



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

6th February 2025

Dear Sir/Madam,

Further submission as an objection to Springvale Water Treatment Plant SSD 7592 Mod11 –

Proposed Consent Conditions for the management of Centennial Coal Mine Waste during Mt Piper Power Station shutdown periods

Wilderness Australia has an in-principle objection to proposed Modification 11 that seeks to legitimise what is currently unauthorised pollution of Sydney's drinking water.

Wilderness Australia also recognises that Mt Piper Power Station (MPPS) must be shutdown for essential maintenance and that in consequence more treated mine waste must be transferred to Thompsons Creek Reservoir (TCR). The proposed Consent Modification 11 must be reframed to prevent, during these proposed shutdown periods, further pollution of receiving waters.

The shutdown of MPPS does not in any material respect affect the mine water coming into the Springvale Water Treatment Plant (SWTP) or the transfer of treated water to TCR. In this regard, Modification 11 is not required and should not be approved. If the Department of Planning and Environment is to recommended approval, however, then the following proposed amendments to the Consent should be considered.

Proposed amendments

Insert Shutdown Period definitions into Consent dictionary

Mt Piper Power Station Shutdown Period *Shut down of Mt Piper Power Station for maintenance that impacts upon mine water reuse for a period that is subject to approval from the Secretary.*

Justification: Shutdown periods must be defined to prevent the Applicant using shutdown provisions outside a MPPS shutdown period.

Springvale Water Treatment Plant Shutdown Period *Shut down of Springvale Water Treatment Plant for maintenance that impacts upon mine water treatment for a period that is subject to approval from the Secretary.*

Justification: The Applicant has been underutilizing the SWTP capability. Shutdown periods must be specified for SWTP to prevent the Applicant transferring mine waste to the TCR without full treatment. The Conditions need to be amended to prevent transfer of partially treated mine water outside SWTP shutdown periods or when mine waste volumes exceed the SWTP capacity.

Revise mine waste definitions in the Consent dictionary

Treated water - *Mine water which has been processed by <insert "reverse osmosis in"> the Water Treatment Plant.*

Justification: The current definition in the consent dictionary which reads "Mine water which has been processed by the Water Treatment Plant" is insufficient. Mine waste can and has bypassed some stages of treatment to be only partially treated, while meeting the definition of treated water in the consent. A definition that requires treated water to pass through reverse osmosis will ensure that treated water passes through all stages of the water treatment plant because such water must be pre-treated to a high level before such a filtration process.

Partially Treated Water – retain definition, but amend its application

Note: Current Condition 6A obviates the requirement to use the SWTP beyond filtration, as under this Condition all 42ML/day of mine waste can be filtered, and not further treated. This provision should only be used in limited circumstances outlined in the justification below.

Justification for retention: The consent dictionary definition of partially treated mine water as – "*Mine water which has been filtered to remove solids*" should be retained, and the acceptable proportions of treated water to partially treated water in the transferred mine water to TCR must be defined by the consent. Note that the environmental assessment for proposed Modification 11 includes a description of the proportions of these two mine waste streams. This description is too generous and allows the SWTP to be by-passed to a considerable extent.

Treated water should be required to produce 42ML/day in transferred water, as that is the treatment capacity of the SWTP. Partially treated water should only be used during SWTP outages or when the mine water produced exceeds 42ML/day, the current capacity of the SWTP, only as an interim measure until the SWTP is upgraded to treat all mine waste. The consent conditions should require the SWTP to be upgraded to treat all mine waste, as per the above definition.

Proposed Condition 6B - omit undefined "water" and insert "treated water"

Justification: Conditions must ensure that the SWTP operates at full 42ML/day capacity. For all treated water discharged from TCR, treatment must be to a standard appropriate for its new proposed reuse purpose as drinking water and as water suitable for passing through the World Heritage Area. The old industrial water quality standards for treated water reused in MPPS must not apply to water discharged from the TCR.

The appropriate standard for receiving water is the long-term upstream receiving water quality of 30µS/cm that was measured over a period of eight years by Lithgow Environment Group/Blue Mountains Conservation Society Streamwatch Monitoring Results 2006 – 2014.

Note: As you are probably aware, the proposed Condition 6B does not use the consent dictionary defined terms “treated water” or “partially treated water” but rather specifies transfers of “water”.

Schedule 2, Condition 6A – retain and amend to

The Applicant may transfer up to a maximum of 7,500 megalitres of <omit partially> treated mine water to Thompsons Creek Reservoir, until 1 April 2027.

Note: Modification 3 provided for 2,700 ML of partially treated mine water to be transferred to the TCR until the end of January 2020 and then this provision was increased to 5,760ML and the deadline extended in subsequent modifications. Modification 11 should retain and extend the operation of condition 6A for the reasons given below.

Justification: Retention of an appropriately sized transfer cap is necessary to ensure discharges from the TCR to receiving waters do not occur (this is understood to be the current regulatory position/understanding of the operation of the SWTP).

If it is not possible to prevent discharges from the TCR, then the volume specified should be adjusted to limit the discharges from the TCR to as low as reasonably achievable.

Discharges to the Coxs River catchment must be of treated water (as per revised definition above), not partially treated, or apparently not treated at all [being defined as just “water” as proposed by the Applicant].

If discharges are to occur then they must be with consent and, at least, limited by volume as well as by a maximum flow rate of 18.5ML/day. Restriction of the flow rate requires the following proposed Condition 6A2 and proposed 6A3. These three provisions should be read together and are necessary to ensure that the TCR, and hence receiving waters, are prevented from being dumping grounds for the Applicant’s mine waste.

Recall that last financial year the Applicant discharge 45% of its mine waste into receiving waters.

Schedule 2, Proposed Condition 6A1 replaces and incorporates proposed Condition 6B.

Schedule 2, proposed Condition 6A1,

Within the transfer limit of the Springvale Water Treatment Plant to Thompsons Creek Reservoir specified in Condition 6A, the Applicant may until 31 December 2026, during a MPPS Outage period, manage transfers of “treated water” to Thompsons Creek Reservoir via the Coxs River Water Supply Pipeline in accordance with the following:

(a) The Applicant must, in consultation with EnergyAustralia, install and maintain a real-time water quality monitoring system capable of assessing water quality in the Thompsons Creek Reservoir before any MPPS Outage events.

(b) The Applicant must notify the DPHI, EPA and WaterNSW prior to the transfer of any water to TCR during MPPS Outage period.

(c) The Applicant must ensure that water is managed so that water quality does not exceed 50 uS/cm EC at any time within Thompsons Creek Reservoir.

(d) During an MPPS Outage period, the Applicant must immediately notify the EPA and WaterNSW in the event of water quality monitoring system finds water quality exceeds 30µS/cm EC in the Thompsons Creek Reservoir.

(e) Water may be transferred to Thompsons Creek Reservoir up to 14 days prior to and up to 7 days following a MPPS Outage period.

Justification: The MPPS outages do not in any material respect impact on the operational efficiency of the SWTP.

The Applicant should be required to use the SWTP to its maximum capacity of 42ML/day, except during a genuine SWTP outage or when mine waste from Angus Place and Springvale mines exceeds the SWTP treatment capacity.

The expiry date of this proposed Condition 6A1 is one calendar year after the commencement of Modification 11 so as to permit approval of a proposed SSD proposal for the upgrade of the SWTP. Once the upgraded SWTP is commissioned, the proposed Conditions 6A1, 6A2 and 6A3 would need revision.

Schedule 2, New Condition 6A2

The Applicant shall not discharge treated mine water, partially treated mine water or other water by the Pipers Flat discharge point, except during emergency situations, subject to approval from the Secretary.

Justification: This discharge may be used by Centennial to discharge from TCR under the proposed salinity dilution contingencies when water is transferred from Lake Lyell, as outlined in the Modification 11 assessment report. Centennial must not use this discharge point to discharge up to ~110 ML/day, unless these discharges are regulated and during an emergency, defined as when TCR is above FSL.

Consent Conditions need to be framed to prevent the Applicant from surcharging TCR with water from Lake Lyell so as to accelerate mine waste disposal or avoid the full utilization of the SWTP treatment. The following proposed Condition 6A3 would regulate the use of water from Lake Lyell.

New Condition 6A3

The Applicant shall not transfer water from Lake Lyell to TCR, except during SWTP outages, subject to approval from the Secretary.

Justification: Salinity dilution of mine wastewater held in TCR with water transferred from Lake Lyell can reduce or eliminate the need for the SWTP treatment of mine waste to meet TCR inappropriate industrial reuse salinity criteria proposed by the Applicant. Water from Lake Lyell can be transferred at a rate of up to 95 ML/day to TCR.

Under Mod 11 there could be a series of "SWTP outages" (addressed by 6A3) and hence TCR emergencies (addressed by 6A2), and these proposed conditions are to discourage these foreshadowed transfers to prevent the Applicant from using the Cocks River as a drain.

Side note: The Applicant's current proposal to dilute TCR salinity with Lake Lyell water would not be possible if Centennial had properly applied NorBE to its (intended and large) transfers from SWTP, as then the proposed TCR transfers would be treated so as to be no saltier than this lake's water (or better).

New proposed Condition 6B – require a new SSD for a new mine waste reuse purpose

Upon approval of Modification 11, Applicant is required to lodge a SSD application for all mine water a treated water management system that produces only 30µS/cm EC treated water suitable for reuse in World Heritage listed receiving waters and for storage as drinking water in Warragamba Dam for the life of its mining operations in the Western Coalfield before 31 December 2025.

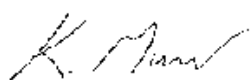
Justification: Industrial reuse is being replaced by reuse as drinking water without a corresponding increase in required wastewater quality treatment. MPPS is generating less electricity with every passing year due to the transition of the energy system away from fossil fuels. This decline in demand is coupled with an increase in supply as ever larger flows of mine waste generated by intensive coal mining under Newnes Plateau that occur at rates beyond predictions.

The above SSD application should follow a broad EPA inquiry into the entire mine water management system. The inquiry should also address the post mining management of considerable quantities of mine waste that will be generated by these mines. An SSD should follow the inquiry to deliver its recommendations.

The termination of proposed revised Condition 6A would correspond to the SSD consent for an improved SWTP and water management system.

Thank you for the opportunity to make a further submission regarding Springvale Water Treatment Plant SSD 7592 Modification 11.

Yours sincerely,



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Wilderness Australia

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