NorBe) on the receiving water by comparing water modelling of the proposal's impacts with upstream water quality.

The Australian and New Zealand Environment and Conservation Council water quality guideline values for storages and streams is a measure known as 350EC (ANZECC 2000). Discharges in the proposal would far exceed this.

We note also that the proposal contains no 'plan B' if heavy rainfall around outage periods raises the level of the reservoir to the extent of necessitating discharge events to maintain safe reservoir levels.

Discharge and release are not necessary

We have confirmed directly with Centennial Coal in a meeting on 17 March 2025 that there is sufficient underground storage capacity to take mine wastewater unable to be treated during the Mount Piper power station outage planned for April-May 2025. Centennial Coal representatives confirmed that 1400ML of storage capacity is available in Angus Place mine and that volumes of wastewater expected to be generated during the upcoming outage sit at 600ML.

Given power station outages are planned years in advance, and all parties were previously aware of the challenges in treating brine during outages (as the reverse osmosis plant results in brine byproduct at a level greater than the ability to solidify it via the crystalliser), Centennial Coal should not be permitted to dilute and dump polluted water as a 'quick fix' due to lack of preparation. Water should be stored underground whilst alternatives to discharge are finalised. Options include upgrade of plant (e.g. boosting crystalliser capacity) or stockpiling of ash or procuring of ash to store alongside brine for when the power station is offline and ash is not being generated.

Structural aspects must be addressed through a State Significant Development application

Centennial Coal must be required to take responsibility for excessive water generation from intensive longwall mining methods and store wastewater during the upcoming outage whilst working with EnergyAustralia and regulatory agencies to define a clear pathway to address ongoing water generation and avoid pollution.









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In addition to ongoing water inflows during the power station outages, Centennial Coal is expected to submit another 'dilute and dump' modification proposal to address the historic stored wastewater by discharging it into Wangcol Creek via a new licensed discharge point. Due to the implications for the drinking water catchment, any such proposal should be required to be a SSD application rather than a modification and invite full public consultation and preparation of an EIS.

Wastewater must be fully treated and brine byproduct managed responsibly prior to any discharge to the environment. The capacity of plant must be upgraded to allow this, including boosting the capacity of the crystalliser.

The root cause of the excessive water generation issue is extensive longwall mining, resulting in apparent aquifer damage and the extent of this damage must be investigated by authorities before any further approvals for longwall mining in the region are assessed.

As Mount Piper power station is expected to have more frequent outage periods and indeed operate in reserve capacity in coming years, there will be reduced demand for water for its cooling towers. Wastewater generation from Centennial Coal is expected to increase. Further, it is understood that Energy Australia would like to reduce dependence on more costly water from the water treatment plant, likely via seeking removal of its licence conditions to use the water coming from the water treatment plant to its full capacity (condition MW5870-00001 in WAL 27428). It is understood that the cooling plant would benefit from less saline water (50-100 EC) than that from the water treatment plant (300EC). This underlines the need to address this issue from a structural perspective.

Proposed consent conditions

Should the IPC be inclined to consent to the amended proposal after considering all other options, it is recommended to frame the consent as an interim measure and to be explicit that it should not set a precedent for how further, fully expected power station outages are handled.

The IPC should reiterate the zero dirty water discharge intent of the water treatment plant, include commentary around upgrade of plant to ensure this regime is upheld into the future and recommend that further proposals to address water management issues be submitted as SSDs not modifications.









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It is noted that during the last financial year (1 July 2023 to 30 June 2024), an average of 7.45 ML/day to 12.75 ML/day was released from Thompsons Creek Reservoir under the EnergyAustralia water access licence. There are no volume caps or quality controls directly on water discharge under this licence. The IPC should consider including commentary for regulatory agencies to investigate pathways to regulate these flows.

Additional recommendations for the NSW government

NCC requests the NSW government to:

- Prevent Centennial discharging wastewater into the natural environment unless it can demonstrate that it meets the neutral or beneficial test to the receiving environment.
- Commission a public inquiry into mine wastewater produced by Centennial's underground coal mines in the Gardens of Stone region with terms of reference that will identify the steps necessary to eliminate harm caused to the aquatic environment, the community, the Greater Blue Mountains World Heritage Area and Sydney's drinking water supplies.
- Require Centennial to significantly reduce the mining intensity at its underground coal mines to protect the natural environment and to reduce the volume of wastewater sent to Mount Piper power station.
- Require Centennial to conduct feasibility studies that determine the most effective means to significantly reduce the volume of mine wastewater produced from previously worked areas of these underground mines.
- Investigate whether volumes of coal anticipated from the proposed Angus Place West mine are needed to service the Mount Piper coal fired power station under flexible operation and the National Electricity Market more broadly, and reject the development application if demand can be met from existing sources.
- Require Centennial to set out a plan for decommissioning and rehabilitation of Angus Place coal mine now whilst it remains inactive, rather than allowing care and maintenance to continue to 2042.
- Consider Centennial's compliance record and community-monitored pollution when assessing mine extension and new mine proposals, as well as likely greenhouse gas emissions over the project life cycle in the context of the legislated NSW government emissions reductions targets.
- Refer the Angus Place West project to the Independent Advisory Panel on Underground Mining to consider full impacts on ecological and cultural values of the Gardens of Stone region.









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- Adopt air and water pollution standards better or equal to the World Health Organisation's benchmarks when setting pollution licence limits across mining sites and introduce Pollution Reduction Programs.
- Conduct in the field investigations to monitor compliance as well as considering the 'fit and proper person' test in reviews of mining environmental protection licences.
- Require Centennial and all coal operators to pay load-based fees for water pollution including salt, nickel, zinc, arsenic, copper, lead, mercury, oil and grease, suspended solids, boron, cobalt and selenium.
- Require Centennial and all coal mine operators to publicly and in real-time share information on community concerns, such as air pollution, water contamination, and incidents.
- Commit to no new coal or gas projects or expansions across NSW.
- Provide investor and community confidence in the renewable energy transition by setting out a staged closure timeline of NSW's remaining coal-fired power stations and anticipated firmed new renewable energy capacity entering the system.

Thank you for the opportunity to make a submission. Your contact person at Nature Conservation Council of NSW is Senior Climate and Energy Campaigner, Jacqui Mills.

Yours sincerely,



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