

4th March 2025

Jessie Evans
Director, Resource Assessments
Department of Planning, Housing and Infrastructure
Locked Bag 5022
PARRAMATTA NSW 2124

Dear Jessie

Re: SWTP SSD – 7592 – Mod 11 Amendment Report

I refer to the Departments request for an Amendment Report to confirm the proposed changes to the Modification 11 Application referred to in the Response to Submissions Report provided to DPHI on Friday 28 February 2025.

The proposed changes to the Modification 11 Application and their potential influence on the findings of the supporting Water Impact Assessment have been reviewed by specialist consultants ERM, in consultation with EnergyAustralia, and is attached to this letter for your reference.

Please contact me if you have any questions with the above.

Yours sincerely



Michael Clark
Executive General Manager ESG &
Infrastructure

Ben Eastwood
NSW Environment Leader
EnergyAustralia NSW Pty Ltd
Mt Piper Power Station
Boulder Road, Portland NSW

DATE
04/03/2025

SUBJECT
SWTP SSD-7592-Modification 11 application

REFERENCE
0767844_L01

Dear Ben,

RE: SSD-7592-Mod-11, time limited amended modification

Background

Springvale Coal Pty Limited (Springvale Coal) is a wholly owned subsidiary of Centennial Coal Company Pty Ltd (Centennial). Centennial is a wholly owned subsidiary of Banpu Public Company Limited (Banpu). Springvale Coal is the proponent for the proposed modification (SSD-7592-Mod-11) associated with the Springvale Water Treatment Project (SWTP) and will be responsible for its implementation.

The SWTP was developed as an industrial water reuse scheme to use mine water from the nearby Angus Place Colliery and Springvale Coal Mine, as cooling water at the Mt Piper Power Station (MPPS), following filtration and desalination treatment. The Springvale Coal Mine is the primary source of coal for the MPPS. During normal SWTP operations, mine water is treated and then transferred to MPPS for use in the cooling water system or transferred to Thomsons Creek Reservoir (TCR) for temporary storage for later use.

Maintenance of the MPPS can require planned Outages, which are scheduled for a known duration and coordinated through the Australian Electricity Market Operator (AEMO) to manage the availability of electricity and stability of the national electricity grid. Outages result in a reduction of power generation, associated ash production and water usage. However, whilst water usage is reduced, the incoming water supply via the SWTP is required to continue in order to prevent flooding of underground workings at the Angus Place Colliery and Springvale Coal Mine.

The Modification

In December 2024, Springvale Coal submitted a Modification Report (Centennial, 2024) and supporting Water Impact Assessment (WIA) (ERM, 2024). The WIA was developed alongside the Modification Report to present an assessment of periodic transfers of water to the TCR in relation to a range of future Outages scenarios at the Mt Piper Power Station (MPPS) forecasted to 2038, during which water usage at the MPPS will be substantially reduced. This solution sought to maximise the use of available desalination alongside the constrained ash availability during the future planned Outages.

The Modification is to permit the transfer of surplus mine water from the SWTP to TCR as:

- Transfer of up to 42 ML/day of Blended Water consisting of up to 18 ML/day of Treated Water (filtered and desalinated output from the SWTP), and up to 24 ML/day of Filtered Water (filtered but not desalinated output from the SWTP), blended in the Coxs River Water Supply Pipeline (Blended Water Transfers); and
- Transfers of Filtered Water up to 24 ML/day for short durations (Filtered Water Transfers). This is a contingency in the event that desalination throughput is limited for any reason during the Outage period.

While the majority of water transferred during the Outage period will be stored in TCR for later use by the MPPS, TCR is required and licenced to continuously release small volumes of water to protect the downstream riparian environment, with capacity for release up to 18.5 ML/day.

Overview of Amended Modification

Based on the outcomes of discussions with regulatory stakeholders since the Mod 11 application was submitted, the modification is now proposed to be time limited to the planned Station Outage, scheduled to occur at MPPS in April/May 2025 when Unit 1 and Unit 2 will be out of service for 54 days and 22 days, respectively, including a consecutive 22-day period where both units are out of service concurrently. This is referred to as '**the Amended Modification**'.

The table below provides a summary of the items assessed by ERM (2024) with consideration of the Amended Modification.

WIA envelope	WIA conclusions	Time limited Mod 11
Periodic transfers of water from the SWTP to the TCR in relation to a range of future Outages scenarios at the MPPS forecasted to 2038.	<p>The WIA concluded that the predicted increase in electrical conductivity (EC) in the TCR and the associated riparian release is low and acceptable, and within the range of environmental variability of the catchment area downstream of the TCR.</p> <p>Mod 11 is unlikely to have a material or lasting adverse impact upon the catchment water quality.</p> <p>Mod 11 will address the risk of potential uncontrolled environmental releases that would otherwise exist during Outages, by providing an approved mechanism for transfers of water to the TCR.</p>	Periodic transfer of water from the SWTP to the TCR in relation to the planned Station Outage, scheduled to occur at MPPS in April/May 2025.
Notification trigger (600 µS/cm) and discharge limit (650 µS/cm)		Notification trigger (550 µS/cm) and discharge limit (600 µS/cm)
42 to 33 ML/day Blended Water transfers to the TCR, Outage based 20-to-111-day transfer periods.		Up to 42 ML/day Blended Water transfers to the TCR, Outage based ~60-day transfer period.
24 ML/day Filtered Water transfers to the TCR, Outage based 2-to-9-day transfer periods.		24 ML/day Filtered Water transfers to the TCR, 2-to-9-day transfer period.
Up to 18.5 ML/day riparian releases from TCR during the Outages.		Riparian releases from TCR will be restricted to 0.8 ML/day in summer and 0.3 ML/day in winter (as licenced) when water transfers from SWTP to TCR are occurring during the Outage period.

Conclusion

As outlined above, the Amended Modification is within the existing WIA envelope for all parameters assessed, including:

- Notification trigger and discharge limit;
- Blended Water and Filtered Water transfer volumes and transfer period; and
- Riparian release volumes from TCR.

Therefore, the conclusions of the WIA (as outlined in the table above) remain valid in relation to the Amended Modification.

Regards



Gavin Powell
Associate Partner



Megan Lawson
Partner