



Nature Conservation Council

The voice for nature in NSW

30 January 2025

NCC Submission Centennial Coal Modification 11 to SSD-7592 (MOD 11)

The Nature Conservation Council of New South Wales (NCC) is the state's leading 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.

We are deeply concerned that one of NSW's biggest mining companies, Centennial Coal, has been storing wastewater from coal mine operations and has submitted a proposal to dump it in a reservoir at the headwaters of Sydney's drinking water catchment.

Centennial mining operations are adjacent to the Gardens of Stone State Conservation Area, a place with more than 80 rare and threatened species and 16 threatened ecological communities.

Centennial's underground coal mining has damaged groundwater aquifers under the Gardens of Stone State Conservation Area. To drain the resulting influx of groundwater into underground coal mines, Centennial removes more than 20 billion litres of groundwater every year, interrupting groundwater supply and drying out nationally endangered peat swamps.

Approximately 5,000,000,000 litres of mine waste is stored underground in Angus Place mine as well as Springvale mine. To continue mining, Centennial proposes to discharge this waste into Sydney's drinking water catchment.

EnergyAustralia's Mount Piper coal-fired power station takes in water from Centennial mines, and runs water needed for the power station cooling towers through the water treatment plant. But Mount Piper power station will be offline for maintenance for a period this year which means it will be unable to manage the polluted water.



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The proposal seeks to end a zero-waste discharge policy

- Centennial is essentially seeking to pass off disposal of large volumes of partly treated mine waste using a consent for a wastewater treatment system that was originally intended to be zero release.
- Centennial wants to release an additional 42 million litres per day of mine wastewater to Thompsons Creek Reservoir (for up to 111 days at a time) to cover Mount Piper outage periods. This will consist of up to 18 million litres per day of water through the water treatment plant and 24 million litres a day of untreated water (only sediment will be removed).
- Thompsons Creek Reservoir discharges via tributaries of the Cocks River that flows through a World Heritage listed national park and ultimately to Warragamba Dam.
- We also expect Centennial to submit a second mine waste proposal in the next couple of months to address stored wastewater. We understand they will apply to release up to 26.5 million litres per day into Wangcol Creek consisting of 16.5 million litres per day treated water via the water treatment plant and 10 million litres per day untreated water (only sediment will be removed) *for up to 4 years*.
- In total, the modifications will contemplate discharge of combinations of treated and untreated mine waste totalling up to 68.5ML/day of water directly and indirectly (via Thompsons Creek Reservoir) into the catchment for Sydney's drinking water supply.

A 'dilute and discharge' approach will exacerbate water pollution

- Water experts have previously warned that blending or dilution of dirty water with treated water will exacerbate, rather than address, pollution of the Sydney drinking water catchment as overall load of pollutants will drastically rise¹.
- Two previous applications from Centennial seeking to discharge megalitres of mine waste into Wangcol Creek were withdrawn, and this 'dilute and discharge' approach would be far worse as it involves far more polluted water.

¹ [Centennial Coal plan to release more water into Sydney catchment will make pollution worse, expert says - ABC News](#)



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- If this first proposal was approved, it would result in a huge increase in pollution, heavy metal and salinity load into the receiving environment. 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). Centennial states their untreated water transfers could have salinity up to 1200EC and discharges into the receiving Coffs River catchment could reach 650EC.
- Higher salinity means lower oxygen, which reduces food for platypus. Electro-receptors on their bill locate prey, however salinity disrupts these, they can't find food and starve to death.

A 'neutral or beneficial effect' on water quality must be required

- The project cannot achieve a "neutral or beneficial effect" as Centennial claims, given the very high salinity envisioned in discharge to Thompsons Creek Reservoir. Centennial is proposing that it should be allowed to dump highly saline water (up to 1200EC), mixed with treated water, into Thompsons Creek Reservoir to keep it a level of no more than 650EC. These proposed salinity levels far exceed the Australian and New Zealand Environment and Conservation Council water quality guideline values for creeks and streams which sit at 350EC (ANZECC 2000).
- Centennial should be required to treat mine water to ensure that any discharge fully removes contaminants like heavy metals, salt and brine and deliver the zero-release system they proposed when the water treatment plant was approved. Anything less threatens the safety of Sydney's drinking water supply and water dependent ecosystems, including endangered and threatened species.
- If Centennial is unable to do this, Springvale mine must be closed and alternative coal supplies found for Mount Piper power station based on unacceptable water impacts. The ongoing large influx of water coming from Springvale is unsustainable and damaging to aquifers and dependent ecological communities including endangered peat swamps. Centennial should not transfer its environmental costs as pollution to water consumers and the World Heritage Area.
- Centennial and EnergyAustralia (operator of Mount Piper power station) must work together to find a solution to the root cause of this issue which is the excessive groundwater inflows associated with intensive mining methods.



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Proposal must be resubmitted as a full development application

- Centennial has chosen to submit this proposal as a “modification”, on the basis that it argues the proposal as it relates to the existing development consent is “substantially the same” for which consent was originally granted. However, the original consent was essentially to operate as a “zero discharge operation”.
- By applying as a modification, Centennial may be seeking to bypass the State Environment and Planning Policy (Biodiversity and Conservation) 2021 part 6.5 that requires that a consent authority may only approve a development proposal with potential impact on the Sydney drinking water catchment if it is satisfied the proposal will have a “neutral or beneficial effect” on water quality. These requirements do not apply to modification proposals.
- However, it is clear the proposal to massively increase the discharge of dirty water has enormous implications for the receiving waters and environment and is not “substantially the same” as the existing consent.
- It follows that this modification proposal should be rejected, and Centennial required to submit a full development application.
- Centennial themselves acknowledge: “It is noted that Clause 6.61 of this SEPP does not strictly apply to the modification of a development consent; however, it is recognised that the intention of this SEPP is to protect the Sydney drinking water catchment.”

Cumulative impacts are unacceptable

- As Mount Piper power station may remain open until the early 2040s, Centennial is seeking permission to dilute and discharge water from Thompsons Creek Reservoir during scheduled offline maintenance periods for the lifetime of the water treatment plant. This could mean up to or around *15 years* of huge volumes of dirty water discharge for up to 111 days at a time.
- There is no clear rationale for why water transfers to Thompsons Creek Reservoir would be required for up to 14 days prior to and up to 7 days after a Mount Piper



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power station outage period. Together with the outage period itself, this means up to 111 days of dirty water discharge.

- Given the cumulative impact of these water transfers annually and over the expected lifetime of the water treatment plant, Centennial's proposal for consent for the life of the water treatment plant must be rejected.
- Very large volumes of wastewater continually generated from Centennial coal operations require Mount Piper power station to burn coal to produce ash to store brine, generating pollution and emissions, even if energy demand reduces. In this way, Centennial's water management issue is undermining an efficient and measured transition from coal-fired generation.

Self-monitoring is unacceptable

- For this modification, Centennial has proposed that it install a water monitoring instrument at Thompsons Creek Reservoir and notify EPA and Water NSW if water quality monitoring system finds 600 EC or more.
- However, there is no 'plan B' to divert mine water if monitoring reveals higher than expected salinity levels.
- There is also no suggestion of independent audit of the water quality monitoring system, which would be needed given there is no other option put forward by Centennial but to proceed with water discharge.
- The community cannot be confident that Centennial would comply with a self-monitoring system, especially considering that over a 23-year period, Centennial has been found to have breached its environmental licence more than 1400 times across 7 coal mine sites in the Greater Blue Mountains region².

² <https://apps.epa.nsw.gov.au/prpoeoapp/>



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Additional recommendations

In addition to rejecting this modification, 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 environment³.
- 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.

³ NorBE-User-Guide-for-Consultants-2022.pdf



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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 firm 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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